

THE FIRST FIFTY YEAR HISTORY *OF THE*



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PREFACE

It seems fitting at this time to retrace the steps in the road by which we came through the last half-century. Certainly the milestones and landmarks along the roadway have been emphasized; but imprints making a barely discernible impression have merely been cited. The road was befogged and rugged in part, since between the cobblestones some unrecorded facts and figures were unfortunately buried with certain deceased members who never gave much thought to posterity. Nevertheless, the author searched diligently for some fifty months to glean all significant information of the past fifty years, and then composed as comprehensively as feasible what is hoped to be a chronicled document of some merit and of value for at least the next fifty years. A significant aspect of the IADR history, I believe, is that it developed and therefore was written in the context of the history of science in general and the history of medical science in particular, as the first few chapters demonstrate.

This volume has in large measure been a truly international effort. The histories of the various Divisions, Sections, and Groups have been compiled by the officers of their respective components wherever they existed in the world. Moreover, a considerable amount of monetary support for the publication of this historic volume came from commercial firms based in and operating from many different countries (as well as from the William J. Gies Foundation for the Advancement of Dentistry and the IADR itself). Our Ad Hoc Committee on History is composed of members also from several different parts of the globe but who communicated well, so the Committee, and especially its chairman with his assistants, could make this published history dynamically expository, accurate, and objective.

With this prefatory background, one can all the more emphatically state as foreground that it is only through an understanding of history that we can improve our evaluation of the present and attempt to guide the future with more enlightened and rational judgments.

FRANK J. ORLAND

Contents of this historical volume
compiled, written in part & edited
by Frank J. Orland
President of the IADR, 1971-72
at the time most manuscripts went to press



ACKNOWLEDGEMENTS

If it should prove to have any historic value, this volume—it must be emphasized—has drawn its strength as well as its comprehensiveness from many knowledgeable persons. Besides the members of the Committee on IADR History, there were a considerable number of persons who deserve special commendation. Most helped in a variety of ways. Some supplied raw data—such as many of the Past-Presidents of IADR; Mary Gies Kellogg and Frances Krasnow (daughter and associate, respectively, of William Gies); George Heiges, historian in the Manheim-Lancaster area of Pennsylvania; as well as Otto Brandhorst, Secretary and Historian of the American College of Dentists.

Since some of the records of the IADR were so meager, individual chapter manuscripts were sent to certain IADR members with long memories for verification and general concurrence. A partial list includes George C. Paffenbarger, President of the William J. Gies Foundation for the Advancement of Dentistry; Arthur R. Frechette, Secretary-Treasurer of the IADR; J. Roy Blayney, Past-Director and Professor Emeritus of the Zoller Clinic at the University of Chicago; and Gardner P. H. Foley, former Professor, University of Maryland, and a Founder of the American Academy of the History of Dentistry. Special thanks are also extended to the authors of the contributed chapters which provided a proper perspective for the IADR history, as well as to the authors who compiled the histories of Divisions, Sections, and Groups of IADR.

Acknowledgment is also made for the several contributed photographs, a few of which had appeared in the Journal, permission to reprint them having been obtained from two publishers—the University of Chicago Press and the American Dental Association.

On the day-to-day action line at the University of Chicago, in commendably continual library researching, typing, and production, there have been Tesa Hyashi, Allie F. Woodbury, and Harriet L. Blakley; more currently, there have been Susan Stucklen, David P. James, Erwin Weirather, and Cynthia C. Susmilch. Finally, to the innumerable others who assisted—including the family of the primary author—go my humble but profound thanks.

F. J. O.



CHAPTER ONE: THE SCIENCES AND THE PUBLIC IN THE TWENTIETH CENTURY

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All are aware that the twentieth century has been characterized by a previously unforeseen growth of the sciences; moreover, there has been, in effect, a new revolution in the attitude toward science. Yet, while this revolution has occurred within scientific laboratories throughout the world, it has also been a revolution that has touched the consciousness of the general public as well. If the former process has been a lengthy one, the latter has not. Indeed, it has only been within the last generation that the common man has really been aware that his was a "scientific" age. Prior to the Second World War, the schoolboy in the United States was exposed to little science. Mathematics, yes, and perhaps a little of the geological history of the earth, but for him "science" took on a meaning that had a special relation to the American dream. We were told of the telephone, the electric light, motion pictures, and the automobile. The "scientists" we knew were Luther Burbank, Alexander Graham Bell, and Thomas Alva Edison. This was an attitude reflected by the government, for, when the Post Office chose to issue a series of stamps honoring great American scientists in 1940, it did not turn to Josiah Willard Gibbs, Albert A. Michelson, or even Benjamin Franklin. Rather, the stamps portrayed John James Audubon, Crawford W. Long, Luther Burbank, Walter Reed, and Jane Addams. A second set, issued the same year, honored American inventors, singling out Eli Whitney, Samuel F. B. Morse, Cyrus H. McCormick, Elias Howe, and Alexander Graham Bell.

THE APPLIED VERSUS THE PURE SCIENTIST

In short, for the average American living before the Second World War, the "scientist" was an inventor, a physician, or a naturalist who made the world better for mankind while simultaneously assuring his own future. In contrast, the scientist who worked in a university research laboratory was little known or considered. This was the impractical and forgetful professor who puttered away at projects which were hardly likely to benefit him or anyone else. How much better it seemed to devote one's life to the emulation of Ford, Marconi, or De Forest. When we were told of the effects of the Industrial Revolution and other nineteenth-century developments on society, we heard of the hard-working practical men, the inventors, whose ideas seemed to have little connection with the universities. These "heroes" were men who had not gone to college. Rather, they had worked with their hands and had seen their ideas through to fruition even though they had suffered



hardships as they pursued their goal. This hostility to higher education was well expressed by the "Dutch" vaudeville headliners Joe Weber and Lew Fields in their sketch "Heinie at College" (1912):

MEYER: When a rich man's son has got no sense then his father sends him to college and when he is stuffed full of useless inflammation then he is turned out into the cold world to look for work.

MIKE: But a Collegeer could easily get a job.

MEYER: Of course, because while he was in college the other fellow who couldn't afford to buy his edimification has got a store by now and he must have somebody to ride his truck.

For Meyer the only college courses worth recommending to his friend were in the field of literature, since they would lead to the highly profitable profession of "bookmaking."

This anti-intellectual attitude changed for the great bulk of the public only during or after the Second World War. Until that time the effect of science and technology on our society—admittedly great—had, nevertheless, been a relatively slow process. It had not been difficult for a person to live with the changes he experienced during the course of his lifetime. The changes were far more rapid after 1939. Now the engineer was no longer praised alone. It was clearly recognized that he worked in concert with the theoretical scientist and that they were both needed to bring about a victory that would destroy the power of the Axis through a new Crusade for Freedom. This union of theory and practice clearly served to alleviate shortages on the home front as well as to prepare new methods of warfare. Above all, the public awoke to the importance of the scientist through the power of a new force unleashed by the bombing of Hiroshima and Nagasaki in 1945. Newspapers screamed in banner headlines, "Atomic Age Begins," while the Horatio Alger "inventor-scientist" hero of the past was relegated to our cultural mythology. And as the glow associated with the names of Edison, Burbank, and De Forest faded, the public turned to astronauts and pure scientists as new heroes. With a new and widespread knowledge of spectacular accomplishments, these men received respect and admiration undreamt of a decade earlier. This new popular recognition was reflected shortly thereafter in the fields of government and politics, where financial support for the sciences and engineering soon became a major part of the annual national budget.

THE CHANGE IN ATTITUDE

How did this change, this new sensitivity to science, occur? In an earlier period the scientists were no more successful than the public in forecasting the significance of their research or its impact on society. At the close of the eighteenth century Antoine Lavoisier was convinced that the revolution in chemistry which his work had initiated would surely result in the advance of that science to its greatest possible perfection within a period of a few decades. In the second half of the nineteenth century it was widely believed in the scientific community that the basic truths of physics had been determined and that in the future it would only be



necessary for physicists to further refine measurements. Perhaps no better example of this weakness may be offered than that of Alfred Russell Wallace, who, summarizing the scientific achievements of the nineteenth century in 1901, pointed to the rejection of the study of phrenology by the scientific community as one of the most unexplainable failures of an otherwise brilliant period. For Wallace at the opening of the twentieth century it seemed that phrenology had been one of the greatest scientific breakthroughs of the preceding seventy years. But if some scientists had developed a sense of complacency by the turn of the century, and if others were willing to judge the developments in fields other than their own with something less than the eyes of experts, the scientific world was in reality in the opening stages of what may now be called a second revolution in science. Surely many factors contributed to this development, but for the purpose of this short essay we may limit ourselves to only a few. Above all, looking back from the third quarter of the twentieth century, it is obvious that a number of spectacular discoveries sparked by scientific genius contributed to a rapid series of advancements. Classical concepts in the physical sciences were overturned in the closing decade of the old century and the opening decades of the new one. In their place new concepts, hypotheses, and theories were postulated at a pace that bewildered the scientist then, no less than it does the historian today who attempts to reconstruct that era. And yet perhaps no less important for an understanding of twentieth-century science than these internal developments within the sciences were the parallel origins of a new union of science, industry, and government in the late nineteenth century—a union that was essentially nonexistent in earlier periods. Here the result was to create a demand for scientists that the universities with new teaching methods quickly filled. And, as newly research-oriented industries began to affect the economic well-being of nations, scientific research inevitably became a matter of concern to politicians and their governments.

It would be impossible to list adequately the major scientific developments of the past eighty years. At best one can point to a few of the more significant areas of change. Nowhere had change been less expected than in physics. Here the spectacular discovery of X-rays by Roentgen in 1895 quickly impressed itself on the scientific world as well as the public. While music-hall comedians pointed to the girls in the chorus and sang songs such as "X-Rays Will Give It Away" (ca. 1899), scientists were engaged in work which led in turn from radioactivity to a whole set of new elements and then on to the problems of nuclear physics. In the course of a few decades this discovery resulted in a knowledge of how atoms are arranged in solids. And, if we may trace these developments through to the solid-state physics of the present, we may point to a second contemporary major development in the physical sciences in the early part of the new century. At that time a new synthesis of the relative character of motion and of the relationship between mechanics and optics led to both the special and the general theories of relativity. With the latter, a far more satisfactory explanation of cosmological phenomena has been made possible. In chemistry, as the fields of biochemistry and physical chemistry developed, a heavy emphasis has been placed on structural problems. The search for answers to biological questions through the



use of chemical methods was not a new one, but surely a new key was found in the investigation of enzymes in the final years of the old century. Eduard Büchner's discovery that the juice obtained from triturated yeast cells could ferment sugar opened an entirely new field of scientific investigation. The subsequent development of biochemistry has been dependent on the combination of genetical, physical, and chemical methods, and these, in turn, have led to the field of molecular biology. The search for the source controlling the enzymes was to be found in the genes, and by 1951 the research of Watson and Crick had resulted in the definition of DNA, the substance which was seen to provide a molecular mechanism for the duplication of genetic material at each cell division cycle.

If one were limited to a choice of one other field of pure science currently in a state of flux, he might well choose geophysics. Here interest in the age of the earth has continued undiminished since the speculations of Lord Kelvin a century ago, and much of the research relating to extraterrestrial samples has been centered on this problem. At the same time there has been a closely associated search for additional information relating to the earth's interior, and most recently a revived interest in the study of surface phenomena. Within the past ten years the investigation of the drift of continental land masses has been established in a way not previously possible.

Even the listing of this limited number of scientific developments indicates the fundamental nature of the changes that have occurred in the sciences in the twentieth century. These developments were in turn to result in the elucidation of totally new techniques and new methods of instrumentation. No less important is the fact that scientists began to view their disciplines in an entirely new fashion. Traditional fields which had previously been taught in a compartmentalized fashion were now found to be closely interconnected, and new interdisciplinary sciences quickly became among the most cultivated areas of research.

SCIENCE APPRECIATION BY THE STATE

To be sure, the development of the sciences since the turn of the century may be explained in terms of internal factors. Nevertheless, without some understanding of changes that have occurred in the funding of research and in scientific organization, the history of recent science is difficult to understand. Surely the realization of the potential of scientific advance for national welfare is nothing new. In the seventeenth century, Francis Bacon stressed this point in England, while Johann Joachim Becher and Johann Rudolf Glauber did the same in Central Europe. And so convinced of this was the French minister Colbert that he saw to it that the members of the newly founded French Academy of Sciences (1663) were paid salaries by the State. Thus a true professionalization of the scientist began to evolve.

While the nonacademic "inventor" remained a person of public esteem in the mid-nineteenth century—and beyond—the "scientific amateur" was rapidly being relegated to the past. If there are a number of factors of



importance connected with this development, few are more significant than the new relationship that developed at that time between industry and the academic world. In this area the most significant changes occurred first in Germany. Justus Liebig introduced the modern chemical laboratory in his courses at Giessen and this development corresponded closely with the new needs of industry. The search for cheap acids, alkalies, bleaching chemicals, fertilizers, and especially explosives, in quantity brought about a new need for well-qualified chemists in the second quarter of the century. The new laboratories—first at Giessen and then elsewhere—were able to supply this need.

The potential of the German system was clearly made evident in the second half of the century when the study of synthetic dyes became a major field of new research. Although this field was opened in England through the research of William Henry Perkins (1856), it was only a matter of decades before German scientists and German industry became preeminent. By 1875 German industrialists and politicians were well aware of the importance of this industry for the economic welfare of the State. This foresighted attitude was to give the German Empire a superiority in the sciences as a whole, at least until the period of the First World War. Emphasis was placed on pure research, and laboratories were closely in touch with academic consultants who were willing to look beyond the immediate interests of an industry and seek out the broader uses of new discoveries.

Among the benefits that the State reaped were those connected with warfare. Because of the flourishing dye industry, the Germans found themselves the world leaders in the research on coal-tar derivatives. The result was to be the development of a number of new explosives, as well as the investigation of the effects of a group of new and deadly gases. Similarly, the need for raw materials no longer available during the war spurred German industry in the search for new processes and synthetic substances. It is little wonder that German industrialists fostered scientific research in their own laboratories as well as in the universities. They helped to organize associations of academic and industrial research scientists in the fields of chemistry and physics—organizations that proved to be so useful that they continued into the postwar years. Recent historical research has shown that these German academic-industrial associations originated the present system of grant support of science projects.

The union of industry and science had clearly contributed to the need for a larger number of better-trained scientists. And, as the number of scientists increased, the highly individualistic nature of scientific research changed gradually to the concept of "scientific teams" more common today. The increased number of scientists also contributed to the ever more intricate organization and specialization of the various fields. The nineteenth century saw the founding of many new societies that were to limit their activities to a single field, in sharp contrast to the omnibus national societies that had been founded in the seventeenth and the eighteenth centuries. These societies, in turn, fostered new journals to record the recent work in their own fields. As Price



has shown, the hundred journals existing in 1800 had grown to a thousand by midcentury, and these had increased to nearly ten thousand fifty years later. The introduction of abstracting journals for the greatly increased literature was an inevitable result. Their growth has also followed an exponential curve, and, with the volume of scientific literature now doubling on the average every decade, an entirely new field related to the retrieval of science information has developed.

THE CHANGED PUBLIC ATTITUDE

In the past fifty years there has been a vast change in the public attitude toward science and scientists. If in 1920 we turned with pride to the inventor rather than to the scientist, today we would emphasize the achievements of the latter first. Our grammar-school students are now exposed to laboratory experiments from their earliest training, and they are more likely to hear the names Galileo, Newton, and Einstein rather than those of Edison and Burbank. This change is a marked one and relatively recent, but was especially accentuated by the contributions of the scientists to the winning of the Second World War, as well as by the more recent exploits of man in space. Science and scientific technology have both become topics that often receive front-page news coverage.

Yet, if the atom bomb, the sputnik, and the landing of man on the moon may be referred to as the most dramatic events that led to a new awareness of science in our society, nevertheless the roots of this change extend back much further than fifty years. Derek Price has established the fact that the sciences have grown at an exponential rate since the first issue of the *Philosophical Transactions of the Royal Society of London* (1665). Still, in the seventeenth century scientific publications seldom proved of interest to the average man, and they rarely affected the society of the period. Even the developments associated with the eighteenth century Industrial Revolution may be ascribed largely to inventors who, for the most part, had little association with the members of the scientific academies of Europe. In the nineteenth century, with the notable exception of the problems posed by Darwin, the sciences seemed to become increasingly remote to the average man. For a good number of scientists this was a period that witnessed increasing specialization in fields that had already been established. Many felt that the basic truths had already been discovered and that new breakthroughs were unlikely. It was only in the final decade of the century that the landscape of a new science began to unfold. Then, rather than continuing the trend toward further compartmentalization, there was a move toward the establishment of connections between previously separated fields. Indeed, a hallmark of the past fifty years has been the growth of interdisciplinary areas of science.

Many historians have studied the growth of the sciences from the journals and the publications of the scientists alone; that is, they have interpreted the subject strictly from an internalist point of view. Nevertheless, there can be little doubt that developments in the sciences are affected by external factors. During the past



century all governments have become aware of the practical significance of scientific advance. Perhaps seen first in Germany in the late nineteenth century, the economic and social implications of scientific predominance were soon acknowledged throughout the world. The results of the German superiority in scientific training clearly became apparent during the First World War, and German scientists continued to press their cause in the postwar era. The unified efforts of scientists, industrialists, and government leaders did much to establish a system of research funding during the period of the Weimar Republic that has been widely copied since that time.

CONCLUSION

There is little doubt that the role of science has been widely expanded in our society in the past five decades. Much of this expansion in scope may be ascribed to scientific genius, but it would be unfair to suggest that industrial, economic, and social factors have not played a part in creating an atmosphere favorable to the furtherance of both pure and applied research. In any case, the continued historical investigation of the science of the past century and its relationship to society will surely establish more firmly the deep roots of the widespread interest in the sciences which exists on all levels of society today.

BIBLIOGRAPHICAL NOTES

There are no thoroughly satisfactory accounts of nineteenth- and twentieth-century science. It is interesting to note the views of nineteenth-century scientists published at the end of the century. There are a number of such evaluations; the one referred to in the present paper is that by Alfred Russell Wallace, *The Wonderful Century: Its Successes and Its Failures* (New York: Dodd Mead & Co., 1899). *A Century of Science, 1851-1951*, edited by Herbert Dingle (London and New York: Hutchinson's Scientific and Technical Publications, 1951), offers an old but useful set of papers on a crucial century, and among recent internalist interpretations of twentieth-century developments may be included *Scientific Thought, 1900-1960: A Selected Survey*, edited by R. Harré (Oxford: Clarendon Press, 1969), and *Science in the Twentieth Century*, edited by René Taton, translated by A. J. Pomerans (London: Thames & Hudson, 1966).

Recent research in this field may best be followed through the annual volumes (since 1969) of the journal *Historical Studies in the Physical Sciences*, edited by Russell K. McCormmach (Philadelphia: University of Pennsylvania Press). Some of the most provocative research in this journal will be found in the papers of Paul Forman and the editor, Russell K. McCormmach, such as studies on the relationship of science to broader socio-economic problems. Another early investigation is that of John D. Bernal, *Science and Industry in the Nineteenth Century* (London: Routledge & Kegan Paul, 1953).

The special significance of the chemical industry in nineteenth-century Germany has been discussed by Aaron J. Ihde in *The Development of Modern Chemistry* (New York, Evanston, and London, 1964) and by J. J.



Beer in *The Emergence of the German Dye Industry* (Urbana: University of Illinois Press, 1959). Derek J. de Solla Price's studies will be found most conveniently stated in his *Little Science, Big Science* (New York: Columbia University Press, 1963) and in the chapters on "Mutations of Science" and "Diseases of Science" in his *Science since Babylon* (New York and London: Yale University Press, 1962).

The dialogue between Joe Weber and Lew Fields was transcribed from Columbia record A-1168, "Heinie at College," recorded on 22 March 1912; the author is indebted to Mr. John Wholahan for locating Albert A. Michelson's reference to the common belief that the future of the physical sciences was to be found in ever more accurate measurements, in the *Quarterly Calendar* (University of Chicago) 3: 2-15, August 1894.



CHAPTER TWO: ACHIEVEMENTS OF MEDICAL SCIENCE OVER THE PAST FIFTY YEARS

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The dynamic growth of medical science over the past half century has greatly exceeded the achievements of any other fifty-year period in the history of medicine. This accomplishment is the product of many centuries devoted to the learning of scientific principles as taught by Newton and Francis Bacon, Vesalius and Harvey, and by the application of the precise methods of Pasteur and Lister, Johannes Müller and Virchow. This period promoted high standards in medical education through the efforts of Abraham Flexner, the American Medical Association, the American College of Surgeons, the Association of American Medical Colleges, and the American Hospital Association; through the establishment of specialty boards; and through the appearance of the full-time faculty in the medical schools. These five decades were decades of research vigorously pursued by the Rockefeller Institute in New York, by the Medical Research Council of Great Britain, by the U.S. Federal Government, and by medical schools, foundations, and the pharmaceutical industry, with emphasis upon basic science. Perhaps the greatest stimulus of all lay in World War I, which uncovered glaring deficiencies in medical science, such as the poor control of wound infections, lethargic encephalitis, meningitis, and war psychosis. The quarter-million deaths that followed in the wake of the influenza epidemic of 1919 demanded a serious reappraisal of medicine.

England, Scotland, France, Germany, Russia, Japan, and the United States continued in their course of increasing excellence in service, education, and research. The World Health Organization helped to quell the great destroyers of mankind—malaria, yellow fever, malnutrition, tuberculosis, and schistosomiasis—and raised health standards in the most backward countries.

The movement toward national health care by which all received free or nearly free medical care from birth to grave was adopted by the Scandinavian countries, England, Russia, South Africa, New Zealand, and parts of Canada, Medicare and Medicaid being practiced in the United States. Third-party carriers like Blue Cross and Blue Shield arose in the United States, along with health centers and group practice units like the Mayo Clinic and the Permanente Group in California. Life expectancy in the United States improved from 53.6 years for men and 54.6 years for women in 1920 to 67.3 years for men and 73.7 years for women in 1956. The death rate per 1000 population in the United States was 14.2 in 1920 and 9.0 in 1967. The national health expenditure in 1950 was \$12,867,000, and in 1968 it was \$53,122,000. The monies spent for research and



development totaled \$1.6 billion in 1968 in the United States; in 1903 the Public Health Service expended a total of \$300 for a research grant in Chicago.

THE LABORATORY IN GROWTH OF MEDICAL SCIENCE

The recent growth of medical science emerged from the increasing interest in chemistry, physics, microbiology, and pharmacology, as well as in the physiology of health and disease in animals and man. The problems of the bedside were taken to the laboratory and the discoveries of the laboratory brought to the bedside. Precision necessary for the new knowledge came through the invention of specific tools and technics: electrocardiography, electromyography, and angiography; radio scanning for studies of the brain, lung, heart chambers, liver, pancreas, and spleen; the evaluation of electrolytes in the body fluids and of phosphorus, calcium, uric acid, creatinine, bicarbonate, and glucose; the determination of blood gases; pulmonary function tests; improved visualization of the retina by photography; esophagoscopy, gastroscopy, peritoneoscopy, proctoscopy, thoracoscopy, mediastinoscopy, bronchoscopy, and cystoscopy; the use of isotopes of iron, sodium, iodine, and phosphorus for both treatment and diagnosis; and the employment of sophisticated laboratory technics such as column chromatography, absorption spectroscopy, ultracentrifugation, electron microscopy, X-ray diffraction, electrophoresis on gel media, and immunochemical assays.

Wilhelm Roentgen's wildest dreams could never have imagined the broad range of developments that flowed from his discovery of a simple X-ray light beam at his laboratory in Würzburg in 1895. Diagnostic radiology came to include cholecystography, intravenous pyelography, myelography, and angiography and brought out details such as those seen through tomography, air contrast, and cinematography; it helped to track down deformities, infection, ulcers, and tumors wherever they occurred. Thanks to the discovery of artificial radiotherapy by the Joliot's in 1934, therapeutic radiology with its gamma rays and its cobalt 60 has been useful in the treatment of tumors and leukemia. Robert Koch would be surprised at the rise of a new field in microbiology, the viruses—such as the adenovirus, the virus of Eaton agent pneumonia, and the virus of hepatitis.

Stupendous developments were a diagnostic skin test of trichinosis; successful vaccination against tuberculosis, measles, German measles, cholera, and poliomyelitis; and the Dick test for susceptibility to scarlet fever.¹

Pathology contributed the Pap test, in which smears taken from the cervix, lungs, mammae, and stomach are studied for early diagnosis of cancer.² Percutaneous biopsy of liver and lungs became commonplace.

SUCCESSES IN SURGERY

Surgery entered the vascular system and altered our previously hopeless outlook in that area. In 1945 Alfred Blalock and Helen B. Taussig³ at the Johns Hopkins Hospital operated on three children with cyanosis



due to pulmonary stenosis and by pulmonary atresia by connecting a systemic artery to the pulmonary artery. With the invention of the heart-lung bypass machine, heart surgery became commonplace, as did perforations of the myocardium, valvular commissurotomy, plastic repair of diseased valves, replacement of old valves by synthetic valves, correction of false communications in the heart, plastic repair of diseased coronary arteries, excision of stenosed arteries and aneurysms and replacement with synthetic vessels. Heart replacement, first successfully performed on Blaiberg, a dentist, in 1968, suffered a setback due to the misunderstood mechanisms of tissue rejection. Renal transplants achieved after the use of immunosuppressive drugs fared better—some 1000 such patients survived for a considerable period of time.

Surgery also resorted to tracheotomy as an emergency measure; resection of the lung for tuberculosis, bronchiectasis, or tumor; pacemakers for heart block inserted into the chest; colectomy for ulcerative colitis; and portocaval shunt for cirrhosis of the liver. Vagotomy as recommended by Dragstedt⁴ in 1943 became the accepted treatment, with pyloroplasty, for duodenal ulcer. Corneal transplants achieved measurable success, as did prostheses for hip fracture.

MEDICAL TREATMENT

The field of hematology was advanced by the discovery of the anticoagulants coumerin and heparin for the prevention of thrombosis in coronary disease, cerebral insufficiency, and atrial fibrillation, as well as by the important contribution of the Nobel Prize winners Murphy and Minot,⁵ who demonstrated that liver extract contains vitamin B-12, which is specific for pernicious anemia. In addition, the Rh blood factor was isolated in the antiserum prepared by the injection of the blood of Rhesus monkeys into rabbits. Rh-negative mothers immunized to Rh substance from an Rh-positive fetus led to the disease erythroblastosis fetalis. Replacement transfusion was provided in therapy and RHO-GAM for prevention. Finally, Factors V-XII were unraveled in the explanation of the clotting reaction. Factor VIII, the antihemophilic factor, present in blood plasma, was found specific for hemophilia.

Psychiatry explained abnormal behavior more in relation to infantile and early childhood emotional trauma than on the basis of the repressed sexual experience doctrine of Freud. Although the pathophysiology of psychiatric disease has not been established, drug therapy has been effective in leading to discharge of large numbers of patients confined to mental hospitals. Some of these drugs were the phenothiazine derivatives, such as chlorpromazine, meprobamate, and chlordiazepoxide for anxiety; monamine oxidase inhibitors like ipromasid and imipramine were for depression. The discovery of mescaline and lysergic acid diethylamide (LSD) led to the field of experimental psychosis; their inappropriate use has been of social concern. Diphenylhydantoin took its place as a dependent anticonvulsant drug, along with primidone, phenacemide, and trimethadione. The new narcotic analgesic agents also found approval: meperidine, methadone, and



propoxyphene.

A historic event occurred 2 December 1921, when Banting, Best, et al.⁶ treated Leonard Thompson, aged 14, ill with juvenile diabetes at the Toronto General Hospital. The blood sugar of the child was 500 mg percent. The doctors injected insulin which they had isolated from pancreas and achieved control of the diabetes. Shortly afterward, crystalline insulin was prepared, to be followed by protamine zinc insulin, globulin insulin, isophane insulin, and lente insulin, all given parenterally. By a serendipitous route the sulfonyl ureas were ushered into the world, then the biguanids, as phenformin, thus making available the long-sought-for oral therapy in diabetes. Surveys disclosed a 1 percent incidence of diabetes in the entire United States population. Equally notable was the use of cortisone and its derivatives obtained from the cortex of the adrenal gland, along with the adrenocorticotrophic hormone (ACTH) of the pituitary gland. In 1949 Hench and his associates⁷ observed a salutary effect of these substances on rheumatoid arthritis. In succeeding years these hormones were useful in acute and chronic adrenal insufficiency, osteoarthritis, bursitis, nephrotic syndrome, systemic lupus erythematosus, bronchial asthma, chronic ulcerative colitis, cerebral edema, acute leukemia, and shock; in organ transplantation; and in the fields of ophthalmology and dermatology.

CHEMOTHERAPY

Modern chemotherapy grew out of the textile-dyeing industry when prontosil, an azo dye containing sulfanilamide, was discovered. In 1935 Domagk⁸ of the I.G. Farbenindustrie proved the specificity of this chemical for streptococcal infections, winning the Nobel Prize as a result. With prontosil Foerster saved the life of a ten-month-old child dying of staphylococcus septicemia. The active ingredient turned out to be sulfanilamide. Substitution made in the amido group led to the development of potent antibacterial substances: sulfapyridine, sulfathiazole, sulfadiazine, sulfamerazine, sulfaguanidine, succinyl-sulfathiazole, and others. These drugs proved effective against staphylococcus, streptococcus, pneumococcus, proteus, and gonococcus.

In 1928, while engaged in the study of staphylococcus variants at St. Mary's Hospital, London, Alexander Fleming et al.⁹ noticed lysis of staphylococcus colonies in an agar plate that had been accidentally contaminated from the air by the penicillium mold. His studies disclosed strong inhibitory properties by the broth cultures of the mold against growth of the common disease-producing bacteria. This was another example of serendipity so common in the drug therapy of the period. The substance took the name penicillin. Twelve years later, on 25 May 1940, H. W. Florey, Ernest Chain, and Norman G. Heatley of the Sir William Dunn School of Pathology at Oxford injected the Fleming mold, *Penicillium notatum*, into two groups of mice with hemolytic streptococci. The first group, protected with penicillin, survived; the second group, unprotected, died. The first patient treated at Oxford was a policeman, ill of staphylococcus and streptococcus sepsis, who received penicillin for five days. However, because sufficient amounts of penicillin were not available, he died.



Penicillin, by the demands of World War II, was manufactured in quantity at the Department of Agriculture in Peoria, Illinois, through the deep-tank fermentation method and through the addition to the culture medium of corn steep liquor. In 1942 there was hardly enough penicillin to treat one hundred patients, but by the end of the year there was a sufficient quantity for all the Armed Forces and their allies. The first civilian patient treated in the United States was a thirty-three-year-old housewife who in 1944 became ill with sepsis due to b-hemolytic streptococcus from inevitable abortion. She recovered under penicillin therapy. By 1958 some 375 tons of penicillin were put to use. The semisynthetic penicillins, congeners of penicillin, were conceived because of the inactivation of penicillin by penicillinase-producing microbes. Methicillin, oxacillin, cloxacillin, nafcillin, and ampicillin all have a broader spectrum of antibacterial activity than penicillin.

Contemporary with this brilliant work was the equally important uncovering of streptomycin. Between 1939 and 1943, Selman Waksman, a soil microbiologist from Rutgers University, disclosed antibiotics in the soil actinomyces. By 1944 he and his associates¹⁰ had isolated streptomycin and found it effective against brucellosis, Listeria infections, and Shigella and Escherichia coli infections. So effective was it against the tubercle bacillus that the morbidity and mortality of the dreaded tuberculosis fell appreciably, tuberculosis sanitariums were less needed, and tuberculosis was treated in the clinic and the office. An array of potent drugs flowed from laboratories studying soil bacteria: bacitracin, chloramphenicol, polymyxin, chlortetracycline, cephalosporin, neomycin, oxytetracycline, nystatin, erythromycin, tetracycline, novobiocin, cycloserine, vancomycin, ristocetin, kanamycin, griseofulvin, and lincocin. Ehrlich's magic bullets had indeed been brought forth. The death rate from infection and parasites in England and Wales was reduced from 1600 per million living to 180 per million living in 1957. The years 1920 to 1970 were, indeed, years of the conquest of bacterial disease.

ORAL CONTRACEPTION

Two active substances in the ovary were defined in the 1920s: the one, estrogen, varying in amounts during menstruation and pregnancy, and the other, progesterone, present in the corpus luteum. The follicle-stimulating hormone and the lutein hormone were traced to the pituitary. Diethylstilbestrol was one of the several estrogens used for menopause, dysmenorrhea, ovarian dysgenesis, osteoporosis, and cancer of the prostate. Recognition of the use of progestin for the inhibition of ovulation led to the discovery of an effective oral contraceptive agent. In 1955 Rock, Pincus, and Garcia¹¹ gave the combination of norethynodrel with mestranol to large numbers of women in San Juan and Humacao, Puerto Rico, and in Port-au-Prince, Haiti, giving the drug from the fifth to the twenty-fifth day of the menstrual cycle. The rate of pregnancy was appreciably reduced. What a boon to womanhood!

Primary hypertension affected 5 percent of the population. Although its pathogenesis has not been well



understood, it has responded appreciably to the benzothiadiazines, hydralazine, methyl dopa, guanethidine, and ganglionic blocking agents. One of the most effective agents was rauwolfia, a herb used in ancient India for anxiety. It was rediscovered in India in 1931 and put to clinical use in 1955.

HOSPITAL AND COMMUNITY HEALTH CENTERS

The emphasis of medical science has been largely centered in the hospital and the improvement of its facilities and professional care; the recent decade has directed attention to the community through health centers, visiting nurses, social service, and rehabilitation services in the home. Social problems such as psychiatric crimes, drug abuse and addiction, alcoholism, delinquency, absenteeism, sexual deviation, and smoking have increasingly burdened the physician. The medical profession has directed attention steadily in the direction of prevention through periodic checkups, immunizations, psychological testing, and the encouragement of a positive, wholesome life through recreation and physical exercise. In view of the present expanding population of 3.6 billion people, medical science in the next fifty years must profit by the past fifty years, and seek to curtail reproduction, and contribute to a higher quality of life.

[Editor's note.—For additional informative background, see *The Growth of Medicine*, compiled and edited by Frederick Stenn (Springfield, Ill.: Charles C. Thomas, 1967).]

REFERENCES

1. Dick, G., and Dick, Gladys H.: Scarlet Fever Toxin in Preventive Immunization, *JAMA* 82: 544, 1924.
2. Papanicolaou, G. N.: The Sexual Cycle in the Human Female as Revealed by Vaginal Smears, *Amer J Anat* (Suppl.) 52: 519, 1933.
3. Blalock, A., and Taussig, H. B.: Surgical Treatment of Malformations of the Heart in Which There Is Pulmonary Stenosis or Pulmonary Atresia, *JAMA* 128: 189, 1945.
4. Dragstedt, L. R., and Owens, Jr., F. W.: Supradiaphragmatic Sections of the Vagus Nerves in Treatment of Duodenal Ulcer, *Proc Soc Exp Biol & Med* 53: 152, 1943.
5. Murphy, W. P., and Minot, G. R.: A Special Diet for Patients with Pernicious Anemia, *Boston Med & Surg J* 195: 410, 1926.
6. Banting, F. G.; Best, C. H.; and MacLeod, J. J. R.: Internal Secretions of the Pancreas, *Amer J Physiol* 59: 479, 1922.
7. Hench, P. S.; Kendall, E. C.; Slocum, C. H.; and Polley, H. F.: The Effect of the Hormones of the Adrenal Cortex and of the Pituitary Cortico-Tropic Hormone on Rheumatoid Arthritis, *Proc Staff Mtg Mayo Clinic* 24: 181, 1949.
8. Domagk, G.: Ein Beitrag zur Chemotherapie der Bakteriellen Infektionen, *Deutsch Med Wschr* 61: 250, 1935.
9. Fleming, A.; Florey, H. W.; and Chain, E. B.: On Antibacterial Action of Cultures of a *Penicillium*, *Brit J Exp Path* 10: 226, 1929.
10. Waksman, S.; Bugie, E.; and Schatz, A.: Isolation of Antibiotic Substances from Soil Microorganisms with Special Reference to Streptothrix and Streptomycin, *Proc Staff Mtg Mayo Clinic* 19: 537, 1944.
11. Rock, J.; Pincus, G.; and Garcia, C. M.: Synthetic Progestins in the Normal Human Menstrual Cycle, *Recent Progress Hormone Research* 13: 323, 1957.



CHAPTER THREE: FROM ANTIQUITY THROUGH THE FIRST FIFTH OF THE TWENTIETH CENTURY

(Setting of the Stage for the IADR Birth)

Significant organizations do not come into existence *de novo*: they evolve through many phases before they attain long-range objectives, especially if those objectives are globally as well as altruistically conceived. Certainly the International Association for Dental Research was not born by springing forth into existence as Athene sprang forth (according to ancient Greek mythology); fully armed, shouting a triumphant cry of victory, and brandishing a sharp javelin, having emerged from the head of Zeus, who was said to have had an intolerable headache during this time.

THE INTELLECTUAL SETTING

A long series of events and conditions set the stage for the conception and eventual birth of this Association which was to so enhance dental research. Just how far back in the story of mankind is the thin thread of research interest discernible? Certain aspects of dental research can, indeed, be traced to the earliest recorded events in civilization.

Since some kind of primitive dental treatment came into being in antiquity, there must have been a few nameless persons in those early civilizations who conducted a form of empirical research to separate facts from fantasies about man's dentition. The papyrus discovered at Thebes by Professor Ebers, dealing with medical diagnostic procedures accumulated between *circa* 3700 and 1550 B.C., listed eleven dental prescriptions. Moreover, the earliest historian, Herodotus, observed that dentistry in Egypt was practiced as a medical specialty. He wrote that "Egypt is quite full of doctors: those for the eyes, those for the head, some for the teeth..." One such doctor was Hesi-Ré, who is credited with being the first dentist. Sumerian clay tablets, Sanskrit records, and ancient Chinese writings attest that there were other persons who must at least empirically have carried out similar primitive research in order to achieve a few simple truths about the teeth. Between *circa* 1000-400 B.C., some of the Etruscans advanced dental prostheses from the "retentive" type of the Egyptians and Phoenicians to the "restorative" type. Etruscan practitioners used gold, carved artificial teeth, and fashioned bridges of an advanced design.

It is certain that in the days of ancient Greece men made some accurate observations that were recorded and gradually separated from mythology. Aesculapius was credited with being the father of surgical tooth removal. Another Greek designed the odontaggon, an instrument so important for the extraction of teeth that it was kept in the Temple of Apollo at Delphi.

It took some careful observations by Aristotle of Macedonia (384- 322 B.C.) to conclude that "figs when soft and sweet" produced damage to the dentition, causing a putrefactive process in teeth. Even Hippocrates



(400-300 B.C.), the "father of medicine", included dental illness in his teachings and writings in which he definitely separated truly effective treatment from religious practices.

Thus, from the earliest investigations regarding teeth, progressive teachings, practice, and refinements in dental research spread throughout the Mediterranean basin and eventually far beyond.

THE MIDDLE ERA

Advances in disease curtailment usually marked the zenith of the various cultures. The Muslim world had its glorious sway around A.D. 1000, at a time when the Western world was just beginning to emerge into the High Middle Ages. In the area of health the outstanding luminary was Abul-Casem. A Moor born near Córdoba in Spain, his Westernized name was Abulcasis. He achieved the important post of physician to the Caliph ruling Spain, in which position he found time to write a magnificent work on medicine and surgery entitled *Al Tasrif*. His chapters on dentistry showed conversant knowledge and skill in surgery on the teeth, in dental stabilization with gold and silver wire, and in treatment of periodontal problems, including dental prophylaxis. Abulcasis is well remembered as Islam's great surgeon, as epitomized in the sketches of the many dental instruments he perfected.

As the Western world was again activated in the generative period of the Renaissance, that eminent personage Leonardo da Vinci produced (*circa* 1509) his excellent anatomical drawings of the teeth and skull, recorded in his hidden and cryptographic notebooks. Especially noteworthy were his drawings on the proportions of the face to the rest of man, which opened a new phase of dental research.

Some fifty years later in France, Ambroise Paré made manifold contributions to dental treatment. He devised stabilizing ligatures for jaw fractures, experimented with the replanting of avulsed teeth, and constructed simple fixed prostheses. Also in France, but 175 years later, in 1728, Pierre Fauchard published his notable work *Le Chirugien-Dentiste ou Traité des Dents*. This covered the entire scope of his extensive knowledge of every phase of dentistry, which he acquired by practical means. As a contemporary and compatriot of Fauchard, Robert Bunon published his *Essai sur les Maladies des Dents*, which emphasized oral hygiene as a means of preventing dental diseases.

Additional dental studies were carried out in other countries during this period of great French influence. Philip Pfaff of Prussia a quarter of a century later, in 1756 while he was royal dentist to Frederick the Great, published a very comprehensive book, *Abhandlung von den Zaehnen des Menschlichen Koerpers und deren Krankheiten*. His major contributions were the first use of plaster of paris for model-making and the capping of a vital pulp prior to filling the carious tooth.

In 1771 the Englishman John Hunter^{**} published his masterpiece *Natural History of the Human Teeth*. These writings and all the research upon which they were based initiated a new epoch in dentistry, especially in



Great Britain, where systematic scientific observations finally replaced haphazard empiricism. Some twenty-five years later, while the chemist Duchâteau and the dentist de Chémant together struggled in France to produce a denture of porcelain, they were visited by Giuseppangelo Fonzi of Italy. By 1815, Fonzi had achieved considerable fame through his successful production of porcelain teeth securely attached to the denture base by precious metal pins. The fame of these "incorruptible teeth" spread from Fonzi's native Italy to the Bavarian court at Munich, to the Czar of Russia, and thence to the Spanish Bourbons.

The French influence in dentistry also extended to America. James Gardette came to the colonies in 1771, where he enjoyed a large practice and also taught many young men in the dental art. One of these was Josiah Flagg, additionally motivated by Paul Revere, who showed him the use of silver in dentistry. Flagg emphasized oral hygiene and proper diet and is said to have invented the first dental chair by adding an adjustable headrest to a Windsor chair. Captured during the War of 1812, he was transported to London, where he was permitted to practice dentistry and thereby spread his new knowledge in the Old World.

A contemporary of Josiah Flagg in Boston was John Greenwood. As a young man, Greenwood learned dentistry in New York City from his brother and became so skillful that by 1789 he made the first of a number of dentures for George Washington, then President of the infant American Republic. He used considerable ingenuity in his work for Washington, whose one upper denture was probably the first swaged gold denture ever made in America, if not in the world.

About 1840, in England, John Tomes conducted his historical investigation of dental enamel which led to his vivid description of the microstructure named after him, Tomes' fibrils. He also designed several forceps which replaced the dental keys used for extracting teeth up to this time. For these and other worthy efforts he was elected the first President of the British Dental Association.

INNOVATIONS IN AMERICA

By the middle of the nineteenth century, the geographic center of innovative achievements in Dentistry definitely turned to the United States, where it remained until the time of the IADR founding and beyond. (These many innovations were in essence applied research, while the more basic science research continued to flourish in Europe until a much later date, as pointed out in the first chapter.) This applied research, however empirically achieved, reverberated around the world. For example, it was on the 11th of December in 1844, that Horace Wells of Hartford, Connecticut, first demonstrated effective general anesthesia with nitrous oxide for the painless removal of one of his own molars. Less than two years later, 16 October 1846, a colleague, William T. G. Morton, demonstrated in the Massachusetts General Hospital that ether as an inhalant could produce anesthesia for general surgery; he had also extracted teeth quite painlessly with ether before this publicized public demonstration. Both these dentists had conducted applied research in their own unique way, but their



discoveries gave to suffering mankind an advancement immeasurably meritorious.

Many such new achievements were occurring on the United States eastern seaboard near the middle of the nineteenth century (as emphasized in the next chapter relative to the IADR founding in New York City). The establishment of the world's first dental school in Baltimore in 1840 was a major factor in formally educating young men in both the art and the emerging science of dentistry. The very first man to receive the new school's diploma was Robert Arthur, who by 1855 had made known his discovery of the welding property of annealed gold foil by malleting. This method of filling small dental cavities with cohesive gold is still the most durable means of restoring a tooth.

A contemporary, Simon Hullihen, became known as the Father of Oral Surgery because of his many new methods and accomplishments in the surgical field, including the innovation known as the "Hullihen splint".

Also in the other area of early specialization, that of orthodontia, it was in America that progress was most striking. Norman Kingsley wrote his treatise on oral deformities in 1880, describing his many unique procedures for their correction. He also systemized the field, for which he was designated the Father of Orthodontia. Within the next two decades Edward Angle set the standard with his classification of malocclusion and the proper treatment for each condition without sacrifice of teeth. These achievements won international recognition for the new specialty.

As a very profound landmark in dental research, but in the Middle West rather than on the eastern seaboard of the United States, the venerated name of G. V. Black must be cited. By his fiftieth year in 1886, Greene Vardiman Black had become the outstanding personality in the dental profession. His contributions to dental and oral pathology were extremely great, and his organizing and standardizing of operative procedures in dentistry were major achievements. From Chicago's Northwestern University, where he centered his activities from 1891 to 1915, his fame spread throughout the world.

Another American from the Midwest who exerted a great influence on dentistry was W. D. Miller. His basic research on the bacterial acid dissolution concept of dental caries was widely accepted, especially in the United States, even though his research was conducted largely in Germany, where he was the first American to receive a professional appointment at the University of Berlin. Willoughby Dayton Miller studied bacteriology under Robert Koch and published a volume on his classic work, entitled *Mikroorganismen der Mundhöhle*, in 1889. He returned to the United States in 1907 to the University of Michigan to accept the Deanship of the dental school.

Both of these outstanding men, Black and Miller, were contemporaries of William J. Gies and J. Leon Williams. Unfortunately, both died before Gies founded the IADR and Williams became its first President. All four men had great interest in and knowledge about the fundamentals of dental caries, although they apparently



never worked together. Gies had done research on various biochemical aspects of caries, while Williams was the first to use the term and to describe dental plaque. It would not be an unwarranted assumption that, had they lived a little longer, both Black and Miller would have been early members and enthusiastic supporters of the IADR if not actually founding members.

From this intellectual setting, it must be clear that dental research, in its early stages of observation, rational deduction, and application to disease treatment as well as prevention, began in antiquity and certainly became interdependently international in both occurrence and development.

THE ENVIRONMENTAL SETTING

The Association of research-minded persons with which this volume is concerned was founded in New York, a massive city with considerable cultural activity in a period of transition just at the very end of the second decade of this century. The United States had just concluded its expeditionary force of military and material might to culminate the world conflict in Europe. In its aftermath, an idealistic President Woodrow Wilson had gone abroad to set up a new society of nations, a "League of Nations", which most unfortunately his own country failed to understand and fully accept. So in 1920 the United States was on its way to a retreat from international problems toward an era of provincial "Normalcy"! But, as history was to emphasize in later decades, the world would not let the United States return to isolationism for more than a short generation. The Founder of this new Association to enhance dental research had wisely called the organization an "international body". Hence it is indeed pertinent to consider both the local and world environment, since it certainly had a bearing on dental research as to its motivation and acceptance in a nation and world not at all yet fully conscious of its multifold attributes and abilities.

What was the immediate physical background in the United States at that time? The domestic scene in 1920 was definitely different from that of a half-century later, at least with respect to its state of technology, which evolved rapidly over the next five decades. The iceman made his daily rounds every summer day, as well as the early-morning milkman—by horse and wagon. Yet there were in the United States 8 million automobiles in 1920, with the figure increasing tremendously thereafter, to 110 million half a century later. The auto brought about a major transformation in social patterns during the next two decades, as the rural area became accessible to the urban dwellers and the converse. The face of the land changed, with road-building in every direction. The clomp of the horse's hoof, the trolley bell, and whistle of the steam locomotive were still in evidence in 1920 but were surely being superseded. Many technological changes as well as a few basic scientific ones were underway, as already pointed out in the first two chapters.

In the year of the Founding, the conterminous United States population was 105,710,620, but the world



population was 1,694,096,000, some fifteen times larger. The center of population in the United States was computed to be eight miles south-southwest of Spencer, Owen County, Indiana. For the first time a decline in rural population to less than 50 percent of total population was noted. The actual number of farm residents had dwindled to less than 30 percent. Illiteracy was lowered to only 6 percent. Life expectancy as determined by the United States Bureau of Public Health was 54.09 years.

THE STATE OF THE ARTS

The pragmatic philosophy in education of John Dewey found militant expression in his *Reconstruction in Philosophy*.

F. Scott Fitzgerald published his first novel, *This Side of Paradise*. Also published that year was Sinclair Lewis' *Main Street*.

The Pulitzer Prize for drama was awarded to *Beyond the Horizon* by Eugene O'Neill.

Conventions of the theatre were cast aside in the powerful production of Eugene O'Neill's *Emperor Jones*.

Popular songs of the period were: "Margie", "Avalon", "Japanese Sandman", "Whispering".

In tennis the Davis Challenge Cup was won 5-0 by the United States in Auckland, New Zealand.

Albert Michelson at the University of Chicago (1892-1929) measured for the first time the diameter of a star with the aid of the interferometer which he invented. He demonstrated that the diameter of Alpha Orionis is 260 million miles.

The Federal Transportation Act was signed, returning the railroads to the former owners, since the United States Government had operated them during World War I. Railroad mileage in the United States was at an all-time peak of 253,000 miles, as contrasted with 31,000 at the end of the Civil War.

As the "Roaring Twenties" began, the motorcar was a definite element in our standard of living, although transcontinental airmail had its beginning between New York and San Francisco.

On 26 August the Nineteenth Amendment to the Constitution was ratified, providing for woman suffrage; and they voted for the first time in the November presidential elections.

National Prohibition (the Volstead Act) passed on 28 October over President Wilson's veto. It defined as intoxicating all beverages containing more than 1/2 percent alcohol.

The Democratic National Convention assembled in San Francisco and nominated Governor James M. Cox of Ohio for President and Franklin D. Roosevelt for Vice-President. They were defeated, however, by Republicans Warren G. Harding and Calvin Coolidge on 2 November. It had been a "front porch" campaign on the slogan "Back to Normalcy". Republican majorities returned to both houses of Congress. The electoral vote was 404 to 127 for Cox and Roosevelt, with the following breakdown in the popular vote:



Harding (Republican)	16,152,200
Cox (Democrat)	9,147,533
Debs (Socialist)	919,799
Watkins (Prohibitionist)	189,408
W. W. Cox (Socialist Labor)	31,175
Christensen (Farmer-Labor)	26,541

On 2 November Westinghouse arranged for the first general radio broadcast concerned with the United States election returns. This was so successful that on 30 November the same broadcasting company sent out by "wireless" its first regular evening program.

On the world scene, there were many events of importance in 1920, but most were concerned with the aftermath of World War I. Events relative to advances in the sciences and arts were reflected by the Nobel Prize winners of 1920:

Charles Guillaume (Switzerland), Physics

Walther Nernst (Germany), Chemistry

August Krogh (Denmark), Physiology or Medicine (discovery of capillary motor regulating mechanism)

Knut Hamsun (Norway), Literature

Léon Bourgeois (France), Peace

General population growth and shifts were as follows: In 1920 London was clearly the world's largest city, with almost 7 1/2 million people, while New York, the city in which the IADR was founded, was second, with over 5 1/2 million. Berlin was third with 3,804,000, Paris had 2,906,000 while Chicago was a close fifth with 2,701,705, and Tokyo had 2,173,000. Half a century later, however, Tokyo emerged as the world's largest by far, with over 11 1/2 million persons. Shanghai apparently had over 8 million, while New York City, with an accurate 1970 census, had 7,798,757 and London now had a slightly smaller population. Taking these cities together with other urban as well as rural areas, the world population had climbed to 3,659,000,000—almost two billion greater than that of fifty years before. Thus the people of the world more than doubled in number during this span of time.

THE FOUNDERS AND THE FOUNDING

As with all things founded, there is almost always a single founder who initiates the event, although he may have induced others to share his enthusiasm and thus also to participate as founders. William J. Gies can clearly be cited as the founder of our Association, but he invited twenty-four other men to join him for the occasion.



Who was this Professor of Biological Chemistry at Columbia University who took such an intensive interest in dental research? This man was deemed to be so important in the evolution of dental research and education that a separate biography of him is being written and will be published later. Thus only a very concise—though adequate—resumé of his biographical attributes is provided in this volume.

William Gies was born in Reisterstown, Maryland, a century ago on 21 February 1872. As a young man he received his B.S. degree from Gettysburg College in 1891 and earned his Ph.D. at Yale in 1897. At Columbia University he served for many years as Professor and Chairman of the Biological Chemistry Department. Aside from his academic duties, he devoted himself for nearly half a century to the advancement of dentistry. William Gies lived a long and hardy life of eighty-four years, during which time he established himself as one of the greatest benefactors of dentistry, although not a dentist himself. For his innumerable and outstanding contributions, W. J. Gies received a great many honors from an appreciative dental profession.

One of the concepts that must have impressed Gies to a profound degree in the period 1910-18 was that he, as a biochemist, had done research in the dental field with considerable initial success. He also had collaborated with other basic science personnel in bacteriology, with some additional fruitful publications. Thus the view must have developed in Gies' thinking that if an association could be organized, bringing together the clinically-minded dentists and scientists who had some research interest in the dental field, there could emerge from such a merger new ideas and approaches to many unsolved dental problems, which actually proved to be more complex than Gies' first impression led him to believe.

Gies had by late 1918 consummated his plans for publishing the *Journal of Dental Research* as a prestigious outlet for the scientific endeavors of competent investigators in the dental field. Even though the *Journal* was ostensibly continuing the *Journal of the Allied Dental Societies*, it purported to be "a journal of stomatology; devoted to the advancement and dissemination of knowledge pertaining to the mouth and teeth, and to their relation to the body as a whole." (See also the chapter on the *Journal of Dental Research*, as well as "The History of the *Journal of Dental Research*".¹)

The *Journal* fulfilled the concept of merging basic scientists with men in dentistry only to the extent that it disseminated their research findings. But Gies' vision also included the formation of an organization in which there could be a meeting of minds on a person-to-person basis of all research-minded men to promote interest in dental research. Thus he laid his plans on a rather grand scale, as he stated later in the *Journal*: "Believing that such an association could best be formed as a federation of local societies, each to be in effect an autonomous section of a national division of the international organization, and confident that it could be projected effectually in the largest city in the United States, the writer corresponded or conferred orally with about one hundred of the leading dentists in New York regarding the feasibility of the general plan and personnel of the charter membership."² The prime meeting establishing the Association took place on Friday evening, 10



December 1920, at a dinner in the Columbia University Club. The weather³ that evening was cloudy and dry with a westerly wind velocity of 24. The temperature was moderate, with a high of 40° and a low of 33.5°F, while the barometric pressure was 29.37.



The purpose of the gathering was "to consider the advisability of promoting research by an international organization." The following men were in attendance: Adolph Berger, Theodor Blum, E. A. Bogue, George W. Clapp, Henry S. Dunning, William J. Gies, Henry W. Gillett, Milo Hellman, R. G. Hutchinson, Jr., Thaddeus P. Hyatt, Victor H. Jackson, F. C. Kemple, Arthur H. Merritt, Bissell B. Palmer, Jr., Frederick A. Peeso, M. L. Rhein, James P. Ruyl, Paul R. Stillman, Leuman M. Waugh, J. Leon Williams, and J. Lowe Young. Herman E. S. Chayes, William B. Dunning, M. I. Schamberg, and Frank T. Van Woert were unavoidably prevented from being present, but had indicated complete accord with the tentative plan for the organization of the proposed Association.⁴ That same evening J. Leon Williams was selected as Chairman, with Leuman M. Waugh as Secretary.

William J. Gies formally outlined the steps leading to this historic meeting, including a statement that dentists in Boston and Chicago who had been consulted earlier were ready to endorse the general proposal and hold meetings to organize regional Sections. Those present in New York then unanimously adopted the following Articles of Agreement, which had previously been approved by the earliest of the prospective members in Boston and Chicago.

ARTICLES OF AGREEMENT⁵

EFFECTING THE ORGANIZATION AND PROVISIONAL GOVERNMENT OF THE INTERNATIONAL ASSOCIATION FOR DENTAL RESEARCH

Founded in New York City, December 10, 1920

PREAMBLE

In order to promote broadly the advancement of active research in all branches of dentistry, and in related phases of the arts and sciences that contribute directly to the development of dentistry; and, further, to encourage and facilitate coöperative effort and achievement by, and mutual helpfulness among, investigators in all nations in every division of stomatology—to the end that dentistry may render cumulatively more perfect service to humanity—we, the undersigned, assembled at the Columbia University Club, in New York City,



December 10, 1920, hereby establish the International Association for Dental Research, and, as its founders, subscribe to and adopt these Articles of Agreement for the provisional government of this Association.

ARTICLE I. OFFICIALS

SECTION 1. *Provisional government.* The provisional executive management of this Association shall be vested in a Council of eleven members, at least six of whom shall be elected at this meeting of organization.

SECTION 2. *Officers.* The officers of the Council, to be elected by the Council itself, shall serve as the officers of the provisional government of this Association.

ARTICLE II. INSTRUCTIONS TO THE COUNCIL

SECTION 1. *Preparation of a constitution.* The Council to be elected is hereby instructed to prepare a constitution for our permanent government, to replace these Articles, and to submit to us such a constitution for formal consideration before February 1, 1921. The Council is also charged to consider ways and means for the permanent international establishment of this Association, and for the immediate progressive furtherance of the Association's purposes. The Secretary of the meeting at which these Articles are adopted shall transmit a copy of these Articles to each member of the Council to be elected.

SECTION 2. *Meetings of the Council.* The Council may, by a majority vote of its total membership, call meetings of the Council after December 18, 1920; and, by such a vote, the Council may use any means at its discretion for prompt procedure toward attainment of the objects of this Association.

ARTICLE III. MEETINGS

SECTION 1. *Next meeting.* The next meeting of the Association shall be held at the Harvard University Club, on December 17, 1920, when three additional members of the Council may be elected.²

SECTION 2. Meetings of the Association may be called by the Council on its own initiative, and shall be called at the request of five members of the Association.

ARTICLE IV. COLLEAGUES ELECTED TO CHARTER MEMBERSHIP

Having indicated direct interest in the successful foundation of this Association, but having been unavoidably prevented from attending this meeting of organization, those of our colleagues who are named below, in this Article, are hereby unanimously elected to membership as founders of this Association:

New York.—Herman E. S. Chayes, William B. Dunning, M. I. Schamberg, Frank T. Van Woert.



Boston.—Robert R. Andrews, Lawrence W. Baker, George A. Bates, Fred R. Blumenthal, Percy R. Howe, A. Leroy Johnson, V. H. Kazanjian, L. M. S. Miner, William Rice, Alfred P. Rogers, H. Carlton Smith, Eugene H. Smith, Kurt H. Thoma, George H. Wright.

Chicago.—Frederick B. Noyes.

ARTICLE V. SECTIONS OF THE ASSOCIATION

The members in any geographical group may organize local sections of this Association; but they may not do so prior to the adoption of a Constitution that will prescribe the relationships of such sections to the Association in general.

ARTICLE VI. NEW MEMBERS

Pending the adoption of a Constitution to replace these Articles of Agreement, new members may be elected by a majority vote of the members in any geographical section, subject to confirmation by a majority vote of the total membership of the Council.

ARTICLE VII. QUORUM

Nine members shall constitute a quorum for the transaction of business by this Association until these Articles of Agreement for our *provisional* government will have been superseded by a Constitution, for our *permanent* government, adopted in conformity with these Articles.



MEETINGS AT BOSTON AND CHICAGO

On 17 December 1920, J. Leon Williams and William J. Gies traveled to the Harvard Club in Boston. This was termed the Second Meeting of the organization of the Association. Here Boston members named in



the previous Articles of Agreement laid the foundation for the Boston Section. Additional members of the Association (residents of Boston and Chicago) were elected.



Shortly afterward, on 30 December 1920, William J. Gies appeared in person at the University Club of Chicago and presented the plan to these IADR members and their guests, who then took preliminary steps for the establishment of the Chicago Section.

Thereafter the Council was organized by representatives of the New York, Boston, and Chicago Sections, so that by the spring of 1921 the Constitution (herein appended) had been adopted as part of the government of the Association. The By-Laws, however, were worked out at a somewhat later date. Even though these three Sections were to meet frequently within their own urban area, the parent body planned to meet annually, almost always in the United States. The name of the Association, implying international participation, was initially primarily a nominal concept, although it encouraged membership from Canada and from overseas.

How has the IADR developed in its adherence to the objectives of the organization? The next chapter, by one of the prominent proponents of dental research with an extensive background of research in several continents, elaborates upon whether the objectives of the Association have been achieved.

CONSTITUTION OF THE INTERNATIONAL ASSOCIATION FOR DENTAL RESEARCH⁶

ADOPTED IN CONFORMITY WITH THE PROVISIONS OF THE *Articles of Agreement*
ON WHICH THE INTERNATIONAL ASSOCIATION FOR DENTAL RESEARCH WAS FOUNDED
IN NEW YORK CITY ON DECEMBER 10, 1920, AND WHICH ARTICLES OF AGREEMENT THIS
CONSTITUTION SUPERSEDES AND REPLACES

ARTICLE I. NAME

This organization is named: *International Association for Dental Research*.

ARTICLE II. OBJECT

The Association has been established (a) to promote broadly the advancement of active research in all branches of dental science and in related phases of the sciences that contribute directly to the



development of dentistry, and which add to the knowledge of the mouth and teeth and of their relations to the body as a whole; and further, (b) to encourage and facilitate cooperative effort and achievement by, and mutual helpfulness among, investigators in all nations in every division of stomatology; (c) to the end, particularly, that dentistry may render cumulatively more perfect service to humanity.

ARTICLE III. PROHIBITION OF COMMERCIAL RELATIONSHIPS

This Association shall in no way enter into, or foster, relations with commercial organizations, nor with makers of appliances or of anything else used in the art of dentistry by the dental profession, or in the care and treatment of the oral structures by the laity.

ARTICLE IV. MEMBERSHIP

SECTION 1. *Eligibility.* Any person who has conducted, and published an account of, a meritorious original investigation in dental science, or in any of the sciences contributory to stomatology, shall be eligible to membership in this Association, providing such person conforms to the recognized standards of professional ethics.

SECTION 2. *Nomination.*

(A) Nominations to membership may be made at any time by any member. Each nomination must be formally endorsed by two additional members, who know personally and certify from specific knowledge, that the candidate for membership is eligible, before the nomination can be registered for official presentation to the Association.

(B) Each endorsed nomination for membership must be formally presented to the Council of the Association, with three copies each of one or more publications which show that the nominee meets the requirement of eligibility relating to research achievement.

(C) The Council shall determine, in the case of each nomination, whether the nominee fully meets the requirements of eligibility. The Council shall report promptly to the Association the details of its findings in this relation, and also such recommendations as it may wish to offer with its report.

SECTION 3. *Election.*

(A) New members may be elected only at annual meetings of the Association.

(B) Election to membership shall be by ballot by the *individual* members. A two-thirds affirmative vote of the ballots cast shall be necessary for election. Substitution of any other parliamentary procedure for that of a secret ballot shall invalidate all elections to membership that may be accomplished in such an irregular way.



SECTION 4. *Initiation.* Initiation of membership in this Association requires (a) formal approval of a certified copy of this Constitution, signified to the Secretary of the Council; also (b) the member-elect's formally avowed acceptance of, and adherence to, all the provisions of this Constitution and of the by-laws of the Association. No member-elect can exercise the privilege of membership before these requirements are met.

SECTION 5. *Forfeiture.* Membership in this Association may be terminated by a member at any time by formal notice, to the Secretary of the Council, of that member's withdrawal. Delivery of such a notice automatically effects that member's withdrawal from membership in this Association.

The privilege and rights of membership may be terminated by the Association for any member at any time, by formal notice to a member, from the Secretary of the Council, of the Association's decision, at an annual meeting by a two-thirds vote of those present and voting, that the member's association is no longer desired. Delivery of such a notice to a member automatically terminates his or her membership in this Association.

Annual dues for the fiscal year in which membership may be terminated by a member or by the Association shall be repaid or, if unpaid, shall not be demanded.

ARTICLE I. DIVISIONS OF THE ASSOCIATION³

SECTION 1. *Organization.* The members in any nation, with the approval of the Association, may organize a Division of the Association, particularly for the national advancement of the objects of the Association.

SECTION 2. *Management.* The national affairs of a Division shall be managed by its own members, but such management must conform in all respects with the requirements of this Constitution and of the by-laws of the Association.

ARTICLE VI. SECTIONS OF THE ASSOCIATION

SECTION 1. *Organization.* The members in any geographical center, with the approval of the corresponding national Division, may organize a Section of the Association, particularly for the local advancement of the objects of the Association.

SECTION 2. *Management.* The affairs of the Sections shall be managed by their own members, but such management must conform in all respects with the requirements of this Constitution, with the by-laws of the Association, and with the by-laws of the corresponding national Division of the Association.

ARTICLE VII. MEETINGS

SECTION 1. *Annual.* The Association shall meet at least once annually, beginning with the calendar



year 1921, at times and places to be determined by the Association, or by the Council when it is authorized to act for the Association.

SECTION 2. *Special*. Special meetings of the Association may be convened by the Council, and shall be called at the request of one-fifth of the total membership.

ARTICLE III. OFFICIALS

SECTION 1. *Council*.

(A) Authority. During the periods between annual meetings, the executive management of the affairs of the Association shall be conducted by the Council, within the general authority voted to it by the Association.

(B) Personnel.

(a) The Council shall consist of three elected representatives of each national Division. Until the number of divisional representatives in the Council attains a total of at least fifteen, the number necessary to constitute that total shall be elected from the American Division of the Association.

(b) With the adoption of this Constitution, the terms of all the members of the existing Council of the Association (selected on the basis of the provisional organization) shall close automatically, when it shall become the duty of each of the three existing and ratifying Sections⁴ of the Association to elect by ballot five Councillors, the fifteen Councillors thus elected to serve as, and to be, the Council of the Association, until their successors will have been chosen in accordance with the provisions of this Constitution.

(C) Election of the divisional representatives. The representatives of the national Divisions in the Council shall be elected by the respective national Divisions.

(D) Length of the term of service. The length of the term of service of the individual representatives in the Council shall be determined by the respective national Divisions.

SECTION 2. *Officers*.

(A) Identical with those of the Council. The general officers of the Council shall be, also, the officers of the Association. They shall be nominated by the Council, preferably though not necessarily from its own membership, subject to formal confirmation by the Association.

(B) Nomination. The list of nominations for the offices of the Council and Association, for a given term, shall be formally announced by the Council to each member of the Association at least three months prior to the date of the annual meeting at which the same nominations will be presented to the Association for its consideration.



(C) Election. The Council's nominees for the offices in the Council and Association, if approved by a majority vote of those present and voting at the succeeding annual meeting, shall become the officers of the Council and of the Association. In the event, however, that the Association should record a majority vote against any of the Council's nominees for the general offices, the Council, at the same meeting, shall present one or more additional nominations for the corresponding offices, until the Association votes its approval. But should the Council fail to make satisfactory nominations, the Association may then and there, independently of the Council, complete the nomination and election of general officers of the Council and Association.

(D) Elective term of service. The elective term of service in all the general offices of the Council and Association shall begin at the close of an annual meeting and shall terminate at the end of the next succeeding annual meeting.

ARTICLE IX. FINANCES

SECTION 1. *Amount of dues.* The annual dues, payable by each member, before the close of each annual meeting of the Association, shall *not exceed* five dollars (\$5.00) or its approximate equivalent.

SECTION 2. *Payment of dues.* The annual dues may be paid through the agency of national Divisions.

SECTION 3. *Restriction on the expenditure of funds.* No funds of the Association may be expended by the Council without general authorization by, or approval of, the Association.

ARTICLE X. BYLAWS

By-laws of this Association may be adopted at any meeting of the Association by a two-thirds vote of the members present and voting.

ARTICLE XI. QUORUM

Fifteen members shall constitute a quorum of this Association.

ARTICLE XII. AMENDMENTS

SECTION 1. *Constitution.*

(A) Presentation. Proposed amendments to this Constitution may be presented, at annual meetings of the Association, by and with the formal endorsement of five members. Statements of reasons for the adoption of proposed amendments must accompany the formal presentation of each such amendment.



(B) Notification of all the members. It shall be one of the duties of the Council to deliver to each member of the Association, within six months of the date of the annual meeting at which an amendment was proposed,

(a) a printed copy of each such suggested amendment, with the names of the sponsors and the reasons given formally for its proposed adoption; also

(b) a blank ballot for the registration of a vote for or against the proposed amendment.

(C) Adoption. At the next, or any, succeeding annual meeting, the foregoing conditions having been met in detail, a vote on the proposed amendment shall be in order; and the proposed amendment shall become a part of this Constitution if, and when, at least two-thirds of the entire membership of the Association vote for its adoption.

SECTION 2. *By-laws.* Amendments to the By-laws may be adopted at any meeting of the Association by a two-thirds vote of those present and voting.

[By-laws have not yet been adopted]

Ratified for the Association, by the New York, Boston, and Chicago Sections, on May 27, 1921.

Attest:

J. Leon Williams, Leuman M. Waugh,

President. *Secretary.*

REFERENCES

1. Orland, F. J.: The Fifty Year History of the *Journal* and the Biographical Directory of the IADR, *J Dent Res* **48**: H-17, 1969 (Special Commemorative Supplement to the September 1969 issue of vol 48).
2. *J Dent Res* **6**: 101, 1924-26; **8**: 197, 1928.
3. Communication DF5214 (1771), dated 14 September 1970, from the National Weather Records Center, Federal Building, Asheville, North Carolina.
4. *J Dent Res* **6**: 102, 1924-26; **8**: 198, 1928.
5. *J Dent Res* **6**: 102-105, 1924-26; **8**: 199-202, 1928.
6. *J Dent Res* **6**: 105-110, 1924-26; **8**: 202-207, 1928.

****Publisher's footnote:** Since John Hunter was born near Glasgow, he should more accurately be referred to as a Scotsman. Our thanks to alert reader Jan Ledvinka, Newcastle, UK.

² At that meeting the members were authorized to hold a special meeting in Chicago, on December 30, 1920, to complete preliminaries of organization, including the election of two additional members of the Council.

³ Divisions have not yet been organized.

⁴ This was a formal recognition of the existence of the New York, Boston, and Chicago Sections, which until then were informal "groups."



CHAPTER FOUR: HAVE OBJECTIVES OF THE IADR BEEN ACHIEVED DURING ITS FIRST FIFTY YEARS?

REIDAR F. SOGNAES,* L.D.S., D.M.D., PH.D

PROFESSOR OF ANATOMY AND ORAL BIOLOGY, FOUNDING DEAN OF DENTISTRY, UNIVERSITY OF CALIFORNIA CENTER FOR THE HEALTH SCIENCES, LOS ANGELES, CALIFORNIA.

When an organization becomes fifty years old, it is just a little too old for its founders to personally verbalize the play-by-play story on its origin. Yet it is still young enough to permit word-of-mouth recollections by members who saw the founders in action during many of the earlier meetings.

INTRODUCTORY

Clearly, those creative pioneers who conceived the idea for this organization—the International Association for Dental Research—were devoted to and optimistic about their field of endeavor. They had to be, for what they set out to do had no precedent.

First of all, it was a unique fact within the field of health research that an *international* association had its origin on American soil. To be sure, there had been many international congresses on various related subjects of medicine prior to the IADR's establishment in 1920. But none were dental, nearly all were instituted in Europe, and the number of investigators from Central Europe far outnumbered those from the English-speaking world and certainly those from the United States of America.

Initially it may also be said that the term *association* was hardly applicable to what really represented a very small group of individuals, who initially were largely centered around New York City. A specific concentration on dental matters certainly indicated a difference from many other health science developments in that the IADR had its initiation on this continent without any comparable precedent of a similar organization first exemplified abroad.

There had been important individual pioneers in innovative dental affairs in France, Britain, Germany, Austria, and America before 1920. Prior to this time, however, there had been no comparable organized group devoted to dentistry in the field of scientific research.

It is of further interest that the scientific orientation of the IADR was, from the very beginning, clearly defined as *dental*. The objectives were nevertheless not confined to any specific methodology or to any one basic or clinical discipline, as was true of most organizations and journals devoted to scientific progress of that time.

The fact that the organization was not only organ-centered, that is, dental, but specifically aimed at the advancement of (dental) *research* represented a somewhat rare pioneering outlook. One is not aware of comparable organizations at that time labeled specifically as exclusively devoted to, let us say,



ophthalmological research, dermatological research, or head and neck research.

OBJECTIVE

With this preamble regarding the originality of its creation, one must now ask to what extent the objectives of the IADR have been met during its first fifty years. When one re-examines Article II of the IADR Constitution, it is evident that the stated goals may be itemized under the following categories:

- A. To promote broadly
 - 1. Advancement of research in all branches of dental science
 - 2. Advancement of research in the related phases of sciences that
 - a) Contribute to development of oral health service
 - b) Add to knowledge of the mouth and the teeth
 - c) Add to knowledge of bodily relations of the teeth
- B. To encourage and facilitate
 - 1. Cooperative effort between investigators
 - 2. Achievement by investigators
 - 3. Mutual helpfulness among investigators
 - a) in all nations
 - b) in every division of stomatology
- C. To the end that
 - 1. Dentistry may render cumulatively more perfect service to humanity

A. "... to promote broadly ..."

In the early years the IADR meetings were mostly concerned with clinical studies supplemented with observations derived from the basic tools of anatomy, histology, and pathology. As the field developed, it is noteworthy that many innovations in research methodology were almost immediately applied to and in some cases even pioneered through studies on problems of dentistry. Thus we find that the utilization of the newest investigative approaches, such as radioactive isotopes, electron microscopes, and lasers, had remarkably prompt application to problems of dental research.

Perhaps one of the most important impacts of the IADR was its wholesome influence on dentistry's ability to draw scientists from other fields into dental research and thus to provide stimulating associations between them and dentists involved in scholarly pursuits. In this connection one notes in the Constitution that such advancement of other sciences was expected to "contribute directly to the development of oral health service". In other words, the organizers of the IADR hoped to bring scientists from other fields into the organization in the hope of stimulating such colleagues to contribute directly to problems of oral health. This



indeed they did through many fields, both with respect to clinical and basic research, ranging from focal infection to fluoridation, and from radioisotope metabolism to electron microscopic ultrastructure of bones and teeth.

Many IADR members were to become involved with the emerging story of fluoridation, with respect to biochemical, microbiological, and epidemiological aspects. It was also anticipated that related sciences would add to the basic knowledge of the mouth and teeth. There had been a significant precedent to this some years earlier in pioneering work in endocrinology, which constituted literally the experimental "discovery" of the rodent incisor. The Founder of the IADR had indeed come from the very new and basic science of biochemistry, and he brought his basic knowledge to bear on the chemistry of the teeth, notably the organic matrix of the enamel. In so doing, he chose what turned out to be a complex problem, still demanding the very best knowledge of fundamental scientists.

Soon there were many colleagues from the general field of science who become deeply involved with dental science, using dental tissues to elucidate fundamental problems related to such fields as nutrition, endocrinology, and anthropology. Many leaders of the IADR came from outside the field of dentistry and brought their knowledge to bear on dental research, resulting in great contributions toward solutions of problems of the day. In addition, these leaders exerted a stimulating influence in their dealings with younger colleagues. Thus, many dentists who took up academic careers benefited greatly from those basic scientists who had shown an early interest in the Association and its progress.

Related sciences were also instrumental in bringing further understanding of dental research in "relation to the body as a whole". This particular aspect was perhaps less significant than the basic research on the oral tissues themselves, for it is only more recently that metabolic diseases and general syndromes have been studied extensively with specific reference to dental research.

B. "... to encourage and facilitate ..."

The original IADR Constitution emphasized the importance of cooperation at several levels, mutual helpfulness between *investigators*, in every division of *stomatology*, in all *nations*. It is well known from the participation in the annual sessions of the IADR that many cooperative efforts have evolved from formal and informal meetings. It is also evident that many if not all phases of stomatology have been represented in the organization. Yet the emphasis has been largely at the basic science level rather than at the clinical and medical levels, as suggested by the term *stomatology*. Furthermore, the cooperative efforts between investigators in all nations have probably been more limited than is indicated by the international title of the organization. This is largely due to the fact that most meetings have been held on the American continent, a matter now up for serious reconsideration in terms of future meeting plans.

C. "... to the end that ..."



The concluding statements in the Constitution listing the objectives of the IADR refer to the cumulative influence of all the former goals toward rendering a more perfect service to humanity. Clearly any one of all of the inputs alluded to above can and will have such a result. This ultimate question is perhaps the hardest one to answer when one ponders the question of the relative degree to which the IADR's objectives have been achieved, according to its original Constitutional goals, during these first fifty years. Perhaps another way of responding to such a question would be to ask another one, namely: What would dental research (and for that matter, academic dentistry and even dentistry generally) have been like today were it *not* for the International Association for Dental Research?

RETROSPECTIVE AND PROSPECTIVE

Possibly the most significant dream (and ultimate accomplishment) of the pioneering IADR founders was, in retrospect, the international character of their American-born organization. Why would dentistry differ from other branches of the healing arts in having its initiation in such organized scholarly pursuits in this particular field in this particular part of the world? Was it merely that there were several very significant individuals on the scene in and around New York at the right time? This undoubtedly was of great importance; but these men undoubtedly would be the first to admit that they stood on the shoulders of their own predecessors who in all corners of the globe had been pioneers in the field of dentistry.

Several of the pioneers had in fact been very close to home. For had not the first dental school been established on these shores south of New York—in Baltimore, many years earlier (1840), independent though it was of the university? Had not the American Academy of Dental Science a similarly early origin? Had not also the first university-affiliated dental school in the world been established north of New York—in Boston? Why, in the first place, should it come to bear that the first university-affiliated dental school was established in New England, rather than in old England; or for that matter, why not in France or in Germany or Austria? How much had this progress been influenced by special events surrounding the New England scene from the time of John Greenwood, Paul Revere, Horace Wells, William Morton, and ultimately Nathan Keep, who, following his chief testimony in the Parkman murder case, was to emerge in 1867 as the first Dean of Dentistry at Harvard, the first university-affiliated dental school in the world?

There were, of course, also precedents for other international groups of scientists coming together to compare notes on their research developments. However, such international congresses in medical sciences initially developed exclusively in Europe and were completely dominated by German scientists for a great many years of the nineteenth century, before any large numbers of British, French, and, much later, American scientists entered the field. Thus it is significant that IADR's organized dental research efforts and meetings should evolve with an international flavor from the very beginning, at least in principle. In fact, this particular



international aspect has only recently become true in practice. Indeed, so far, only one IADR President has been elected from outside North America.

During the next fifty years the international aspect of IADR will undoubtedly undergo significant developments. There is yet to be an international annual meeting of the IADR held outside North America, except for special conferences on Oral Biology sponsored under IADR leadership. During the past fifty years, perhaps the most significant service of the IADR has been as a focal point for dental research, not just by members of the dental profession with a scientific background but by a great number of scientists coming from other fields of knowledge, bringing their talents to bear on our dental problems. In fact, there have been several IADR Presidents from non-dental backgrounds, in addition to the pioneering service of the Founder, who was a biochemist. The distinguished record both in research and in administration of many other colleagues from other fields of science are well-known in the memory of current members. They brought respectability to dental research, and they were cooperative with their colleagues in many ways, both directly and indirectly through education and training programs.

ASSOCIATIONS WITH NATIONAL ASSOCIATIONS

What would academic dentistry be like today without the IADR? This is perhaps the most interesting question that may be raised, at least as far as the American dental schools are concerned, where IADR has had its closest affiliations. During the initial years of the IADR, membership was limited to a very small group from a very small number of institutions. Today it can be fairly said that there is hardly any dental school in North America which is not represented by faculty holding membership in the IADR and presenting one or more reports to its annual meetings.

In between these periods, however, this fifty-year reflection would not be wholly true were it to suggest that the IADR—particularly in terms of its individual members—had been held in particularly high regard among the administrators of dental schools except in very recent years. It is possible that the change in attitudes was not entirely related to a sudden change in the research efforts *per se*. Instead, it would appear that a significant change occurred in connection with the increased support for dental research and for dental researchers that followed World War II. Before this became generally apparent, there were times, indeed, where it might have appeared to IADR members that their affiliation in this group might have been considered incompatible with a career in academic dentistry, dealing with either teaching or administration, especially in matters of a clinical nature. Things are now quite different. We now have many dentists who are well-founded in basic sciences, and well-known for their contributions to the IADR, who are holding prominent, nationally recognized positions in research, teaching, and administration.

When it came to IADR's relationship as a whole with other organized groups of dentistry, the support of

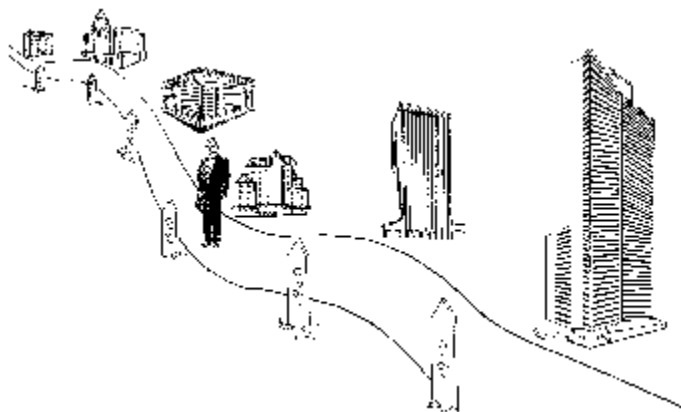


the IADR was for many years either totally lacking or very late in coming. That this was true of the American Dental Association, representing at the time almost exclusively the practitioner, was perhaps not too surprising in terms of early history, aside from the fact that any early reluctance has certainly been made up for many times over in recent years. It is less readily understood that groups whose own objectives very specifically suggested a strong interest in supporting scholarly pursuits were not only very late in understanding the IADR but actually never did come to recognize the importance, let alone the needs, of the IADR. This was notably true of the American College of Dentists, although it again has shown some signs of eye-opening interest in more recent years. But perhaps most surprising of all relationships was the illogical dichotomy between the dental research group, the IADR, and the principal group of dental educators, represented by the American Association of Dental Schools. In retrospect this would seem to be a great paradox in the field of dentistry; yet, over the years, the groups did begin to arrange overlapping meetings, with some overlapping of participants as well. Also, it is evident that administrators are beginning to look with increasing interest upon young members of the IADR and their presentations at the annual meetings. Without the existence of the IADR as a focal point and as a forum for researchers interested in this field, it is doubtful whether dentistry could have been ready for the postwar research developments. This began in the late 1940's, following the establishment of continuous research support from the United States Federal Government through the National Institute of Dental Research.

Today, perhaps the greatest need for the International Association for Dental Research is to play an increasingly important role, not merely in organizing and conducting the annual meetings, but in serving as a national and international force in seeking greater support and more talent for the evolution of dental research during the next fifty years.



CHAPTER FIVE: MILESTONES AND LANDMARKS



The introductory sketch depicts the IADR historical roadway with decadal milestones. The simulated landmarks (on the right) housed significant events in the life of IADR: Columbia University Club, New York City (1920); Royal York Hotel, Toronto (1930); Jefferson Hotel, St. Louis (1941); Broadmoor Hotel, Colorado Springs (1952); Headquarters Building of the American Dental Association housing the IADR new Central Office (since 1965); Americana Hotel, New York City (1970).

MILESTONES AND LANDMARKS

In essence, this is the cataloging chapter for the remainder of the book. The accompanying list provides a concisely capsulated resum³ of the fifty-year history of the IADR. These fifteen definitive statements are cited as Milestones.

MILESTONES

1. Founded in New York City 10 December 1920.
2. First Annual Meeting held in New York City, 1922.
3. First Annual Meeting outside United States: Toronto, 1930.
4. Cosponsor, AAAS Nd Symposium since 1932.
5. *Journal of Dental Research* (founded 1919) ownership offered to and accepted by IADR, 1934.
6. Dental Materials Group affiliated with IADR, 1939.
7. First Meeting of North American Division, 1952.
8. First Meeting of the British Division (first Division abroad), 1953.
9. Awards of the IADR:

Dental Science and Dental Art Award was first presented as a Novice Award in 1953; it was renamed the Edward H. Hatton Award in 1957.

Wilmer Souder Award, first presented in 1955 by the Dental Materials Group.



Memorial Awards:

H. Trendley Dean Memorial Award—since 1964

Isaac Schour Memorial Award—since 1967

Five Commercially Funded Awards established—from 1963 through 1967.

Student Travel Awards established—since 1968.

1. Sponsor, International Conferences on Oral Biology triennial meetings initiated in 1959 at New York; after that, abroad, as follows: 1962, Bonn; 1965, London; 1968, Copenhagen.
2. Central IADR office established in the ADA headquarters building in Chicago, August 1965, with a full-time Secretary-Treasurer and Staff.
3. Craniofacial Biology Group established 1965.
4. Periodontal Research Group established 1969.
5. Fiftieth Anniversary Commemorative Program in New York City, 16 March 1970.
6. First Fifty-Year History being written.

As some milestones need further elucidation, additions termed *landmarks* have been included in this chapter to make the chronological epic of the Association more meaningful. The extensive documentation that is furnished throughout the book can be termed the hallmarks and benchmarks, depending on whether the data came from the *Journal* or from other sources, while the keystone of the whole endeavor has been the IADR Constitution, with the By-Laws as cornerstones to guide the actions of the organization.

Lamartine, the French orator and poet, said, "History is neither more nor less than biography on a large scale." In recognizing this view, names of persons active in IADR are cited whenever appropriate, but, since events are fashioned by persons under certain motivating circumstances, it is the events that are stressed in this chapter. Thus the salient historic occurrences have been cited chronologically, the more important of which are elaborated upon in subsequent chapters.

THE EPIC OF THE IADR

The simple fact is that the IADR was organized with minimal fanfare on 10 December 1920. It seems logical to conjecture that the Association could not have been formed much earlier than the second decade of the twentieth century. Almost up to this very time, there were various omnibus societies concerned with broad areas of science in general. Somewhat later came societies organized to promote special fields and to support a single-topic journal.

The concept of a society designed to enhance dental research was indeed unique—it was to cover a special area of the health sciences, yet it was an omnibus in the sense of covering all aspects of science which were even remotely related to Dentistry. Into this curious duality the IADR was born and surprisingly



flourished, although it floundered at first. It was to the everlasting credit of William J. Gies that he concerned himself with this unique area of endeavor. Yet one must be aware that he had prior experience in organizing such scientific groups and publications. He had more than a decade before helped to organize and served as Secretary of the Society for Experimental Biology and Medicine and was Editor of its *Proceedings*. He also was one of the founders of the American Society of Biological Chemists and was its first Secretary and Founder and Editor of its *Proceedings*. (These events are all documented in the biography of William J. Gies to be published later.)

THE LANDMARKS

A. The organizing meeting was in essence comprised of three regional parts: the primary one in New York City on 10 December 1920, followed by the one in Boston on 17 December and that in Chicago on 30 December. Soon after, the Constitution was proposed and accepted. The first President of the Association was J. Leon Williams, 1921-23. There is very little documented evidence of his presidential role in the IADR; even his term of office is very tenuous. Williams was often ill or for other reasons did not attend all functions expected of current IADR Presidents. Sometime during 1923 Paul Stillman, also of the active New York Section, was apparently appointed as interim President. But the next man, Albert E. Webster of Toronto, was definitely elected for a regular term of one year in 1924. After this, Presidents served single terms from one annual meeting to the next, with the exception of Leroy Miner, who served two terms and Albert Webster, who was elected to a second term later. Somewhat astonishingly, after the Constitution was accepted in 1920, there was apparently quite a period of inactivity.

B. It was not until twenty-four months later that the first general meeting was held on 21 December 1922 in the Plaza Hotel in New York City. It fulfilled its objective of constituting the first of many annual scientific meetings; but it was indeed meager in its scientific content. (See chapter on "Meetings and Members".) Only two papers were presented, in contrast to the almost 1000 half a century later. Yet one should not be too dismayed at this slow start, since the Founder himself had stated that the Association was to function as a Federation, with the local Sections as the active components. These numbered four by the time of the First General Meeting in 1922. But there were eleven Sections at the conclusion of the Eighth General Meeting in Toronto in 1930, and these all held frequent local gatherings.

C. The meeting in Toronto, which was the first meeting outside the United States, underscored the intention that the Association was to be international. Moreover, by that time there were several members from overseas, some organizing into small Sections, such as the one in Vienna.



D. Another facet of the Association was demonstrated by its ability to sponsor additional scientific gatherings which could be cited as extracurricular. William Gies had established the Nd Section of the American Association for the Advancement of Science. Although the American College of Dentists sponsored it at first, the IADR co-sponsored it starting in 1932 and has done so ever since. (See chapter on "Other Research Gatherings".)

E. The *Journal of Dental Research*, founded in 1919, was in existence eighteen months before the Association was organized and forty-two months before the first scientific papers were read at the 1922 meeting. The *JDR* and IADR were at first rather distinct entities. Surprisingly, the *Journal* never printed a resum³ of Association activities until 1926, although in 1921 there was an incidental footnote in the *JDR* that alluded to the existence of the Association. (This delay is understandable only if one knows that Gies was intensely involved in his Survey on Dental Education during this period, as explained in his biography.)

William Gies had full responsibility for the *Journal*. He received much meritorious credit as the Editor of a scholarly and principled publication, but he was also liable for all monetary problems, including the raising of funds to pay the recurring printing bills. Among the list of names donating to the *Journal*, there were several anonymous donors (who, it is suspected, were close friends, if not Gies himself) who contributed consistently to keep the publication solvent. Upon viewing the record of pages published, there were two years (1924 and 1925) in which no printing at all was possible for lack of funds. (See the chapter on the "History of the *Journal*".) The *Journal* was back in production in the following year, and by 1934 Gies found it propitious to present it to the IADR lock, stock, and barrel. The Association took months to meditate about this special offer before its acceptance. Finally it decided to accept the unique gift. This was during the period when W. J. Gies was approaching his retirement from Columbia University "for age".

A young associate of Gies at Columbia, Theodor Rosebury, served as Editor for part of the year 1935. The Great Depression finally hit the *Journal* hard, and it was not printed that year. Then a publication committee of young men at the University of Rochester was selected by the IADR in 1936. These were Hamilton Robinson, Harold Hodge, and Maynard Hine, with the first named becoming Editor.

To gain much needed monetary support, Supporting Associates were recruited, beginning in 1954. These were consistently listed in each issue of the *Journal*.

William J. Gies, upon relinquishing the Editorship, which he had held for sixteen years, and the General Secretaryship (held for twelve years), was honored by being elected IADR President 1939-40. By then it was established by tradition that the Vice-President became President-Elect and then



President. However, the man who was President-Elect while Gies was President, Rudolf Kronfeld of Chicago, unfortunately died one month before entering office, so the previously logical sequence was somewhat upset. The only other time a Vice-President did not move up to the Presidency was when F. V. Simonton of San Francisco resigned from all academic endeavors in 1929, despite the fact that he had been slated as President-Elect according to notices sent out by the General Secretary at the time.

F. After much correspondence and discussion between Gies and certain university-associated men in the field of dental materials, it was arranged to establish a Dental Materials Group as an affiliate of the IADR. By 28 July 1939 the Group had been fully approved by IADR. (See chapter on "History of the Groups".) William J. Gies wrote in the Program of the Twentieth General Meeting of IADR in 1942 that the Dental Materials Group "was organized as the first of a prospective series of groups within the Association to advance research in various aspects of dentistry."

G. The first documented meeting of the North American Division was held on 23 March 1952. Although this was merely a nominal meeting, by the end of the next two decades the NAD was finally ready for activation as an independent entity.

H. The British Division was formed on 21 March 1953, an outgrowth of the earlier London Section. Other landmarks were the establishment of the Japanese Division in 1954, the Continental European Division in 1964, the South African Division in 1966, the Australia Division in 1968 (which became the Australia-New Zealand Division in 1969), and the Scandinavian-NOF Division in 1969. Upon the demise of William J. Gies on 20 May 1956, a moving tribute was read by Theodor Rosebury at the (next) Thirty-fifth General Meeting in 1957.

I. The first Award established through the auspices of the Association was in 1948. (See chapter on "Awards".) The Dental Science and Dental Art Award was established in 1948 but was first presented as a novice award in 1953; however, it was renamed the Edward H. Hatton Award in 1957 at the banquet in Atlantic City honoring the Association's long-time Secretary in his eightieth year. In recent years it has been monetarily supported by the Warner-Lambert Pharmaceutical Company. The Wilmer Souder Award was begun in 1955 by the Dental Materials Group. (See also the history of the Dental Materials Group.) Two memorial awards were established: one in the name of H. Trendley Dean (1964), by Frank J. McClure, his close friend at NIDR-NIH; the other, the Isaac Schour Award (1967), by Schour's confreres at the University of Illinois College of Dentistry. Aside from these honorary awards, there were five commercially supported awards established over a span of years (1963-67), which are as follows: Research in Oral Therapeutics Award—supported by Cook-Waite Laboratories, Inc.; Research in Oral Science Award—supported by Procter & Gamble Company; Research in Periodontal Disease Award—supported by Colgate-Palmolive Company; Research in Biological Mineralization Award—



supported by Lever Brothers Company; Research in Prosthodontics Award—supported by Clark-Cleveland Inc. Additionally, since 1968 there have been Student Travel Awards supported by Johnson and Johnson.

The idea of honoring individuals who were not IADR members occurred first in 1958, when Harold Hillenbrand of the American Dental Association was selected as the first Honorary Member. In 1965 Congressman John C. Fogarty was the second person so honored.

J. The IADR has sponsored the International Conference on Oral Biology every three years, beginning in 1959 at New York; after that, abroad as follows: 1962, Bonn; 1965, London; 1968, Copenhagen. The 1971 meeting is planned for Zürich. The monetary sponsor, Colgate-Palmolive Company, will continue to support these outstanding triennial gatherings. (See chapter on "Other Research Gatherings".)

The second meeting outside the United States was again held in Toronto, in 1965. At this significant meeting, Martin Rushton was the President of IADR and as such was the first member from beyond North America to hold the Presidency.

K. Since the inception of the office of Secretary and later Secretary-Treasurer, this officer has had the burden of maintaining all records and carrying out many other administrative activities. This became overbearing as the Association grew. So in 1961 an agency was hired to assist with the record-keeping and routine activities: the American Institute of Biological Sciences. However, after a short two-year period this system collapsed. Hence, after much discussion, extending over many months, there was established the central IADR office located in the brand new ADA headquarters building on 1 August 1965. This entailed a full-time Secretary-Treasurer and a staff of one full-time assistant. The Secretary-Treasurer selected was Arthur R. Frechette, an IADR member who retired from the Navy as the Commanding Officer of the Naval Dental School in Washington, D.C. (See chapter on "Administrative Aspects".)

L. Additional Groups were established. (See chapter on "History of the Groups".) The Craniofacial Group was formed in July 1965.

M. The Periodontal Research Group was organized in March 1969.

N. The Fiftieth Anniversary Commemorative Program was held in New York City on Monday, 16 March 1970. (See final chapter in this volume for all details.) All Divisional Presidents were invited, and they or their representative attended this Forty-eighth General Meeting. During this historic gathering, the President of the British Division, C. Howard Tonge, proposed that the 1975 IADR meeting be held in London, England, and this significant invitation was accepted and approved by the Council.

O. The Council in 1967 approved an Ad Hoc IADR History Committee to be organized for the purpose of writing the half-century history of the Association. Frank J. Orland was selected Chairman, an office



he had also held in the earlier Archives Committee (established 23 March 1956, as cited in the IADR Proceedings published in the *Journal*).

With these memorable milestones and luminous landmarks along the long road by which the IADR has come, the reader should read the more comprehensive coverage in subsequent chapters.



CHAPTER SIX: PAGES OF PRESIDENTS

The following pages purport to portray the forty-seven different men who have guided the destiny of the Association during its first fifty years. Only their most notable attributes are cited, since other aspects of their respective biographies are recorded either in the Biographical Directory of Members (Special Commemorative Supplement, *J Dent Res*, vol. 48 [September-October, 1969]) or, if they are deceased, in chapter seventeen of this volume entitled "Who in IADR Was Who".

Perhaps more important to the Association than the list of professional achievements which mark the outstanding attributes of these men as individuals, are the ideas expressed in the incoming and outgoing presidential addresses. These have sometimes given a profound insight into the chief officer's fundamental thinking and have often indicated his administration's contribution to the advancement of the IADR. Hence, in those cases in which such an address was presented and published, reference is cited, in order to provide the fullest background for each era in the Association's history.

THE PRESIDENTIAL ADDRESS

The custom of presenting an address by the incoming or outgoing President during the annual meeting has grown over the years. In the early decades, little was made of the inaugural occasion. When J. Leon Williams became the first President, he did not present a formal address but alluded to and discussed the Association's problems in the introduction to a long scientific paper that he delivered at the meeting in which he took the office of his second year. For some time there were only "remarks" or "comments." On some occasions there were rather comprehensive retiring presidential addresses. Later there were inaugural addresses, although some were discourses upon travel or art forms. In recent times, however, almost all inaugural addresses, at least in part, carried the impact of rather profound thinking on the part of the incoming President.

The outgoing addresses, remarks, or reports, although not frequent in recent years, have been even more meaningful to the Association, since they have often emphasized important problems encountered and sometimes solved during the administrative year of the current President. In the case of both incoming and outgoing presidential addresses, the tradition has developed that any subject could be discussed and later would be published in the *Journal* without editorial emendation.

PAST-PRESIDENTS—A DIVERSE GROUP

The Past-Presidents were indeed a diverse lot, although they had in common an intense loyalty to the Association and considerable interest, as well as ability, in dental research. The forty-seven men pictured in this chapter had an extensive academic background. Collectively they held a total of sixty-nine doctoral degrees. Of these, forty-one were dental degrees, while seventeen were Ph.D. degrees and ten of the latter were held by men



with dental degrees. One individual held only an M.D. degree, while six others had both dental and medical degrees. Another held both a Ph.D. and an M.D., and one had triple doctorates—D.D.S., Ph.D., M.D. A total of twenty-six men had Master's degrees. (All the foregoing were academically earned degrees; honorary degrees are not included, although they have been conferred upon IADR Past-Presidents to the extent of forty-two in number.)

The variety of academic degrees, and the number of man-years involved in earning them, give some indication of the diversity and profundity in the backgrounds of the chief officers of the IADR. Moreover, these attributes of diversity and profundity have been the seat of strength and leadership in the Association.

Individual traits of all the Past-Presidents during the first half-century cannot be elaborated upon here. However, group photographs of all those who attended the several annual Past-Presidents' Luncheons are presented for analysis of their physiognomy in chapter nine, "Honorary Status in the IADR".

A complete listing of Past-Presidents of the IADR, with years in office and academic degrees, is given on the next two pages, followed by the pages of presidential profiles (photo registered, almost always, during term of office).

IADR PAST-PRESIDENTS

1921-22	J. LEON WILLIAMS, D.D.S., L.D.S.
1922-23	J. LEON WILLIAMS, D.D.S., L.D.S.
1923-24	PAUL R. STILLMAN, D.D.S.
1924-25	ALBERT E. WEBSTER, D.D.S., M.D.
1925-26	FREDERICK B. NOYES, D.D.S.
1926-27	LEUMAN M. WAUGH, D.D.S.
1927-28	LEROY M. S. MINER, D.M.D., M.D.
1928-29	LEROY M. S. MINER, D.M.D., M.D.
1929-30	ARTHUR D. BLACK, D.D.S., M.A., M.D.
1930-31	U. GARFIELD RICKERT, M.S., D.D.S.
1931-32	ALBERT E. WEBSTER (see 1924-25)
1932-33	RUSSELL W. BUNTING, D.D.S., D.D.SC.
1933-34	EDWARD H. HATTON, M.D.
1934-35	JOSEPH L. T. APPLETON, D.D.S.
1935-36	THEODORE B. BEUST, D.D.S., M.D.
1936-37	WILLIAM G. SKILLEN, D.D.S.
1937-38	PAUL C. KITCHIN, D.D.S., M.S.
1938-39	THOMAS J. HILL, D.D.S.
1939-40	WILLIAM J. GIES, M.S., PH.D.
1940-41	WILMER SOUDER, A.M., PH.D.



1941-42	ISAAC SCHOUR, D.D.S., M.S., PH.D.
1942-43	CHARLES F. BODECKER, D.D.S.
1943-44	PHILIP JAY, D.D.S., M.S.
1944-45	H. TRENDLEY DEAN, D.D.S.
1945-46	WALLACE D. ARMSTRONG, M.S., PH.D., M.D.
1946-47	SAMUEL W. CHASE, A.M., PH.D.
1947-48	HAROLD C. HODGE, M.S., PH.D.
1948-49	ALLAN G. BRODIE, D.D.S., M.S., PH.D.
1949-50	J. ROY BLAYNEY, D.D.S., S.M.
1950-51	BASIL G. BIBBY, B.D.S., PH.D., D.M.D.
1951-52	LEONARD S. FOSDICK, M.S., PH.D.
1952-53	MAYNARD K. HINE, D.D.S., M.S.
1953-54	FRANCIS A. ARNOLD, JR. D.D.S.
1954-55	GEORGE C. PAFFENBARGER, D.D.S.
1955-56	PAUL E. BOYLE, D.M.D.
1956-57	JOSEPH F. VOLKER, D.D.S., M.S., PH.D.
1957-58	REIDAR F. SOGNAES, L.D.S., PH.D., D.M.D.
1958-59	NED B. WILLIAMS, D.D.S., PH.D.
1959-60	HAMILTON B. G. ROBINSON, D.D.S., M.S.
1960-61	HOLMES T. KNIGHTON, D.D.S.
1961-62	JAMES A. ENGLISH, D.D.S., M.S., PH.D.
1962-63	SEYMOUR J. KRESHOVER, D.D.S., PH.D., M.D.
1963-64	DAN Y. BURRILL, L.L.B., D.D.S., M.S.
1964-65	MARTIN A. RUSHTON, M.A., L.D.S., M.B., M.D.
1965-66	BARNET M. LEVY, D.D.S., M.S.
1966-67	RICHARD S. MANLY, M.A., PH.D.
1967-68	RALPH W. PHILLIPS, M.S.
1968-69	JOHN B. MACDONALD, D.D.S., M.S., PH.D.
1969-70	CLIFTON O. DUMMETT, D.D.S., M.S.D., M.P.H.
1970-71	GORDON H. ROVELSTAD, D.D.S., M.S.D., PH.D.
1971-72	FRANK J. ORLAND, D.D.S., PH.D.
1972-73	GUNNAR RYGE, M.S., D.D.S
1973-74	MOGENS ROY SKOUGAARD, D.D.S., D.M.SC
1974-75	JAMES KNUCKEY AVERY, D.D.S., PH.D.
1975-76	DAVID B. SCOTT
1976-77	HAROLD MILTON FULMER, D.D.S
1977-78	GEORGE SIMPSON BEAGRIE, D.D.S., D.SC

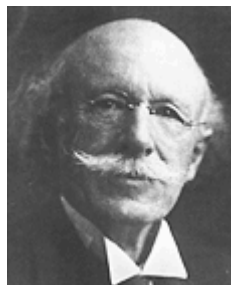


1978-79	FINN BRUDEVOLD, M.S., D.D.S
1979-80	HARALD A. LOE, D.D.S.
1980-81	JOHN A. GRAY, PH.D.
1981-82	MARIE U. NYLEN, D.D.S.
1982-83	ANTONY H. MELCHER, B.D.S., H.D.D., M.D.S.
1983-84	ROBERT M. FRANK, D.D.S., M.D.
1984-85	A. RICHARD TEN CATE, B.SC., PH.D., B.D.S.
1985-86	PAUL GOLDHABER, D.D.S.
1986-87	IVAR A. MJOR, B.D.S., M.S.D., M.S., ODONT.DR..
1987-88	ROY CHRISTOPHER PAGE, D.D.S., PH.D.
1988-89	WILLIAM DENNIS MCHUGH, L.D.S., B.D.S., D.D.SC., F.D.S., ODONT.DR.
1989-90	ERNEST NEWBRUN, B.D.S., M.S., D.M.D., PH.D.
1990-91	WILLIAM HENRY BOWEN, B.D.S., M.SC., PH.D.
1991-92	ROBERT JOSEPH GENCO, D.D.S., PH.D.
1992-93	JOHN CLIFFORD GREENE, D.M.D., M.P.H.
1993-94	STEPHEN H.Y. WEI, D.D.S., M.D.S., M.S.
1994-95	BARRY JOHN SESSLE, B.D.S., M.D.S., M.SC., PH.D.
1995-96	RICHARD R. RANNEY, D.D.S., M.S.
1996-97	JOHN S. GREENSPAN, B.S.C., PH.D.
1997-98	PER-OLAF GLANTZ, D.D.S., PH.D., ODONT.DR.
1998-99	MAMORU SAKUDA, D.D.S., D.D.SC/PH.D.
1999-2000	SALLY J. MARSHALL, PH.D.
2000-01	MARJORIE JEFFCOAT
2001-02	GRAHAM EMBERY
2002-03	JOHN CLARKSON
2003-04	STEPHEN CHALLACOMBE

James Leon Williams

The First President, 1921-22, 1922-23

- born 21 April 1852, Embden, Maine
- died 23 February 1932, New York City
(In Memoriam *J Dent Res* 12: 877-885, 1932)
- Presidential remarks pertinent to the Association, made at a meeting of the New York Section of the IADR, 27 January 1922, at the New York Academy of Medicine, in the introductory aspects of the scientific paper "Disputed Points and Unsolved Problems in the Normal and Pathological Histology of Enamel"
J Dent Res 5: 27-107, 1923
- *Journal of Dental Research* Editorial Board, 1919-31
- A Founder of IADR



Paul Roscoe Stillman

The Second (Interim) President, 1923-24

- born 4 June 1871, Greenwich, New York
- died 15 December 1945
- Faculty member:
Columbia University
New York University
- President:
American Academy of Periodontology
Periodontology Section, Seventh International Dental Congress
- Vice-President, First District Dental Society of New York
- A Founder of IADR



Albert Edward Webster

The Third President, 1924-25, 1931-32 (Served two full but nonconsecutive terms)

- born 1866, Canada
- died 5 November 1936
(In Memoriam *J Dent Res* **16**: 359-360, 1937)
- Inaugural remarks delivered at Memphis, 22 March 1931: "brief thanks"
J Dent Res **11**: 449, 1931
- Farewell Address delivered at Columbus, Ohio, 20 March 1932: "The Value of Research in Dentistry"
J Dent Res **12**: 412-414, 1932
- University of Toronto, 1893-1926
Dean, Faculty of Dentistry, 1915-23
- Canadian representative, International Dental Congress, 1904
- President:
American Institute of Dental Teachers
Canadian Dental Association
- Editor, *Dominion Dental Journal*, 1900-1935



Frederick Bogue Noyes

The Fourth President, 1925-26

- born 22 August 1872, Chicago, Illinois
- died 25 July 1961, Lake Worth, Florida
- Northwestern University, 1897-1920
Professor, Histology & Orthodontics



- University of Illinois College of Dentistry:
Professor, Orthodontics, 1921-40
Chairman, Department of Orthodontics, 1928-36
Chairman, Department of Histology, 1928-35
Dean, 1928-40
- President:
Chicago Section, IADR, 1920-28 (& Founder)
Illinois State Dental Society, 1921-22
Institute of Medicine of Chicago, 1943

Leuman Maurice Waugh

The Fifth President, 1926-27

- born 6 March 1877, New Dundee, Ontario
- died 6 May 1972, Betterton, Maryland
(In Memoriam *J Dent Res* 51: 1321, 1972)
- University of Buffalo, 1901-14
Professor, Histology & Pathology
- Columbia University, 1916-45:
A founder of the School of Dental & Oral
Surgery and the founder of its Graduate School
of Orthodontics
Professor, Orthodontics
- Director, American Board of Orthodontics, 1949-53
- President:
Northeastern Society of Orthodontics, 1926
American Association of Orthodontists, 1935
American Board of Orthodontics, 1953
New York Academy of Dentistry, 1931-33
Dental Society of the State of New York, 1920-21
- A Founder, Secretary Pro Tem, International
Association for Dental Research, 1920



Leroy Matthew Simpson Miner

The Sixth President, 1927-28, 1928-29

- born 13 April 1882, Chicago, Illinois
- died 19 April 1964, Boston, Massachusetts
- The First Presidential Address, delivered at
Washington, 25 March 1928.
Topic: A discussion of the IADR
J Dent Res 8: 395-400, 1928
- The Second Presidential Address, delivered at Chicago, 23 March 1929.
Topic: The need for dental education more relevant to research
J Dent Res 9: 269-272, 1929



- Boston University School of Medicine (Stomatology), 1918-44
- Harvard School of Dental Medicine Dean, 1922-44
- President, American Dental Association, 1936-37

Arthur Davenport Black

The Seventh President, 1929-30

- born 15 November 1870, Jacksonville, Illinois
- died 7 December 1937, Evanston, Illinois
(In Memoriam *J Dent Res* **17**: 337-338, 1938)
- Presidential Farewell Address delivered at Toronto, 25 March 1930:
"A Dental Research Program"
J Dent Res **10**: 368-372, 1930
- Northwestern University Dental School, 1900-1937
Professor, Operative Dentistry & Dental Pathology
- President:
American Institute of Dental Teachers
Illinois State Dental Society
Chicago Centennial Dental Congress, 1933



Ura Garfield Rickert

The Eighth President, 1930-31

- born 22 October 1879, Wadsworth, Ohio
- died 22 October 1938, Ann Arbor, Michigan
(In Memoriam *J Dent Res* **18**: 293-294, 1939)
- Presidential farewell remarks at Memphis, 22 March 1931:
"Several Urgent Problems in Dental Research"
J Dent Res **11**: 438-449, 1931
- University of Michigan School of Dentistry
Professor, Diagnostics, Therapeutics, & Radiology, 1916-38
- President:
American College of Dentists, 1932
Michigan State Dental Society, 1937
- (The next presidential year, 1931-32, was filled by Albert Webster's second term in office)



Russell Welford Bunting

The Ninth President, 1932-33

- born 2 June 1881, Ann Arbor, Michigan
- died 22 November 1962, Ann Arbor, Michigan
(In Memoriam *J Dent Res* **42**: 2, 1963)
- Presidential farewell remarks delivered at Chicago, 19 March 1933:
"Certain Trends in Dental Research"
J Dent Res **13**: 175-181, 1933
- University of Michigan School of Dentistry, 1903-50
Professor, Secretary, & Dean, Dental Faculty
- Director, Dental Caries Research Project of Children's Fund of Michigan
- Secretary, AAAS Nd, 1950-58



Edward Howard Hatton

The Tenth President, 1933-34

- born 2 April 1876, LaRose, Illinois
- died 15 August 1959, Evanston, Illinois
- Presidential farewell remarks delivered at Chicago, 18 March 1934:
"Louis-Charles Malassez: 1842-1909"
J Dent Res **14**: 154-157, 1934
- Northwestern University Dental School, 1916-59
Chairman, Department of Oral Pathology
- Secretary, 1938-41, IADR
Secretary-Treasurer, 1941-57, IADR
- Hatton (Novice) Award named in his honor



Joseph Luke Teasdale Appleton

The Eleventh President, 1934-35

- born 18 September 1888, Albany, New York
- Inaugural Address delivered at Chicago, 18 March 1934 (not printed, but cited *J Dent Res* **14**: 187, 1934)
- Farewell Address delivered at Chicago, 17 March 1935.
Topic: Relation of IADR to *J Dent Res*, indexing of dental literature, public welfare, and the welfare of dentistry
J Dent Res **15**: 140-147, 1935-36
- Chairman, Council on Dental Research, American Dental Association, 1931-46



- University of Pennsylvania School of Dentistry, 1914-59
Professor & Chairman, Department of Bacteriology

Theodore Bernhard Beust

The Twelfth President, 1935-36

- born 14 January 1871, New Albany, Indiana
- died 24 November 1937
(In Memoriam *J Dent Res* **17**: 336-337, 1938)
- Presidential Address delivered at Chicago, 17 March 1935. Topic: The importance of the *Journal J Dent Res* **15**: 150-154, 1935-36
- Farewell Address delivered at Louisville, 15 March 1936. Topic: On research and researchers *J Dent Res* **15**: 296-299, 1935-36
- University of Louisville College of Dentistry
Professor, Dental Histology & Embryology, Comparative Dental Anatomy, Dental Bacteriology & Biology, 1917-37



William Graham Skillen

The Thirteenth President, 1936-37

- born 6 November 1884, Toronto, Ontario
- died 27 August 1958, Chicago, Illinois
- Presidential Address delivered at Louisville, 15 March 1936. Topic: Factors contributing to the success of the IADR *J Dent Res* **15**: 301-304, 1935-36
- Farewell Address delivered at Baltimore, 14 March 1937. Topic: On preceptors—their importance and influence in dental research *J Dent Res* **16**: 290-294, 1937
- Northwestern University Dental School, 1912-58
Professor, Histology



Paul Clifford Kitchin

The Fourteenth President, 1937-38

- born 8 October 1891, Toledo, Ohio
- died 16 June 1972, Fife Lake, Michigan
(In Memoriam *J Dent Res* **51**: 1524, 1972)
- Inaugural Address delivered at Baltimore, 14 March 1937: "brief thanks" *J Dent Res* **16**: 295-297, 1937



- Farewell Address delivered at Minneapolis, 13 March 1938. Topic: On microscopy in dentistry
J Dent Res **17**: 274-289, 1938
- Chairman:
ADA Research Section, 1935
NIDR Dental Study Section, 1946-49
- National Advisory Council on Dental Research, NIH, 1949-52
- Ohio State University College of Dentistry, 1925-57
Professor, Oral Histology & Embryology
- Secretary, AAAS Nd, 1940-44

Thomas Joseph Hill

The Fifteenth President, 1938-39

- born 10 March 1886, Ebensburg, Pennsylvania
- Inaugural Address delivered at Minneapolis, 13 March 1938: "brief thanks"
J Dent Res **17**: 291-292, 1938
- Farewell Address delivered at Cleveland, 19 March 1939:
"The Influence of Saliva upon the Growth of Oral Bacteria"
J Dent Res **18**: 214-224, 1939
- Western Reserve University School of Dentistry
Professor, Oral Pathology, 1909-55
- Chairman:
ADA Council on Dental Research, 1955-60
Board of Scientific Review, Intramural Programs, NIDR, USPHS, 1957-60
Committee on Research, Survey of Dentistry, 1957-60
- President:
Northern Ohio Dental Association, 1928
American College of Dentists, 1958



William John Gies

The Sixteenth President, 1939-40

- born 21 February 1872, Reisterstown, Maryland
- died 20 May 1956, Lancaster, Pennsylvania
- Inaugural Address delivered at Cleveland, 18 March 1939. Topic: On other dental organizations and the needed changes in the organization of IADR
J Dent Res **18**: 230-236, 1939
- Farewell Address delivered at Philadelphia, 14 March 1940:
"The Work & Functions of the IADR"
J Dent Res **19**: 258-266, 1940
- Columbia University Professor, 1907-37



- Editor (& Founder), *Journal of Dental Research*, 1919-35
- Secretary (& Founder), IADR, 1928-38
- Secretary, AAAS Nd, 1936-39

Wilmer Souder

The Seventeenth President, 1940-41

- born 21 February 1884, Salem, Indiana
- Inaugural Address delivered at Philadelphia, 14 March 1940. Topic: On exploitation of dentistry by manufacturers' false advertising claims
J Dent Res **19**: 276-278, 1940
- Farewell Address delivered at St. Louis, 16 March 1941: "Loyalty to Our Association and to Our Protecting Nation"
J Dent Res **20**: 217-220, 1941
- National Bureau of Standards, 1911-54
Chief, Metrology Division, 1945-54
- Souder (DMG) Award named in his honor



Isaac Schour

The Eighteenth President, 1941-42

- born 11 January 1900, Efingar, Russia
- died 5 June 1964, Chicago, Illinois
(In Memoriam *J Dent Res* **43**: 638, 1964)
- Presidential remarks delivered at St. Louis, 16 March 1941: "The Problem of Integration in Dental Research, Training and Clinical Practice"
J Dent Res **20**: 221-230, 1941
- Farewell Address delivered at New York City, 14 March 1942: "The Work and Functions of the IADR"
J Dent Res **21**: 285-289, 1942
- University of Illinois College of Dentistry, 1924-64:
Professor, Histology, 1935-64
Dean, 1955-64
- Secretary, AAAS Nd, 1946-49
- Schour (IADR) Award named in his honor



Charles Francis Bodecker

The Nineteenth President, 1942-43

- born 2 September 1880, New York City
- died 11 February 1965, New York City
(In Memoriam *J Dent Res* **44**: 462, 1965)
- Presidential Address delivered at New York City, 14 March 1942.
Topic: On the value of basic research
J Dent Res **21**: 291-295, 1942
- Farewell Address delivered at Chicago, 14 March 1943.
Topic: Research on commercial products
J Dent Res **22**: 191-192, 1943
- Columbia University School of Dental and Oral Surgery
Chairman, Department of Oral Histology, & Director of Research, 1923-46
- Editor, *New York State Dental Journal*, 1948-65
- (Presented very first research report before IADR, 21 December 1922)



Philip Jay

The Twentieth President, 1943-44

- born 5 June 1898, Detroit, Michigan
- Inaugural Address delivered at Chicago, 14 March 1943.
Topic: Some thoughts relative to growth of the Association and the annual scientific program
J Dent Res **22**: 194-195, 1943
- Farewell Address delivered at Chicago, 19 March 1944.
Topic: On the need for improvement in the IADR
J Dent Res **23**: 181-183, 1944
- University of Michigan School of Dentistry, 1929-68
Professor, Dentistry, Department of Oral Biology



Henry Trendley Dean

The Twenty-first President, 1944-45

- born 25 August 1893, Winstanley Park, Illinois
- died 14 May 1962, Evanston, Illinois
(In Memoriam *J Dent Res* **42**: 3, 1963)
- Presidential Address delivered at Chicago, 19 March 1944.
Topic: On progress in epidemiology
J Dent Res **23**: 183-188, 1944



- Farewell Address delivered at Chicago, 27 May 1945.
Topic: IADR business administration improvements; comments on meeting cancellation
J Dent Res **24**: 189-191, 1945
- First Dental Officer, National Institutes of Health, 1931
- Dental Director, U.S. Public Health Service, 1945-53
- First Director, National Institute of Dental Research, 1948-53
- President, American Association of Military Dental Surgeons, 1937
- H. Trendley Dean (IADR) Award named in his honor

Wallace David Armstrong

The Twenty-second President, 1945-46 (The youngest IADR President)

- born 8 July 1905, Celeste, Texas
- Farewell remarks delivered at Kansas City, Missouri, 17 March 1946 (not printed, but cited
J Dent Res **25**: 173, 1946)
- University of Minnesota College of Medical Science, 1932-:
Professor, Biochemistry
Head, Department of Biochemistry, 1946-



Samuel Wood Chase

The Twenty-third President, 1946-47

- born 27 May 1892, Lowell, Massachusetts
- Inaugural Address delivered at Kansas City, Missouri, 17 March 1946:
"Dental Research in the Near Future"
J Dent Res **25**: 151-154, 1946
- Western Reserve University School of Dentistry, 1920-62
Professor, Histology & Embryology



Harold Carpenter Hodge

The Twenty-fourth President, 1947-48

- born 19 December 1904, Chicago, Illinois
- Inaugural Address delivered at Chicago, 22 June 1947:
"Impressions of Operation Crossroads"
J Dent Res **26**: 435-439, 1947
- Manhattan Project, 1943-47



Atomic Energy Project, 1947-58
Chief, Division of Pharmacology & Toxicology

- University of Rochester, 1937-70
Chairman, Department of Pharmacology, 1958-70

Allan Gibson Brodie

The Twenty-fifth President, 1948-49

- born 31 October 1897, New York City
- Inaugural Address delivered at Rochester, New York, 20 June 1948:
"Our Common Field of Research"
J Dent Res **27**: 717-723, 1948
- University of Illinois College of Dentistry, 1929-66:
Professor & Head, Department of Orthodontics, 1931-66
Dean, 1944-55
- President:
Chicago Association of Orthodontists
International Society of Craniofacial Biology



James Roy Blayney

The Twenty-sixth President, 1949-50

- born 28 July 1889, Alexis, Illinois
- Inaugural Address delivered at Chicago, 26 June 1949:
"Dental Education and the IADR"
J Dent Res **28**: 627-631, 1949
- University of Illinois, 1918-36
Head, Department of Material Medical & Dental Therapeutics
- University of Chicago
Professor & Director, Zoller Memorial Dental Clinic, 1936-54
- President:
Illinois State Dental Society, 1941-42
American Academy of Oral Pathology, 1950
- Director, Evanston Dental Caries Fluoridation Study, 1946-61



Basil Glover Bibby

The Twenty-seventh President, 1950-51

- born 6 October 1904, Waipawa, New Zealand
- Inaugural remarks delivered at French Lick Springs, Indiana, 26 March 1950:
"The Scientific Emphasis in Dentistry"
J Dent Res **29**: 649-655, 1950
- Farewell Address also delivered at French Lick Springs, 18 March 1951.
Topic: On the needs of the Association
J Dent Res **30**: 455-458, 1951
- Tufts University School of Dental Medicine Dean, 1940-47
- Director, Eastman Dental Center, Rochester, New York, 1947-70
- University of Rochester, 1947-70
Professor, Dentistry



Leonard Samuel Fosdick

The Twenty-eighth President, 1951-52

- born 7 November 1903, Chagrin Falls, Ohio
- died 31 January 1969, Tucson, Arizona
(In Memoriam *J Dent Res* **48**: 172, 1969)
- Inaugural Address delivered at French Lick Springs, Indiana, 18 March 1951.
Topic: On the chemistry of caries (not printed in *Journal* or anywhere else)
- Northwestern University, 1927-69; Dental School, 1929-69
Professor of Chemistry in the Dental School, 1936-69



Maynard Kiplinger Hine

The Twenty-ninth President, 1952-53

- born 25 August 1907, Waterloo, Indiana
- Inaugural Address delivered at Colorado Springs, 23 March 1952.
Topic: [Education, research, & the IADR](#)
J Dent Res **31**: 455-458, 1952
- University of Illinois College of Dentistry
Faculty member, 1936-44
- Indiana University School of Dentistry, 1944-68:
Chairman, Department of Histopathology &
Periodontia, 1944-45
Dean, 1945-68
- Indiana University-Purdue University at Indianapolis Chancellor, 1968-



- Editor, American Association of Dental Editors, 1941-47
- Chairman, ADA Research Commission, 1952
- President:
 - American Association of Endodontists, 1946-47
 - American Association of Dental Editors, 1949-50
 - Indianapolis District Dental Society, 1952
 - American Association of Dental Schools, 1953-54
 - Fund for Dental Education, 1955-61
 - Indiana State Dental Association, 1957-58
 - American Academy of Periodontology, 1964
 - American Dental Association, 1966-67

Francis Arthur Arnold, Jr.

The Thirtieth President, 1953-54

- born 30 December 1910, Orrville, Ohio
- died 1 December 1967, San Francisco, California
(In Memoriam *J Dent Res* 47: 4, 1968)
- Inaugural Address delivered at Philadelphia, 22 March 1953:
["Trends in Research"](#)
J Dent Res 32: 628-632, 1953
- United States Public Health Service, 1936-67
- National Institute of Dental Research:
Associate Director, 1948-53
Director, 1953-66
- Honorary Editor, *Archives of Oral Biology*
- Board of Editors, *Public Health Reports*



George Corbly Paffenbarger

The Thirty-first President, 1954-55

- born 3 November 1902, McArthur, Ohio
- Inaugural Address delivered at French Lick Springs, Indiana, 21 March 1954:
["The International Aspects of Our Association with Special Emphasis on Japan"](#)
J Dent Res 33: 637-643, 1954
- National Bureau of Standards, 1929-40
Senior Research Associate, American Dental Association, at NBS, 1946-70
- President, William J. Gies Foundation for the Advancement of Dentistry, 1966-



Paul Edmund Boyle



The Thirty-second President, 1955-56

- born 20 April 1900, Somerville, Massachusetts
- Inaugural Address delivered at Chicago, 20 March 1955. (The Address was an illustrated narration of a trip to Burma.)
- Harvard University Medical School & School of Dental Medicine, 1926-45
- University of Pennsylvania, 1945-56
Professor, Oral Histology & Pathology
- Western Reserve University School of Dentistry
Professor & Dean, 1956-69
- President:
American Academy of Oral Pathology, 1949-50
Ohio Division, American Cancer Society, 1967

Joseph Francis Volker



The Thirty-third President, 1956-57

- born 9 March 1913, Elizabeth, New Jersey
- Inaugural Address delivered at St. Louis, 24 March 1956:
["The Life of Magitot"](#) (not printed, but cited *J Dent Res* 35: 817, 1956)
- Tufts University School of Dental Medicine
Dean, 1947-48
- President, Alabama Academy of Science, 1953-54
- University of Alabama at Birmingham:
Dean, School of Dentistry, 1948-62
Director of Research (& Graduate Studies), Medical Center, 1955-65
Vice-President, Health Affairs, 1962-66
Director, Medical Center, 1966-68
Executive Vice-President, 1968-69
President, 1969-
- Director, Arizona Medical School Study, 1960-61

Reidar Fauske Sognaes



The Thirty-fourth President, 1957-58

- born 6 November 1911, Bergen, Norway
- Inaugural Address delivered at Atlantic City, 22 March 1957:
["A Precious Heritage: Footnotes on Ivory Art and Dental Science"](#)
J Dent Res 37: 374-383, 1958



- Harvard School of Dental Medicine, 1945-60:
Associate Dean, 1952-59
Acting Dean, 1959-60
- University of California at Los Angeles:
Founder & Dean, School of Dentistry, 1960-69
Professor, Oral Biology, Center for Health Sciences, 1960-
Professor, Anatomy, Center for Health Sciences, 1963-
- President, American Institute of Oral Biology, 1964-70
- Secretary, AAAS Nd, 1959-62

Ned Blanchard Williams

The Thirty-fifth President, 1958-59

- born 8 July 1912, Dayton, Ohio
- Inaugural Address delivered at Detroit, 21 March 1958:
["The IADR and Communications"](#)
J Dent Res 37: 951-955, 1958
- University of Pennsylvania School of Dental Medicine, 1947-:
Chairman, Department of Microbiology, 1947-72
Chairman, University Senate, 1967-68
Director, Center for Oral Health Research, 1967-



Hamilton Burrows Greaves Robinson

The Thirty-sixth President, 1959-60

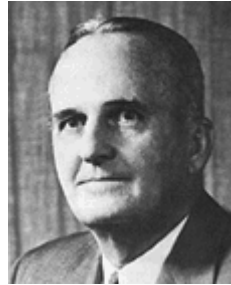
- born 16 February 1910, Philadelphia, Pennsylvania
- Inaugural Address delivered at San Francisco, 21 March 1959:
["The Journal of Dental Research, 1919-1958"](#)
J Dent Res 38: 640-649, 1959
- Washington University School of Dentistry at St. Louis
Professor, 1937-44
- Ohio State University College of Dentistry
Professor, Oral Pathology, 1944-58
- University of Missouri at Kansas City:
Professor & Dean, School of Dentistry, 1958-
Acting Chancellor, 1967-68
- Editor, *Journal of Dental Research*, 1936-58
- President:
Columbus (Ohio) Board of Health, 1946-54
American Academy of Oral Pathology, 1953
American Association of Dental Schools, 1967-68
Pierre Fauchard Academy
- First Vice-President, American Dental Association, 1971-72



Holmes Tutt Knighton

The Thirty-seventh President, 1960-61

- born 15 September 1902, Bellamy, Alabama
- Inaugural Address delivered at Chicago, 19 March 1960:
["An Evaluation of Clinical Research in Dentistry"](#)
J Dent Res **39**: 649-652, 1960
- University of Georgia
Faculty member, 1933-34
- Medical College of Virginia
Faculty member, 1934-36
- University of Louisville School of Dentistry
Faculty member, 1936-46
- Washington University at St. Louis
Professor, Microbiology, 1946-50
- Virginia Commonwealth University School of Dentistry, 1951-
Professor, Dentistry & Microbiology



James Andrew English

The Thirty-eighth President, 1961-62

- born 14 May 1910, Harrison Valley, Pennsylvania
- Inaugural Address delivered at Boston, 25 March 1961:
["International Aspects of Dental Research"](#)
J Dent Res **40**: 631-640, 1961
- United States Navy Dental Corps, 1936-60
Captain (retired)
- State University of New York at Buffalo, School of Dentistry, 1960-:
Professor, Radiology
Dean, 1960-70



Seymour Jacob Kreshover

The Thirty-ninth President, 1962-63

- born 22 June 1912, New York City
- Inaugural Address delivered at St. Louis, 17 March 1962:
["The Image of Dental Research"](#)
J Dent Res **41**: 917-918, 1962
- Virginia Commonwealth University School of Dentistry, 1949-56:



Professor, Oral Pathology & Diagnosis
Director of Dental Research

- National Institutes of Health, National Institute of Dental Research:
Associate Director, 1956-66
Director, 1966-
- Secretary, AAAS Nd, 1963-66

Dan Youngs Burrill

The Fortieth President, 1963-64

- born 9 May 1907, Chicago, Illinois
- Inaugural Address delivered at Pittsburgh, 23 March 1963.

Topic: [The need for Journal funding, and other organizational changes](#)

J Dent Res **42**: 1053-1055, 1963

- Northwestern University Dental School, 1942-46; 1957-
Professor, Oral Diagnosis, & Chairman of Department, 1957-
- University of Louisville, 1946-57
Professor & Chairman, Department of Oral Medicine
- Assistant Secretary-Treasurer, IADR, 1952-57
- Secretary-Treasurer, IADR, 1957-61



Martin Amsler Rushton

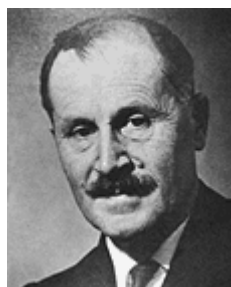
The Forty-first President, 1964-65

- born 29 March 1903, London, England
- died 16 November 1970, London, England
(In Memoriam *J Dent Res* **50**: 327, 1971)
- Inaugural Address delivered at Los Angeles, 21 March 1964.

Topic: [The need for more internationality](#)

J Dent Res **43**: 725-728, 1964

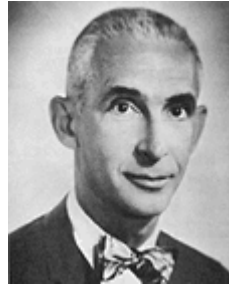
- Guy's Hospital, London, 1937-67
- University of London, 1946-67
Professor, Dental Medicine & Pathology
- Royal College of Surgeons, 1959-62
Dean, Faculty of Dental Surgery
- President:
British Dental Association
British Society for the Study of Orthodontics, 1947
British Society of Periodontology, 1957
Odontological Section, Royal Society of Medicine
British Division, IADR, 1960-62



Barnet Mortimer Levy

The Forty-second President, 1965-66

- born 13 January 1917, Scranton, Pennsylvania
- Inaugural Address delivered at Toronto, 21 July 1965:
["The Climate of Research"](#)
J Dent Res **44**: 1061-1064, 1965
- Columbia University School of Dental & Oral Surgery
Director, Research & Postgraduate Studies, 1949-57
- University of Texas:
Professor, Pathology, Dental Branch at Houston, 1957-
Director, Dental Science Institute at Houston, 1964-
- President:
American Board of Oral Pathology, 1965-66
American Academy of Oral Pathology, 1969-70



Richard Samuel Manly

The Forty-third President, 1966-67

- born 31 May 1911, Malta, Ohio
- Inaugural Address delivered at Miami Beach, 26 March 1966:
["The Growth of Dental Research"](#)
J Dent Res **46**: 5-8, 1967
- Tufts University School of Dental Medicine
Research Professor, Dentistry, 1945-
- President, Westwood Research Laboratories, Inc., 1953-
- Secretary, AAAS Nd, 1967-70



Ralph Wilbur Phillips

The Forty-fourth President, 1967-68

- born 12 January 1918, Farmland, Indiana
- Inaugural Address delivered at Washington, D.C., 16 March 1967:
["The Stature of Dental Research in the Scientific Community"](#)
J Dent Res **46**: 1125-1131, 1967
- Indiana University School of Dentistry
Research Professor, Dental Materials, 1940-



John Barfoot Macdonald

The Forty-fifth President, 1968-69

- born 23 February 1918, Toronto, Ontario
- Inaugural Address delivered at San Francisco, 21 March 1968:
["Science Education: Backdrop for Discovery"](#)
J Dent Res **47**: 855-859, 1968
- Harvard University, 1956-62
Professor, Microbiology
- Director, Forsyth Infirmary, 1956-62
- University of British Columbia President, 1962-67
- Executive Director, Council of Ontario Universities, 1968-



Clifton Orrin Dummett

The Forty-sixth President, 1969-70

- born 20 May 1919, Georgetown, British Guiana
- Inaugural Address delivered at Houston, 20 March 1969:
["Comprehensiveness, Too, in Research on Oral Health and Disease Prevention"](#)
J Dent Res **48**: 985-989, 1969
- Farewell remarks delivered at New York City, 15 March 1970.
Topic: [On ad hoc committees and recommendations](#)
J Dent Res **49**: 911, 914-917, 1970
- Meharry Medical College School of Dentistry:
Professor & Chairman, Department of Periodontology, 1942-45
Dean & Director, Dental Education, 1945-49
- VA Hospital, Tuskegee, Alabama:
Chief of Dental Service, 1949-65
Associate Chief of Staff, Research & Education, 1962-65
- VA Research Hospital, Chicago
Chief of Dental Service, 1965-66
- Editor, American Association of Dental Editors, 1965-
- Dental Director, Watts Neighborhood Health Center, Los Angeles, 1966-67
- University of Southern California School of Dentistry:
Health Center Director, 1967-68
Chairman, Research Committee, 1968-70
Professor & Chairman, Department of Community Dentistry, 1970-



Gordon Henry Rovelstad

The Forty-seventh President, 1970-71

(At the time the first IADR President younger than the IADR itself)

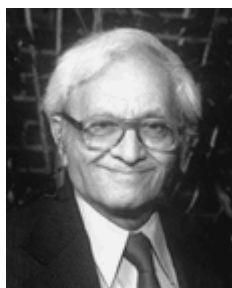
- born 19 May 1921, Elgin, Illinois
- Inaugural Address delivered at New York City, 18 March 1970:
"The Next Fifty Years—New Goals"
J Dent Res **49**: 961-965, 1970
- Northwestern University Dental School
Chief, Dental Department, Children's Memorial Hospital of Chicago, 1948-53
- Head of Dental Research Laboratory, USNTC, Bainbridge, Maryland, 1954-58
- Head of Research and Science Division, Naval Dental School, Washington, D.C., 1960-65
- Officer in Charge and Scientific Director, Naval Dental Research Institute, USNTC, Great Lakes, Illinois, 1965-69
- Dental Research Program Director, Bureau of Medicine and Surgery, and Dental Research Adviser, Office of Naval Research, Department of the Navy, Washington, D.C., 1969-



Frank J. Orland

The Forty-eighth President, 1971-72

- born 23 January 1917, Little Falls, NY
- Inaugural Address delivered at Chicago, IL, 18 March 1971:
"Historical Perspectives Are a Prologue to the Decades Ahead"
J Dent Res 50(5 Suppl):993-996, 1971
- Various academic posts, University of Chicago, 1941-1988
- Professor *emeritus*, University of Chicago, 1988-
- Director, Zoller Memorial Dental Clinic, 1954-1966
- Author, **The First Fifty-Year History of the IADR**
Author, **William John Gies, His Contributions to the Advancement of Dentistry**
- Editor, *Journal of Dental Research*, 1958-1969



Gunnar Ryge

The Forty-ninth President, 1972-73

- born 15 December 1916, Copenhagen, Denmark
- Inaugural remarks delivered at Las Vegas, NV, 23 March 1972 (no address was presented because of special Keynote Lecture)
- Royal Danish Dental School, 1939-1943, 1946-1950
- Marquette University, 1950-1964
- Branch Chief to Scientific Director, USPHS, Dental Health Center, 1964-1972



- University of the Pacific, 1972-1983
Professor *emeritus*, University of the Pacific, 1984

Mogens Roy Skougaard

The Fiftieth President, 1973-74

- born 21 July 1922, Copenhagen, Denmark
- Inaugural Address delivered at Washington, DC, 10 April 1973:
"Challenge for Tomorrow"
J Dent Res 52(5 Suppl):852-854, 1973
- Visiting Scientist, Brookhaven National Laboratory, New York, 1963-64
- Head and Founder, Institute for Graduate Studies, Royal Dental College, Copenhagen, 1970
- Initiator and Director, Danish Child Oral Health Program in Kuwait, 1984-1999



James Knuckey Avery

The Fifty-first President, 1974-75

- born 6 August 1921, Holly, CO
- Inaugural Address delivered at Atlanta, GA, 21 March 1974:
"Internationalization of the International Association for Dental Research"
J Dent Res 53(5 Suppl):954-957, 1974
- Instructor, University of Rochester Medical and Dental School, 1952-54
- Faculty, University of Michigan Medical and Dental School, 1954-1990
- Professor *emeritus*, University of Michigan, 1991
- Director, Dental Research Institute, 1975-1989



David B. Scott

The Fifty-second President, 1975-76

- born 8 May 1919, Providence, RI
- Inaugural Address delivered at London, England, 10 April 1975:
"Through the Looking Glass"
J Dent Res 54(Spec Iss C):C6-C8, 1975
- Chief, NIDR Laboratory of Histology and Pathology, 1958-1965
- Professor, Case Western Reserve University, 1965-1976
- Director, NIDR, 1976-1981



Harold Milton Fullmer

The Fifty-third President, 1976-77

The Fifth President of the AADR, 1976-77

- born 9 July 1918, Gary, IN
- Inaugural Address delivered at Miami Beach, FL, 25 March 1976:
"The Support of Dental Research"
J Dent Res 55(Spec Iss D):D6-D9, 1976
- National Institute of Dental Research, 1953-70
- University of Alabama, Birmingham, 1970-1987
Professor *emeritus*, UAB-Birmingham, 1987



George Simpson Beagrie

The Fifty-fourth President, 1977-78

- born 14 September 1925, Peterhead, Scotland
- Inaugural Address delivered at Copenhagen, Denmark, 31 March 1977:
"Why Research?"
J Dent Res 56(Spec Iss D):D6-D9, 1977
- University of Edinburgh Dental School, 1963-68
- University of Toronto Dental School, 1968-1978
Dean, Faculty of Dentistry, University of British Columbia, Vancouver, 1978-88
Dean *emeritus*, UBC, 1989



Finn Brudevold

The Fifty-fifth President, 1978-79

- born 12 June 1910, Gjøvik, Norway
- Inaugural Address delivered at Washington, DC, 15 March 1978:
"Broadening the Mission of IADR"
J Dent Res 58(Spec Iss C):1180-1183, 1979
- Eastman Dental Dispensary, 1940-41
- University of Rochester School of Medicine and Dentistry, 1941-42
- Tufts College Dental School, 1942-1949
- University of Rochester, 1949-1958
- Professor of Dentistry, Harvard School of Dental Medicine, 1958-1967
- Forsyth Dental Center, 1958-1986
Senior Member of Staff *emeritus* (Forsyth), 1989



Harald A. Løe

The Fifty-sixth President, 1979-81

- born 19 July 1926, Steinkjer, Norway
- Inaugural Address delivered at New Orleans, LA, 28 March 1979:
"Scientific Revolutions in Dentistry"
J Dent Res 58(Spec Iss D):2164-2168, 1979
- School of Dentistry, Oslo University, 1952-55, 1959-62
- Norwegian Institute of Dental Research, 1956-62
- Fulbright Research Fellow, University of Illinois-Chicago, 1957-58
- Royal Dental College, Aarhus, Denmark, 1962-72
- University of Michigan, Ann Arbor, 1972-74
- University of Connecticut, Farmington, 1974-82, 1994-
- Director, National Institute of Dental Research, 1983-94



John A. Gray

The Fifty-seventh President, 1980

- born 13 August 1924, Waterbury, CT
- Inaugural Address delivered at Osaka, Japan, 5 June 1980:
"Future of the IADR"
J Dent Res 59(DI):1658-1661, 1980
- Procter & Gamble, 1948-80
- Executive Director, IADR/AADR, 1980-90



Marie U. Nylén

The Fifty-eighth President of the IADR, 1981-82

The Eighth President of the AADR, 1979-80

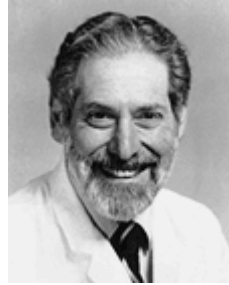
- born 13 April 1924, Denmark
- Inaugural Address delivered at Chicago, IL, 19 March 1981:
"IADR President-elect's Speech"
J Dent Res 60(C):1483-1485, 1981
- The first woman elected President of the IADR.
- Royal Dental College, Copenhagen, Denmark, 1951-55
- National Institute of Dental Research, 1949-51, 1955-89



Antony H. Melcher

The Fifty-ninth President, 1982-83

- born 1 July 1927, Johannesburg, South Africa
- Inaugural Address delivered at New Orleans, LA, 18 March 1982:
"Growing Pains in a Sixty-year-old"
J Dent Res 61(7):836-837, 1982
- General practice, Johannesburg, 1949-61
- Institute of Dental Surgery, Eastman Dental Hospital, London, England, 1961-64
- Royal College of Surgeons of England, 1964-69
- University of Toronto, ON, Canada, 1969-1993
Professor *emeritus*, University of Toronto, 1993
- Established and Directed the Medical Research Council in Periodontal Physiology, 1973-83



Robert M. Frank

The Sixtieth President, 1983-84

- born 21 May 1924, Strasbourg, France
- Inaugural Address delivered at Sydney, Australia, 1 August 1983:
"The Need for an International Association for Dental Research"
J Dent Res 62(11):1102-1103, 1983
- Dental School, Strasbourg, 1947-52
- Harvard School of Dental Medicine, 1958-59
- Dental School, University of St. Andrews, Scotland, 1967
- University of Manchester (England), 1979-85
- Dental Research Center of Strasbourg, 1968-90
- Professor, Dean, Facult³ de Chirurgie Dentaire, Universit³ Louis Pasteur, Strasbourg, 1970-92
Professor *emeritus*, 1993
- Editor, *J Biol Buccale*, *Arch Oral Biol*, *Calcif Tissue Res*



A. Richard Ten Cate

The Sixty-first President, 1984-85

- born 21 October 1933, Accrington, Lancashire, England
- Inaugural Address delivered at Dallas, TX, 15 March 1984:
"Dental Research,,More or Less"
J Dent Res 63(7):942-943, 1984
- Royal College of Surgeons of England, 1961-63
- Guy's Hospital Medical School, University of London, 1963-68



- Faculty of Dentistry, University of Toronto, ON, Canada, 1968-77
Dean, Faculty of Dentistry, University of Toronto, 1977-89
Vice Provost, Health Sciences, University of Toronto, 1989-94

Paul Goldhaber

The Sixty-second President of the IADR, 1985-86

The Second President of the AADR, 1973-74

- born 16 March 1924, New York, NY
- Inaugural Address delivered at Las Vegas, NV, 21 March 1985:
"From Mice to Men"
J Dent Res 64(7):947-951, 1985
- Harvard Medical School, 1948-50
- School of Dental and Oral Surgery, Columbia University (NY), 1950
- Harvard School of Dental Medicine, 1954-1990
Dean, Harvard School of Dental Medicine, 1968-1990
Emeritus Dean, Harvard School of Dental Medicine, 1990



Ivar A. Mjör

The Sixty-third President, 1986-87

- born 18 September 1933, Norway
- Inaugural Address delivered at The Hague, The Netherlands, 26 June 1986:
"The Impact of Dental Research on Dental Practice"
J Dent Res 65(10):1194-1195, 1986
- Dental Officer, Royal Norwegian Army, 1957-58
- University of Alabama Medical Center, 1959-61
- Norwegian Institute of Dental Research, 1961-67
- University of Oslo, 1968-73
- Director, Scandinavian Institute of Dental Materials, 1973-93
- College of Dentistry, University of Florida (Gainesville), 1993-
- Editor, *Norwegian Dental Journal*, 1971-82
Editor-in-Chief, *Acta Odontol Scand*



Roy Christopher Page

The Sixty-fourth President of the IADR, 1987-88

The Eleventh President of the AADR, 1982-83

- born 7 February 1932, Campobello, SC
- Inaugural Address delivered at Chicago, IL, 11 March 1987:
"The International Association for Dental Research: A Vision of the Future"
J Dent Res 66(7):1206-1209, 1987
- Private practice, periodontics, Seattle, WA, 1963-
- University of Washington Schools of Medicine and Dentistry, Seattle, 1967-
Director of Research, University of Washington School of Dentistry, Seattle, 1976-94
Associate Dean for Research, University of Washington School of Dentistry, Seattle, 1994-



William Dennis McHugh

The Sixty-fifth President of the IADR, 1988-89

The Twelfth President of the AADR, 1983-84

- born 8 May 1929, Berwick-on-Tweed, England
- Inaugural Address delivered at Montreal, Quebec, Canada, 9 March 1988:
"Choice and Challenge"
J Dent Res 67(7):978-979, 1988
- Dundee (Scotland) Dental School, 1950-53
- Royal Dental School, Malmö, Sweden, 1954-56
- Royal Dental Hospital, London, England, 1956-58
- University of Birmingham, England, 1958-59
- St. Andrews (Scotland) University Dental School, 1959-70
- Director, Eastman Dental Center, Rochester, NY, 1970-94
Associate Dean for Dental Affairs, School of Medicine and Dentistry, University of Rochester, NY, 1970-94
Director *emeritus*, Eastman Dental Center, Rochester, NY, 1994
Professor *emeritus*, University of Rochester, NY, 1994



Ernest Newbrun

The Sixty-sixth President, 1989-90

- born 1 December 1932, Vienna, Austria
- Inaugural Address delivered at Dublin, Ireland, 28 June 1989:
"Dental Research: Problems, Progress, and Prognosis"
J Dent Res 68(10):1377-1378, 1989
- Eastman Dental Center, Rochester, NY, 1955-57
- University of Alabama (Birmingham) Medical Center, 1957-59



- Institute of Dental Research, Sydney, Australia, 1960-61
- University of California, San Francisco, 1961-94
- Professor *emeritus*, UCSF, 1994
- Editor, **Fluorides and Dental Caries**, 1986

William Henry Bowen

The Sixty-seventh President of the IADR, 1990-91

The Tenth President of the AADR, 1981-82

- born 11 December 1933, Enniscorthy, Ireland
- Inaugural Address delivered at Cincinnati, OH, 7 March 1990:
"Apathy"
J Dent Res 69(7):1350-1351, 1990
- Private dental practice, London, England, 1955-56
- Royal College of Surgeons, London, England, 1956-59
- Nuffield Foundation Fellow, 1962-65
- Senior Research Fellow, 1965-69
- Sir Wilfred Fish Fellow, 1969-1973
- Acting Chief, Caries Prevention Branch, National Institute of Dental Research, 1973-79
- Chief, Caries Prevention Branch, National Institute of Dental Research, 1979-82
- Chairman, Dental Research, University of Rochester, NY, 1982-
- Director, Cariology Center, University of Rochester, NY, 1984-



Robert Joseph Genco

The Sixty-eighth President of the IADR, 1991-92

The Fourteenth President of the AADR, 1985-86

- born 31 October 1938, Silver Creek, NY
- Inaugural Address delivered at Acapulco, Mexico, 17 April 1991:
"The Trust and the Agenda"
J Dent Res 70(8):1102-1104, 1991
- School of Dental Medicine, State University of New York, Buffalo, 1967-
- Editor, *J Periodontol*, 1988-
- ADA Gold Medal Award, 1991



John Clifford Greene

The Sixty-ninth President of the IADR, 1992-93

The Fifteenth President of the AADR, 1986-87

- born 19 July 1926, Ashland, KY
- Inaugural Address delivered at Glasgow, Scotland
J Dent Res 71, 1992
- USPHS Hospital, Chicago, 1952-53
- USPHS Hospital, San Francisco, 1953-54
- Asst. Regional Dental Consultant, Region IX, San Francisco, 1954-56
- Asst. to Chief Dental Officer, USPHS, Washington, DC, 1958-60
- Chief, Epidemiology Program, Dental Health Center, 1961-66
- Deputy Director, Division of Dental Health, 1966-70
- Director, Division of Dental Health, 1970-73
- Acting Director/Director, Bureau of Health Resources Development, 1973-75
- Chief Dental Officer, USPHS, 1974-81
- Deputy Surgeon General, 1978-81
- Professor and Dean, School of Dentistry, University of California, San Francisco, 1981-1994
- Professor and Dean *emeritus*, UCSF, 1994



Stephen H.Y. Wei

The Seventieth President, 1993-94

- born 17 September 1937
- Inaugural Address delivered at Chicago, IL, 10 March 1993:
"Promotion of Research Worldwide"
J Dent Res 72(7):1060-1061, 1993
- University of Iowa, 1967-83
- University of California, San Francisco, 1983-84
- Chair Professor and Head, Department of Children's Dentistry and Orthodontics, Prince Philip Dental Hospital, Hong Kong, 1984-1993
- Dean, Faculty of Dentistry, and Director, Prince Philip Dental Hospital, Hong Kong (1989-1997)
- Professor *emeritus*, University of Hong Kong
- Founding Editor-in-Chief, Editor *emeritus*, *Pediatric Dentistry* (1978-1982)



Barry John Sessle

The Seventy-first President, 1994-95

- born 28 May 1941, Sydney, NSW, Australia
- Inaugural Address delivered at Seattle, WA, 9 March 1994:
"Dental Research: Strategic Alliances and the



Issue of Quality"

J Dent Res 73(7):1237-1240, 1994

- University of New South Wales, 1965-68
- National Institute of Dental Research, 1968-70
- University of Toronto Dental School, ON, Canada, 1971-
Dean, University of Toronto Dental School, 1990-

Richard R. Ranney

**The Seventy-second President of the IADR,
1995-96**

The Nineteenth President of the AADR, 1990-91

- born 11 July 1939
- Inaugural Address delivered at Singapore, 28 June 1995:
"Seventy-five and Growing"
J Dent Res 74(7):1343-1345, 1995
- Chief Dental Officer, USPHS Outpatient Clinic, Cincinnati, OH, 1964-66
- University of Oregon Dental School, 1969-72
- Medical College of Virginia, Richmond, 1972-86
- Dean (1986-89) and Professor of Periodontics (1986-91), School of Dentistry, University of Alabama, Birmingham
- Professor and Dean, Baltimore (MD) College of Dental Surgery, 1991-



John S. Greenspan

**The Seventy-third President of the IADR,
1996-97**

**The Seventeenth President of the AADR,
1988-89**

- born 7 January, 1938, London, England
- Inaugural Address delivered at San Francisco, CA, 13 March 1996:
"If Not Us, Then Who?"
J Dent Res 75(6):1336-1337, 1996
- Royal Dental Hospital, London, England, 1962-75
- School of Dentistry, University of California, San Francisco, 1976-
- Director, Oral AIDS Center, UCSF, 1992-
- Senior Editor, *Oral Diseases*, 1994-98



Per-Olof Glantz

The Seventy-fourth President, 1997-98

- born 23 July 1936, Lund, Sweden
- Inaugural Address delivered at Orlando, FL, 19 March 1997:
"IADR in Years to Come"
J Dent Res 76(8):1431-1432, 1997
- Royal Dental School, Malmö, Sweden, 1963-68
- University of Lund, Malmö, Sweden, 1967-73, 1977-98
- University of Göteborg, Sweden, 1973-77
- University of California, San Francisco, 1977-78
- Prorektor/Vice President, University of Lund, Malmö, Sweden, 1989-92
Dean, Faculty of Dentistry, University of Lund, Malmö, Sweden, 1984-89, 1993-98
Vice Chancellor/President, University of Malmö, Sweden, 1998-



Mamoru Sakuda

The Seventy-fifth President, 1998-99

- born 11 May 1932, Shizuoka, Japan
- Inaugural Address delivered at Nice, France, 24 June 1998:
"Advancing Dental Research in the 21st Century"
J Dent Res 77(9):1668-1669, 1998
- Osaka University Faculty of Dentistry, 1968-1996
Professor *emeritus*, Osaka University, 1996
- Tokushima University School of Dentistry, 1996-97
- Okayama University School of Dentistry, 1998-
- Kyushu University, Fukuoka, 1999-



Sally J. Marshall

The Seventy-six President of the IADR, 1999-2000

The Twenty-first President of the AADR, 1992-93

- born 8 January 1949
- Inaugural Address delivered at Vancouver, BC, Canada, 10 March 1999:
"The IADR: Mentor for Dental Research"
J Dent Res 78(8):1384-1385, 1999
- Northwestern University, Evanston, IL, 1970-87
- University of California, San Francisco, 1987-



Marjorie K. Jeffcoat

The Seventy-seventh President of the IADR, 2000-2001 The Twenty-fourth President of the AADR, 1995-96

- born 14 June 1951
- Inaugural Address delivered at Washington, DC, April 5, 2000
"The World of Oral Research: How Do We Improve It?"
J Dent Res 79(7):1448-1449, 2000
- Harvard School of Dental Medicine, 1978-88
- University of Alabama, Birmingham, 1988-



Graham Embery

The Seventy-eighth President of the IADR, 2001-2002

- born 20 August 1939, Clwyd, North Wales, UK
- Inaugural address delivered at Chiba, Japan, June 27, 2001
"Dental Research; Our Unique Contribution to Medical Science"
J Dent Res 80:1688-1689, 2001
- Senior Lecturer and Reader in Dental Science, University of Liverpool (1973-87)
- Professor of Basic Science, University of Wales Dental School (1987-2001)
- Professor of Dental Science and Dean, School of Dentistry, University of Liverpool, UK (2001-)
- Past President, British Division of IADR
- Winner, IADR Distinguished Scientist Award in Oral Biology



John Clarkson

The Seventy-ninth President of the IADR, 2002-2003

- Born in Mullingar, Ireland, in 1941
- Inaugural address delivered in San Diego, CA, USA, March 6, 2002
"The Missions of the IADR"
(*J Dent Res* 81:300-301, 2002)
- BDS, University College, Dublin, Ireland, 1964
PhD, University College, Cork, Ireland, 1987
- Dean, Dental School & Hospital, Trinity College, Dublin, Ireland (1998-)
Executive Director, International and American Associations for Dental Research (1990-98)
Deputy Chief Dental Officer, Ireland
Professor/Consultant in Public Dental Health & Community Services
Chair, Department of Public & Child Dental Health



Stephen Challacombe

The Eightieth President of the IADR, 2003-2004

- Born April 5, 1946, London, UK
- Inaugural address delivered in Göteborg, Sweden, June 25, 2003
“Global Perspectives for the IADR and Dental Research” (*J Dent Res* 82:671, 2003)
- Licentiate in Dental Surgery, Royal College of Surgeons, England (LDSRCS), 1968
Bachelor of Dental Surgery, University of London (BDS), 1969
Doctor of Philosophy, University of London (PhD), 1976
Membership of the Royal College of Pathologists (MRCPATH), 1981
Fellowship of the Royal College of Pathologists (FRCPath), 1992
Fellowship in Dental Surgery, Royal College of Surgeons of Edinburgh (FDSRCSed), 1994
Fellow of the Academy of Medical Sciences (FMedSci), 1998
- Professor of Oral Medicine, University of London, UK
Head, Division of Oral Medicine, Pathology, Microbiology and Immunology, Guys, Kings & St. Thomas’ Medical and Dental School, London, UK
Director, Centre for the Study of the Oral Manifestations of HIV Infection, London, UK



CHAPTER SEVEN: ADMINISTRATIVE ASPECTS OF IADR

Since IADR executive officers have been portrayed in the "Pages of Presidents", it is thus fitting to also cite the several Association Secretaries, Treasurers, and Secretary-Treasurers who have carried out the innumerable and important tasks of administering Association affairs, especially between the annual meetings. Many of these men became the chief executive in a later year.

Secretary Pro Tem:

Leuman M. Waugh	1920
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Acting General Secretary:

William J. Gies	1920-22	Leuman M. Waugh	1924
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Secretaries:

Albert E. Webster	1927-28	Edward H. Hatton	1938-41
William J. Gies	1928-38		

Treasurers:

William C. Rice	1927-32	Bissell B. Palmer	1933-41
Leroy S. M. Miner*	1932-33		

Secretary-Treasurers:

Edward H. Hatton	1941-57	Gordon H. Rovelstad	1964-67
Dan Y. Burrill	1957-61	Arthur R. Frechette	1967-
Joseph C. Muhler	1961-64		

Assistant Secretary-Treasurers:

Dan Y. Burrill	1952-57	Frances Kendrick	1964-65
Edward H. Hatton	1957-60	Arthur R. Frechette	1965-67
H. F. Campbell (AIBS)	1960-61†	Gordon H. Rovelstad	1967-68
Mildred Erickson (AIBS)	1961-62	Harvey W. Lyon	1968-70
Barney O. Green (AIBS)	1962-63	John A. Gray	1970-73
No person appointed	1963-64		





The appointment of Arthur R. Frechette as the current and only full-time salaried Secretary-Treasurer of IADR in charge of the efficient IADR Central Office has been hailed as a very significant achievement in the history of the Association.²



An IADR Central Office was established in 1965 on the sixteenth floor in Suite 1636 of the ADA Building at 211 E. Chicago Avenue, Chicago, Illinois.



TRUSTEES AND DIRECTORS

IADR Trustees and the Board of Directors also had administrative roles. Although there had been none designated earlier, in 1933 three men were selected as IADR Trustees. They had assigned to them certain fiduciary duties in the Association. According to the 1940 By-Laws (Article IX, Sections 4a and 4b),³ their primary activity seems to have been to look after the Endowment Fund for the *Journal*.

The first trustees were named respectively to staggered terms of three-, two-, and one-year terms. However, these years of service were extended, and many of the trustees served terms of five years or longer. The IADR Trustees, chronologically, were Arthur D. Black (1933-38), Bissell B. Palmer (1933-42), Russell W. Bunting (1933-43, 1943-48), Arthur H. Merritt (1941-44), Edward H. Hatton (1941-50), Thomas J. Hill (1942-57), J. L. T. Appleton (1944-49), Leuman M. Waugh (1946-57), H. Trendley Dean (1948-57), Harold C. Hodge (1949-57) and Paul C. Kitchin (1950-57).

In 1952 the Endowment Fund for the *Journal* was incorporated in New York as the William J. Gies Foundation for the Advancement of Dentistry.⁴ This effected separation of the fund (which surpassed \$50,000) from the IADR. Soon after, the Trustees as a body were discontinued when a Board of Directors was appointed to satisfy legal requirements related to incorporation (Thomas J. Hill, Chairman of the Committee on Incorporation, indicated in his report the desirability of incorporation)⁵ of the IADR, which occurred in the State of Illinois on 12 April 1957. In addition to attending an annual meeting of the corporation, the practical duty of these Directors was to approve banks as repositories for IADR funds, including the Endowment Fund of the IADR for the *Journal of Dental Research*. This second fund for the *Journal* had a meager beginning, but by late 1970 it amounted to over \$5500. (See chapter sixteen.)

The following nine men were reappointed by the Council to the Board of Directors every year from 1959 through 1970: Paul E. Boyle, Reidar F. Sognaes, Ned B. Williams, H. B. G. Robinson, Holmes T. Knighton, James A. English, Frank J. Orland, Thomas J. Hill, and Dan Y. Burrill. (All of these had served as Presidents of IADR except F. J. Orland, who was the Editor of long and substantial standing and who, by the wisdom of those in charge, must have been considered to possess no less a level of monetary horse sense than the Past-Presidents.)

THE MONETARY HISTORY

The unstinting donations of time and effort, the engendering of goodwill, and the accomplishments of volunteers have carried the Association a long way, especially in the early decades. However, money pervades all things, these days, and through good management the IADR has acquired a substantial monetary reserve. It was the consensus of the History Committee that 'twas unnecessary to present a specific monetary history of the Association in this volume. However, for those interested, a detailed record of almost all financial transactions can be found published in the *Journal* with the proceedings of each annual meeting. For example,



the financial picture for the 1970 Fiftieth Anniversary year is presented in considerable detail.⁶ The earliest financial report that appeared in the *Journal*⁷ was for the 1944 calendar year. Similar reports of the intervening years have been published with varying detail depending on preparations by the incumbent Secretary and/or Treasurer. While some early reports were published only in part, full reports were always available for inspection by members even if only in mimeographed form at the annual meetings.

Needless to emphasize, during the recent years, monetary aspects paralleled the great growth in every phase of Association activity. Whereas dues were very meager in the early days, they are now substantial and stabilized at \$30 per year including a subscription to the *Journal of Dental Research*. There was no registration fee for the annual meetings until 1955, when it became necessary to charge \$2 (to cover the unexpected cost of professional slide projectionists who were necessary at that Chicago meeting). But, by contrast, registration at the annual meeting fifteen years later was \$10 for members and \$20 for nonmembers.

While the Association income increased considerably, so did the expenditures;⁸ nevertheless, with wise management, monetary assets, including those of the *Journal*, had grown to the substantial figure of \$279,283 by 1970. Funds of the *Journal of Dental Research* had always been maintained in a separate account and rightfully so, since the *Journal* had historically been a separate entity, requiring some independence in the use of its funds in order to rapidly and adequately publish its many scientific manuscripts. This sound financial situation is in vivid contrast to the meager Depression days of the 1930s when William Gies was said to have borrowed on his own life insurance in order to keep the *Journal* in existence.

CONTRIBUTION OF TIME, EFFORT AND SPACE

It should be noted that, over the decades, the custom evolved that the various Schools have the "honor" to donate portions of a professor's time to the cause of the IADR. Not uncommonly, and almost expectedly in academic circles, it is the unofficial concept that since scientific societies are well within the academic realm, certain activities within these societies may be considered part of the scholarly pursuit of the professor, especially when he becomes involved as an officer. As such, he should devote considerable academic (school) time and effort in addition to his personal time during evenings, weekends, and vacations to the activities of the Association. This has been especially true of the office of General Secretary, the Editorship, and also the Presidency. It seems opportune to cite this nonmonetary "labor of love" on the part of IADR members and also to commend the contribution of professorial time and physical space on the part of the respective universities where it has been so magnanimously provided.

REFERENCES

1. *J Dent Res* **36**: 801, 1957.
2. See "Views and News" in *J Dent Res* **44**: 461, 1965 and "IADR Chargé d'affaires" on page 626 of the same issue.



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3. *J Dent Res* **19**: 341-342, 1940.
 4. Orland, F. J.: The Fifty Year History of the *Journal* and the Biographical Directory of the IADR, *J Dent Res* **48**: H-13, 1969 (Special Commemorative Supplement to the September 1969 issue of vol **48**).
 5. *J Dent Res* **34**: 770, 1955.
 6. *J Dent Res* **50**: 1023-1031, 1971; **51** 1151-1159, 1972.
 7. *J Dent Res* **24**: 210, 1945.
 8. *J Dent Res* **50**: 1024, 1971. The \$279,283 mentioned is the Statement of Income and Expenses and Fund Balances for the six months ending 30 June 1970 (this was at the transition from calendar-year to fiscal-year accounting, starting 1 July 1970). Total income \$160,467 minus total expenses \$138,620 equals \$21,847, plus previous fund balance \$257,436, equals \$279,283.

* Miner became Interim Treasurer when Dean Rice died in office on 23 November 1932.

† Toward the end of Dan Burrill's tenure as Secretary-Treasurer, the Council of the Association concurred with Burrill's suggestion that a professional group be appointed to operate the routine business of the Association. The American Institute of Biological Sciences (AIBS) was such a body that contracted to function in this capacity. (Actually, the IADR had voted affiliation with AIBS¹ on 23 March 1957.) Hence, one of the AIBS officers during the time of 1960-63 was appointed Assistant Secretary-Treasurer *per se*. Unfortunately, Howard F. Campbell, financial officer of the AIBS, died suddenly in January 1961, weakening the Institute's efficiency. During 1963 the AIBS could no longer fulfill its obligations to the IADR, and the contract was terminated.



CHAPTER EIGHT: THE ORGANIZATION OF IADR

As a society organized to promote and communicate scientific endeavor, the IADR does not need any elaborate political machinery by which to function. The first President, J. Leon Williams, stated on 27 January 1922 that "dental politics" should be kept out of the new organization.¹ The IADR certainly has been above the common political maneuvering that local, state, and national dental and medical societies are often said to indulge in.

As a society of scientists and those professing an interest in science, the exact form of the governing rules should be as unimportant as the spirit behind them must be important. On IADR principles, there has always been concurrence among the officers, the councilors, and the many committeemen and -women. On the *modus operandi*, with enough free and open discussion, there has usually been achieved a meeting of minds. Thus, guide rules to expedite routine and new business of the IADR have been kept relatively simple. As Emerson said, "The less government we have—the better. . ." Yet simple but up-to-date constitution and by-laws are necessary.

The first Constitution² (reproduced earlier in chapter three of this book) was written largely by William Gies, and it still serves as a basic instrument, although it has been modified through amendments and many by-law changes. There were some major revisions of the Constitution in 1940, 1951, 1957, 1964, and 1967. These changes and relevant discussions were sometimes cited in the *JDR* for those respective years. But other polemic writings were found only in the reams of correspondence available to the primary author. Since the *Journal* almost never reprinted the Constitution in its entirety, although it was from time to time printed as a leaflet for general membership distribution, the latest version still being used in 1970 is being reprinted here as a matter of documentation.

INTERNATIONAL ASSOCIATION FOR DENTAL RESEARCH

Constitution and Bylaws

Adopted March 1957—Revised through March 1967

CONSTITUTION

ARTICLE I. Name

This organization is named: International Association for Dental Research.

ARTICLE II. Objects

The association has been established to promote broadly the advancement of research in all branches of dental science, and in the related phases of the sciences that contribute directly to the development of oral health-



service, and which add to the knowledge of the mouth and teeth and of their relation to the body as a whole; and further, to encourage and facilitate cooperative effort and achievement by and mutual helpfulness among, investigators in all nations in every division of stomatology to the end that dentistry may render cumulatively more perfect service to humanity.

ARTICLE III. Membership

SECTION 1. *Eligibility.* Any individual who is interested in Dental Science and Dental Research shall be eligible to membership in this Association, provided such person conforms to the recognized standards of professional ethics.

SECTION 2. *Election.* Any person who is eligible to membership under Article III, Section 1, who shall have been nominated in writing in due form by two members of the Association, and who shall have been certified by the Secretary-Treasurer or Assistant Secretary-Treasurer and approved by the Membership Committee of the appropriate division, non-divisional section or group shall become a member of the Association upon payment of dues.

SECTION 3. *Discontinuance.*

- (A) Membership may be automatically terminated by a member, by delivery of a formal notice to the Secretary-Treasurer of that member's resignation.
- (B) Membership may be discontinued for any member by vote at an annual meeting by two-thirds of the members present and voting, followed by notice to the member from the Secretary-Treasurer that the membership has been terminated. The person whose membership is threatened with termination is entitled to appear before the Association or submit a written statement at the annual meeting to defend his rights to membership.

ARTICLE IV. Divisions

SECTION 1. *Organization.* Thirty or more members in any nation or group of nations on the same continent, *with the approval of the Council*, may organize a Division for the advancement of the objectives of the Association.

SECTION 2. *Management.* The affairs of a Division shall be managed by its members in harmony with the Constitution and Bylaws of the Association.

SECTION 3. *Officers.* Each Division shall elect a Secretary and such other officers and committees as may seem desirable.

ARTICLE V. Sections and Groups

SECTION 1. *Sections.* Each section shall consist of ten or more members of the Association. New sections may be organized only *with the approval of the Division*.

SECTION 2. *Groups.* Members in any branch of dental science, or in fields related to dental science, *with the approval of the Association* may organize a group to further the objectives of the Association in special scientific or professional fields.



SECTION 3. *Management.* The affairs of Sections and Groups shall be managed in harmony with the Constitution and Bylaws of the Association.

ARTICLE VI. Meetings

SECTION 1. *Annual.* The Association shall meet at least once each year unless prevented by circumstances not under the control of the members.

SECTION 2. *Special.* Special meetings of the Association may be convened by the Council.

SECTION 3. *Division meetings.* Each Division shall meet at least once each year unless prevented by circumstances not under the control of the members.

ARTICLE VII. Officials

SECTION 1. *General officers.* The general active officers of the Association shall be a President, a President Elect, a Vice-President, a Secretary-Treasurer, and an Editor. The Council shall appoint an Assistant Secretary Treasurer to serve at the request of, or in the absence of the Secretary-Treasurer for administrative matters.

- (A) *Term of Office.* The term of office for each officer of the Association excepting the Editor and the Secretary-Treasurer shall be the one Association year. The term of office of the Editor shall be two years. The term of office of the Secretary-Treasurer shall be no less than five years and may be renewed at the discretion of the Council.
- (B) *Tenure of office.* Each officer shall continue to serve until the installation of his duly elected successor.

SECTION 2. *Vacancies.* An ad interim vacancy in any office shall be filled for the unexpired term by a *majority vote of the Council*. Any vacancy occurring at or during the progress of the ballot preceding an annual meeting shall be filled *by the Association* on recommendation by the Council, by vote of a majority of the members present and *voting at the meeting*.

SECTION 3. *Honorary officers.* Honorary officers may be elected *by the Association* from nominations *by the Council, or by divisions, sections or groups*.

ARTICLE VIII. Council

SECTION 1. *Personnel.* The Council of the Association shall consist of the President, the immediate Past-President, the President-Elect, the Vice-President, the Secretary-Treasurer, the Editor, one Councillor from each section, one Councillor from each group, and two Councillors at large.

- (A) *Division Representation.* For the purposes of representation on the Council a division which does not include two or more sections shall be deemed a section.
- (B) *Election of Councillors.* Councillors from sections shall be elected for a term of one year by the members of the sections they represent.
- (C) *Councillors at large.* Members of the Association who are not members of any section for purposes of representation shall be represented on the Council by two Councillors at large who are not members of any section.
- (D) *Election of Councillors at large.* Two Councillors at large shall be elected for a term of one year *by the Association* in the manner by which general active officers of the Association are elected.



SECTION 2. *Duties of the Council.* The Council shall exercise the functions set forth for it in this Constitution and the Bylaws of the Association, the functions delegated to it by vote of the Association, and such other functions as may be necessary in the conduct of the business of the Association.

SECTION 3. *Ad interim Committee.* During the periods between meetings of the Association the executive management of the affairs of the Council shall be by an Ad interim Committee of the Council. The Ad interim Committee shall consist of the President, the immediate Past-President, the President-Elect, the Vice-President, the Secretary-Treasurer, the Editor, and two additional members to *be designated by the Council*.

ARTICLE IX. Journal

SECTION 1. *Name of Journal.* The official publication of the Association is the Journal of Dental Research.

SECTION 2. *Management of Journal.* A Publication Committee shall be in charge of the Journal.

- (A) *Publication Committee.* The Publication Committee shall consist of the Editor as Chairman, the President, the President-Elect, and two special members elected *by the Association*. The Secretary-Treasurer shall be an ex officio member.
- (B) *Terms of office.* The terms of service of the two special members of the Publication Committee shall be two years, the terms so staggered that one is elected each year, except in case of vacancy.
- (C) *Reports.* Annually and at such other times as the Council may direct, the Publication Committee shall report to the Council and the Association concerning the conduct of the Journal.

SECTION 3. *Endowments.* Endowments for the Journal shall be segregated from the other assets of the Association.

SECTION 4. *Authorization for expenditure.* Expenditures of income from endowments for the Journal may be made only on authorization *by the Association*.

SECTION 5. *Endowment Trustees.* If and when endowments for the Journal exceed \$10,000, the Council shall appoint three endowment trustees to be custodians of the endowment assets. The terms of service of the endowment trustees shall be three years and the terms shall be so staggered that one new trustee is appointed each year. A trustee may not succeed himself.

ARTICLE X. Nominations and Elections

SECTION 1. *Nominations by the Council.* One or more nominations for each active and honorary office, for councillors at large, and for publication committeemen shall be made *by the Council* and announcement of the nominations shall be mailed to each member of the Association not less than three months before the date of the next annual meeting, and in a form to indicate that other nominations may be made by members.

SECTION 2. *Nominations by petition.* Additional nominations may be made by petition signed by five members of the Association and received by the Secretary-Treasurer not more than 30 days after the mailing of the announcement of the Council nominations.

SECTION 3. *Notice of Nominations.* Not less than one month before the next annual meeting, the nominations for each office shall be sent by the Secretary-Treasurer to all members of the Association on an official ballot form for a vote at that meeting.

SECTION 4. *Election.* A plurality of votes cast shall elect to each office.



ARTICLE XI. Finances

SECTION 1. *Dues.* At each annual meeting of the Association, the amount of the annual dues to the Association and the subscription fee for the Journal of Dental Research shall be determined and announced by the Council. In case no annual meeting is held this function shall be exercised by the Ad interim Committee of the Council.

SECTION 2. *Expenditures.* Funds of the Association may be expended only on *general or specific authorization by the Association*, except that if the annual meeting of the Association is not held the Ad interim Committee of the Council may authorize expenditure of funds.

SECTION 3. *Expenditures.* The Ad interim Committee of the Council may authorize expenditure of funds of the Association to defray expenses for the business of the Association not foreseen at the time of the annual meeting.

SECTION 4. *Accounts.* All accounts of assets belonging to the Association shall be audited annually by a *certified public accountant*.

SECTION 5. *Reports.* All officers collecting, disbursing, or holding in trust assets belonging to the Association shall report annually to the Council and the Association in written form.

ARTICLE XII. Bylaws

Bylaws and amendments to Bylaws may be proposed at any annual meeting of the Association and may be adopted at the same meeting by a vote of *two-thirds* of the members *present and voting*, the Bylaws and amendments taking effect at the close of the meeting.

ARTICLE XIII. Quorum

At any regular meeting of the Association, or at any special meeting of the Association called by the Council of the Association, *thirty members* shall constitute a quorum provided members from at least *three sections* are present, and provided notice of the meeting shall have been mailed to all members at least 60 days prior to the date on which the meeting is called.

ARTICLE XIV. Amendments to the Constitution

SECTION 1. *Proposal.* A proposed amendment of this Constitution, formally endorsed by at least five members and accompanied by a statement of reasons for adoption, may be presented at any annual meeting of the Association, and thereupon becomes a special order of business for a vote at the succeeding annual meeting.

SECTION 2. *Notice and ballot.* The Secretary-Treasurer shall mail to each member of the Association not less than one month before the meeting of the Association at which the amendment is to be voted upon: (a) a copy of the amendment, (b) the names of the sponsors and the stated reasons for its adoption, (c) a ballot for a vote on the amendment, and (d) a copy of this article (XIV) of this Constitution.

SECTION 3. *Adoption.* A proposed amendment shall be adopted by a vote of not less than *two-thirds* of the members *voting* on the question at the meeting of the Association, and shall become a part of the Constitution at the close of the meeting at which it is adopted.



BYLAWS

SECTION A. Membership

1. **Nomination.** Nominations for membership shall be signed by two members of the Association who shall attest to the eligibility of the nominee for membership.
2. **Eligibility.** The words "individual who is interested in Dental Science and Dental Research" in Article III, Section 1 of the Constitution shall be interpreted as follows:
 - (A) *Active Member:* (1) Persons who are conducting or have conducted research, or, (2) persons who have presented scientific papers based upon original research before national or international meetings, or, (3) persons who have had one or more scientific papers based upon original research published in scientific journals.
 - (B) *Sustaining Member:* Persons of scientific training or attainment who are interested in the furtherance of dental research. The Sustaining Member shall have all rights and privileges of active membership but shall have no vote.
 - (C) *Affiliate Member:* Science oriented persons who have a genuine interest in dental research although not active research workers. The Affiliate Member shall have all rights and privileges of active membership but shall have no vote.
 - (D) *Student Member:* Predoctoral students enrolled in recognized universities and colleges and recommended for student membership by two faculty members who are acquainted with the scientific work of each candidate. Persons elected to student membership must meet the criteria for active, sustaining, or affiliate membership within five years or be dropped from membership. The Student Member shall have all the rights and privileges of active membership but shall have no vote.
 - (E) *Life Member:* Any person who has attained the age of 65 and has been a member of the Association in good standing for at least 25 years. In the event of ill health forcing retirement, only the latter qualification will be necessary for Life Membership.
3. **Election.** By unanimous vote of the members in attendance at a meeting, the Secretary may be instructed to cast a ballot, for the Association, for one or more nominees.
4. **Sections and Groups.**
 - (A) Assignment for a member to a section shall be optional.
 - (B) Secretaries of the Sections shall notify the Secretary-Treasurer of the Association of changes in Section memberships.
 - (C) Each section or group may elect as associate members in the section or group persons who are not members of the Association. Such persons may become members of the Association only if eligible and in the manner provided in the Constitution and Bylaws of the Association.
5. **Discontinuance of membership.** Any member who has failed for three years in succession to pay his annual dues to the Association, and whose reason for the delinquency has not been accepted by the Council, shall, at the end of the third year of delinquency, automatically forfeit membership in the Association and shall be notified by the Secretary-Treasurer of the said termination.
6. **On April first of each year the Secretary-Treasurer shall cancel the subscription to the Journal of Dental Research for any member whose dues and subscription fee are not paid by that time.**
7. **Honorary Membership.**



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- (A) One honorary member may be nominated each year by unanimous recommendation of the *three most recent living past presidents* of the Association. Such honorary membership shall have all the rights and privileges of membership, but shall not receive the Journal.
 - (B) Honorary members shall be selected on the basis of the candidate's significant contributions to the advancement of dental research.

SECTION B. Payment of Dues

1. Dues and subscription fee to the Journal shall be paid by members of the Association to the Secretary-Treasurer or his appointed representative. These payments are due on January first of each year.
2. Exceptions.
 - (A) Annual dues for the year in which membership is terminated by a member or by the Association prior to the date of the annual meeting shall be refunded, or if unpaid, shall not be demanded.
 - (B) Dues shall be remitted for Life Members.
 - (C) Rights of membership shall not be affected by remission of dues, but members whose dues have been remitted shall receive the Journal of Dental Research only if the subscription fee charged to members has been paid.
 - (D) In any year *the Council may suspend payment of dues* by members resident in countries outside North America, upon request from such members because of unwieldy foreign exchange relations, currency depreciation, or other conditions of like nature.

SECTION C. Meetings

1. Annual meeting. The place and time of each annual meeting, when not voted by the Association, shall be determined by *the Council* (VI, 1).
2. Program.
 - (A) The arrangements for each annual meeting of the Association shall be made in accordance with the instructions from the Association or the Council by a Program Committee consisting of the President-Elect, the President and the Vice-President, with the Secretary-Treasurer as a member *ex officio*.
 - (B) The President-Elect shall be chairman of the Program Committee.
3. Registration fee. With the approval of *the Ad interim Committee* of the Council a registration fee may be assessed for the annual meeting.

SECTION D. Officials

1. Duties.
 - (A) The duties of the officers shall be those ordinarily associated with the official titles, and such other duties as the Association and the Council may assign.
 - (B) Each general active officer shall report annually to the Council on the conduct of his office.
 - (C) The Council shall report annually to the Association on the nature and scope of their proceedings.
 - (D) The Council shall appoint an Assistant Secretary-Treasurer to serve at the request of, or in the absence of the Secretary-Treasurer for administrative matters.
2. Installation. At the annual meeting of the Association an appropriate ceremony of installation shall inaugurate the term of service of each active officer of the Association.



3. Bonding. *The Council shall direct officers collecting, disbursing, or holding in trust assets belonging to the Association to be bonded by a reliable surety company and shall determine the amount of the bond.*

SECTION E. Journal

1. Officers of the Publication Committee. In addition to the Editor, who is chairman of the committee, the Publication Committee may select other officers from the members of the committee and assign such duties as seem desirable.
2. Executive assistants. The Publication Committee may appoint assistants not members of the committee, subject to *approval by the Council*.
3. The Publication Committee is authorized to select the publisher or printer for the Journal of Dental Research, and to negotiate donations, contracts and agreements for or necessary in the conduct of the Journal, subject to the *approval of the Council*.
4. *The Council shall appoint* an advisory editorial board of ten or more members who shall act as consultants to the Editor.
5. All assets received by the Association from the conduct of the Journal, or for the support of the Journal, shall be disbursed for the support of the Journal in accordance with the rules and regulations of the Association.

SECTION F. Committees

1. Standing and special committees may be designated for particular functions by the Association, its President, the Council, or the Ad interim Committee of the Council.
2. Appointments to membership in committees, excepting personnel specified in motions creating committees, shall be made by the President.
3. Standing committees. In addition to the Program Committee and Publication Committee, the following additional standing committees shall be appointed:
 - a. A Membership Committee of three to examine nominations to membership and report to the Council at the annual meeting.
 - b. A Meeting Place Committee of three to determine the suitable time and place for the annual meeting and to report to the Council.
 - c. A Nominating Committee of five members to advise the Council in the selection of members of the Association for nomination as candidates for offices on the official ballot of the Association.
4. The members of the committees on membership and meeting places shall be appointed for three year terms, and the members of the committee on nominations for five year terms, the terms so staggered that one new member is appointed each year, except in case of vacancy.
5. A Local Arrangements Committee shall have charge of the detailed arrangements for the annual meeting, under the direction of the Program Committee.

SECTION G. Authorized Banks and Expenditures

1. Funds of the Association shall be deposited in a bank or banks approved for the purpose *by the Association*. Authorized expenditures from the general funds of the Association shall be made by checks each of which must



be signed by the President or President-Elect or Vice-President and the Secretary-Treasurer or Assistant Secretary-Treasurer.

2. Expenditures from the funds of the Journal of Dental Research of the Association shall be made by checks each of which must be signed by the Editor, and the President, or President-Elect, or Vice-President.

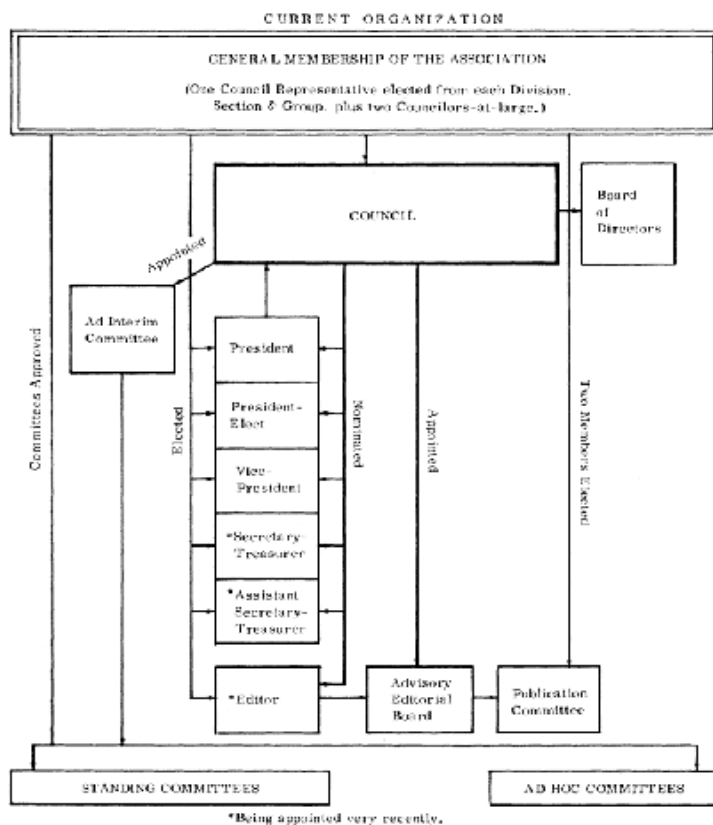
SECTION H. Definitions

1. Members of this Association for purposes of notice or other communications or actions are those persons who are members according to the latest information possessed by the Secretary-Treasurer at the time of mailing of the notice or communication, or the time of the action.

2. Notice shall be considered to have been given to a member when written statement of the notice has been mailed to the member at the last address for the member known to the Secretary-Treasurer or Assistant Secretary-Treasurer at the time of mailing.

Parliamentary procedure is used at all meetings, although in small informal gatherings it is largely truncated. *Robert's Rules of Order* was used as a guide, but very recently, the *Sturgis Standard Code of Parliamentary Procedure*³ was adopted as the official manual for consultation.

To understand the IADR as a functioning organization, a flow diagram can provide the most lucid and concise explanation. A display of such an organizational chart was exhibited at the 1970 New York IADR meeting.⁴

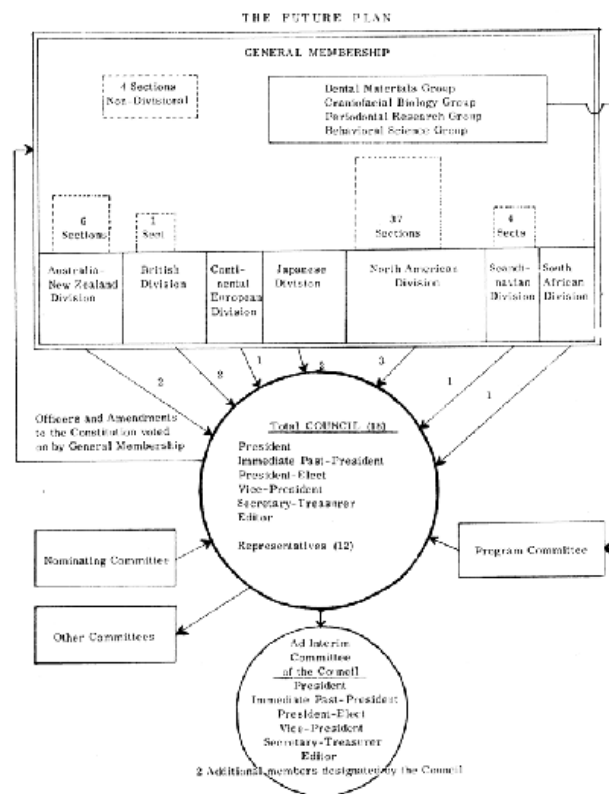


As has been explained in an earlier chapter, basically the Association consists of the large general membership which approves major decisions and elects the officers annually. The membership at the end of



1970 comprised fifty-two Sections, seven Divisions, and three Groups, plus another one recently approved, each of which had the right and privilege of sending a Councilor to the annual IADR Council meeting, where most of the deliberations are openly conducted. Although many Councilors do not attend, the body is still large and at times unwieldy. In the beginning, as many as five Councilors were elected from each of the few Sections. This number was later modified to two and then to a single person as the Sections grew in number.

Now the Divisions are growing and becoming important by holding their own annual scientific and business meetings, except for the North American Division, whose equivalent meeting, in essence, has been held in conjunction with the annual IADR meeting, so far conveniently in North America. The current surging strength in the Divisions has provided a challenge for a change in the major governing rules of the Association. The planned change can best be explained by a new organizational chart.



In essence, a series of amendments will need to be passed by the general membership. This would permit a new basis of representation in a newly constituted Council. The new international Council would be small and hence efficient, having representatives only from the Divisions plus all the IADR officers. The number of representatives would depend on membership size, but each Division would have at least one. Those with at least one hundred (10^2) members would have two representatives, and those with at least 1000 (10^3) members, three. In the distant future, if a Division should reach 10^4 members, it would have four representatives on the Council. This is a unique form of democracy and could be termed "exponentially proportional representation".



REFERENCES

1. *J Dent Res* **5**: 28, 1923.
2. *J Dent Res* **6**: 102-110, 1924-26.
3. Sturgis, A.: *Sturgis Standard Code of Parliamentary Procedure*, 2d ed, new and revised, New York: McGraw-Hill Book Company, 1966.
4. *J Dent Res* **49**: 940, 1970.



CHAPTER NINE: HONORARY STATUS IN THE IADR

Over the decades it has seemed fitting to designate certain noteworthy individuals as "honorary". In the early years with reverence for the "founding father", William J. Gies was referred to as the Honorary President, 1922-28.

HONORARY VICE-PRESIDENTS

It must have been appropriate to designate several IADR members active in remote regions as Honorary Vice-Presidents. These were labeled as such and are as follows: R. Gordon Agnew, Chengtu, 1935-37, 1939-44; Karel Cerný, Prague, 1938-39; J. Frank Colyer, London, 1932-33; Ernest B. Dowsett, London, 1939-40; Geoffrey Friel, Johannesburg, 1936-37; Bernhard Gottlieb, Vienna, 1932-33, Palestine, 1940-41; Otto Hofer, Vienna, 1937-38; Cyril H. Howkins, London, 1936-37; Jan Jesensk&ycute;, Prague, 1933-35; Ashley W. Lindsay, Chengtu, 1937-38; Harrison J. Mullett, Chengtu, 1938-39; František Neuwirt, Prague, 1939-40; J. Lewin Payne, London, 1937-39; Hans Pichler, 1933-34, 1939-42; George B. Pritchard, London, 1940-44; A. Martin Schwarz, Vienna, 1938-39; J. C. Middleton Shaw, Johannesburg, 1935-36, 1937-44; Evelyn C. Sprawson, London, 1934-36; József Szabó, Budapest, 1935-38; Karel Wachsmann, Sr., Prague, 1935-38; and Hermann Wolff, Vienna, 1934-37.

Much later, there were a few more Honorary Vice-Presidents designated by the Council. Senator Lister Hill of Alabama (although not a member) was named for 1957-58,¹ and Edgar D. Coolidge of Chicago for the year 1958-59.² For special reasons, three men from European countries were named Honorary Vice-Presidents for 1967-68; these were Jens J. Pindborg from Copenhagen, S. Yngve Ericsson from Stockholm, and Hans R. Mühlemann from Zürich.

HONORARY MEMBERSHIP

Honorary membership became another avenue of honoring certain outstanding individuals in recognition of service to the cause of dental research on a broad scale, although they had not held IADR membership before. The first such Honorary Membership was conferred upon Harold Hillenbrand² as Secretary of the American Dental Association in 1958. Later, at the Forty-third General Meeting of IADR in Toronto in 1965, Honorary Membership was conferred upon John E. Fogarty, Congressman from the Second Congressional District of Rhode Island and Chairman of the Subcommittee on Appropriations for the Department of Labor and Health, Education, and Welfare.⁴

Apparently, it was overlooked that Harold Hillenbrand was already an Honorary Member, so in his last year as Executive Director of the ADA, he was again designated an Honorary Member in Houston.⁵ The following year in New York at the Fiftieth Commemorative Year of the Association, Honorary Membership was conferred upon Roger O. Egeberg, Assistant Secretary for Health and Scientific Affairs, Department of



Health, Education, and Welfare in the United States Federal Government.⁶ (For the Egeberg presentation, see chapter eighteen on the "Fiftieth Anniversary Observance".)

THE PAST-PRESIDENTS

In a somewhat special sense, Past-Presidents of the Association have been held in honored esteem! They have had annual luncheons provided by the Association; at some, group photographs documented the occasion. These photographs are reproduced here for perusal. Past-Presidents appear to be a very erudite body, but as a group of past leaders they have not been taken seriously in their advice to current officers (except when a future President discreetly planned to designate the Past-Presidents as his Privy Council to learn their thoughts on Association problems).

The list of Past-Presidents on page 98 cites those who passed away during the first half-century life of the Association. Their range of age at death was 57 to 89, in round figures, while their collective average age was 73.2 years.

PAST-PRESIDENT LUNCHEON MEETINGS



These sixteen Past-Presidents met on Saturday, 21 March 1964, in the Ambassador Hotel, Los Angeles, California. Clockwise: Ned B. Williams, Hamilton B.G. Robinson, Francis A. Arnold, Isaac Schour, Reidar F. Sognaes, Wallace D. Armstrong, Paul E. Boyle, Seymour J. Kreshover, Basil G. Bibby, George C. Paffenbarger, James A. English, Holmes T. Knighton, Joseph F. Volker, Thomas J. Hill, Harold C. Hodge, and Maynard K. Hine.





On this occasion, Saturday, 24 July 1965, eighteen Past-Presidents met in the British Columbia Room of the Royal York Hotel, Toronto, Canada. Clockwise: B. G. Bibby, H. T. Knighton, P. C. Kitchin, P. Jay, T. J. Hill, J. A. English, J. R. Blayney, A. G. Brodie, W. D. Armstrong, D. Y. Burrill, G. C. Paffenbarger, F. A. Arnold, S. J. Kreshover, R. F. Sognnaes, P. E. Boyle, N. B. Williams, H. C. Hodge, and H. B. G. Robinson.



Photographs were not taken in the intervening years, but at the Forty-eighth General Meeting, held in the Americana Hotel, New York City, the following thirteen Past-Presidents were present: Standing: Sognnaes, Macdonald, English, Kreshover, Knighton, Levy, Phillips, and Manly. Seated: Paffenbarger, Armstrong, ROBINSON, BURRILL, AND BIBBY.

DECEASED PRESIDENTS OF THE IADR, 1920-70

<i>Presidential Term</i>	<i>Name</i>	<i>Life Span</i>	<i>Age Attained</i>
1921-23	J. Leon Williams	21 Apr 1852-23 Feb 1932	79yrs 10mo 2da
1923-24	Paul R. Stillman	4 Jun 1871-15 Dec 1945	74yrs 6mo 11da
1924-25	} Albert E. Webster	1866-5 Nov 1936	70yrs
1931-32			
1925-26	Frederick B. Noyes	22 Aug 1872-25 Jul 1961	88yrs 11mo 3da
1927-29	Leroy M. S. Miner	13 Apr 1882-19 Apr 1964	82yrs 6da
1929-30	Arthur D. Black	15 Nov 1870-7 Dec 1937	67yrs 22da



1930-31	U. Garfield Rickert	22 Oct 1879-22 Oct 1938	59yrs
1932-33	Russell W. Bunting	21 Mar 1881-22 Nov 1962	81yrs 8mo 1da
1933-34	Edward H. Hatton	2 Apr 1876-15 Aug 1959	83yrs 4mo 13da
1935-36	Theodore B. Beust	14 Jan 1871-24 Nov 1937	66yrs 10mo 10da
1936-37	William G. Skillen	6 Nov 1884-27 Aug 1958	73yrs 9mo 21da
1939-40	William J. Gies	21 Feb 1872-20 May 1956	84yrs 2mo 29da
1941-42	Isaac Schour	11 Jan 1900-5 Jun 1964	64yrs 4mo 25da
1942-43	Charles F. Bodecker	2 Sept 1880-11 Feb 1965	84yrs 5mo 9da
1944-45	H. Trendley Dean	25 Aug 1893-14 May 1962	68yrs 8mo 19da
1951-52	Leonard S. Fosdick	7 Nov 1903-31 Jan 1969	65yrs 2mo 24da
1953-54	Francis A. Arnold, Jr.	30 Dec 1910-1 Dec 1967	56yrs 11mo 1da
1964-65	Martin A. Rushton	29 Mar 1903-16 Nov 1970	67yrs 7mo 18da

REFERENCES

1. *J Dent Res* **36**: 801, 1957.
2. *J Dent Res* **37**: 962, 1958.
3. *J Dent Res* **46**: 1153-1154, 1967.
4. *J Dent Res* **44**: 1064, 1099-1103, 1965.
5. Unfortunately, no mention is made in the *Journal* of Hillenbrand's actually receiving the Honorary Membership Plaque in 1969 at the conclusion of his Banquet Address (which is printed in *J Dent Res* **48**: 1059-1062, 1969).
6. *J Dent Res* **49**: 937, 1970.



CHAPTER TEN: THE AWARDS

The concept of presenting some tangible award of merit to outstanding researchers has many precedents. All awards in the world related to the dental field were described in a 1965 *JDR* Editorial.¹ The definition of an award in the sense applicable to IADR is an emblem conferred or bestowed upon a person after careful consideration by his peers. Be it a monetary or a nominal award, both symbolically draw attention to the recipient for his past achievements.

Over the years the Association has developed a series of awards, beginning with the Novice Award in 1953. By 1970 there were a total of eleven different categories of awards² which were presented at the IADR banquet.

THE HATTON AWARD

Samuel M. Gordon, while Secretary of the Council on Dental Therapeutics of ADA, edited the widely read book *Dental Science and Dental Art* (Philadelphia: Lea & Febiger, 1938). At the 1940 IADR meeting, Gordon and the contributors to this book offered the income from it to the Association to establish grants-in-aid in dental research.³ In 1948, with the income from the royalties, the IADR Council authorized the establishment of an award called the Dental Science and Dental Art Award for the best research presented by a novice. The commendation was unofficially shortened to the "Novice Award", with a stipend of \$100. It was first presented in 1953 at the IADR meeting in Philadelphia.

At the annual meeting at Atlantic City, on 22 March 1957, Edward H. Hatton, the long time Secretary-Treasurer, then age 80, was honored at the IADR banquet with a special program, giving a resumé of his extensive career in the fields of research and education.⁴ At the conclusion of the event, the name of the Novice Award was permanently changed to the Edward H. Hatton Award.

At present, four awards are made to young investigators judged as presenting the most meritorious papers on original research at each annual meeting. A first award of \$500 and a second award of \$250 are made in both predoctoral and graduate categories. These awards are now supported by the Warner-Lambert Pharmaceutical Company.

Novice Award Winners

- 1953 John J. Salley (U Rochester)
- 1954 Leo Korchin (Maj., DC, US Army; Georgetown U)
- 1955 Daniel E. Waite and C. E. Staley (U Iowa)
- 1956 Barry G. Miller (U Ill)



Hatton Award Winners

1957	Robert L. Smith (Ohio State U)	
1958	J.C. Beck, Jr. (Ind U)	
1959	Richard L. Hoffman (U Ill)	
1960	Reginald J. Andlaw (Eastman Dent Disp)	
1961	Jack G. Dale (Forsyth Dent Infirm)	
1962	Charles R. Jerge (U Pa)	
1963	Brigit Johansson (Forsyth Dent Infirm)	
1964	Robert E. Williamson (U Ill)	Postdoc
	Robert E. Zager (Ind U)	Predoc
1965	Louis W. Ripa, Jr. (Eastman Dent Disp)	1st postdoc
	William F. Malone (U Ill)	2d postdoc
	Robert C. Dolven (U Minn)	1st predoc
	Mildred Romans (Howard U)	2d predoc
1966	Arnett A. Anderson (Howard U)	1st postdoc
	Arthur R. Johnson (U Minn)	2d postdoc
	Murray E. Nickleborough (U Alberta)	1st predoc
	Basil A. Richardson (Forsyth Dent Disp)	2d predoc
1967	David L. Russell (U Ala)	1st predoc
	Burton A. Horowitz (Ind U)	2d postdoc
	Sherman C. Sweeney (St. Louis U)	1st predoc
	Stuart C. White (UCLA)	2d predoc
1968	Dick R. Lavender (NIDR)	1st postdoc
	Mladen M. Kuftinec (Forsyth Dent Disp, Harvard U)	2d postdoc
	Marlin W. Walling (Harvard U)	1st predoc
	Ronald L. Shuler (St Louis U)	2d predoc
1969	Yehoshia Shapira (Forsyth Dent Disp)	1st postdoc
	Helen L. Blaine (U Mo—KC)	2d postdoc
	Alan Lurie (U Rochester)	1st predoc
	(Only three awards this year)	
1970	Richard M. Selmont (U So Calif)	1st postdoc
	Benjamin Ciala (U Ala & U Conn)	2d postdoc
	Michael E. Barkin (UCLA)	1st predoc
	George P. Kelly (U Mich)	2d predoc



Titles and papers (almost all were published) can be found among the Proceedings of each IADR annual meeting printed in the respective issue of the *Journal of Dental Research*.

THE HATTON AWARD COMMITTEE

The Hatton Award Committee has been listed in the *Journal* since 1962. Previously, IADR officers functioned in this capacity.

W. Lefkowitz	1962-63	S. S. Han	1969-74
I. Schour	1962-63	H. M. Fullmer	1970-74
K. Asgar	1962-65		
M. Lunin	1962-66	<i>Chairmen:</i>	
R. S. Manly	1962-66	W. Lefkowitz	1962-63
J. R. Ring	1962-66	J. R. Ring	1963-64
I. Zipkin	1963-67	K. Asgar	1964-65
C. O. Dummett	1963-68	M. Lunin	1965-66
J. K. Avery	1964-69	I. Zipkin	1966-67
A. L. Morris	1966-68	A. L. Morris	1967-68
R. L. Glass	1966-70	J. K. Avery	1968-69
R. W. Broge	1967-71	R. W. Broge	1969-70
G. W. Wade	1968-72	S. S. Han	1970-72
E. Johansen	1968-73		

IADR SCIENCE AWARDS

The following awards are made in recognition of a career of distinguished accomplishments in research and development. Certain details are provided for some years in the *Journal* under IADR Proceedings, but in the following pages a comprehensive citation is given for all awards and award committees.

WILMER SOUDER AWARD

This is the highest honor awarded to a person for outstanding achievement in the science of dental materials research. It is a plaque presented by the Dental Materials Group of the IADR in honor of Wilmer Souder, who is regarded as the father of modern dental materials research. (For more information, see chapter fifteen *re* "The Dental Materials Group", and see "Pages of Presidents" for information on Wilmer Souder.) The first such award was made at the Chicago 1955 IADR meeting.

Souder Award Winners

- 1955 Richard L. Coleman (JM Ney Co)
- 1956 Eugene W. Skinner (NWU)



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- 1957 Walter S. Crowell (SS White Co)
 - 1958 George C. Paffenbarger (ADA-NBS)
 - 1959 Ralph W. Phillips (Ind U)
 - 1960 William T. Sweeney (NBS)
 - 1961 Floyd A. Peyton (U Mich)
 - 1962 Alan R. Docking (U Melbourne)
 - 1963 George M. Hollenback (Loma Linda)
 - 1964 Norris Oslow Taylor (SS White Co)
 - 1965 John S. Shell (George M. Hollenback Res Assoc)
 - 1966 Gunnar Ryge (USPHS Dent Health Center, San Francisco)
 - 1967 David B. Mahler (U Ore)
 - 1968 Marjorie L. Swartz (Ind U)
 - 1969 Gerhard M. Brauer (NBS)
 - 1970 Kamal Asgar (U Mich)

H. TRENDLEY DEAN MEMORIAL AWARD

This Award for meritorious research in epidemiology and dental caries was established and supported by Frank J. McClure (author of *Water Fluoridation: The Search and the Victory*, NIDR-NIH, 1970) in memory of the late H. Trendley Dean. The award, consisting of a bronze plaque and a cash stipend of \$200, is presented annually, provided that a worthy recipient is nominated. (For more information on H. Trendley Dean, see "Pages of Presidents".)

Dean Award Winners

- 1964 Francis A. Arnold, Jr. (USPHS, NIDR)
- 1965 J. Roy Blayney (Prof Emer, U Chicago)
- 1966 John W. Knutson (UCLA)
- 1967 Wallace D. Armstrong (U Minn)
- 1968 David B. Ast (Dent Bur, St of NY Dept Health)
- 1969 Finn Brudevold (Forsyth Dent Center)
- 1970 S. Yngve Ericsson (Karolinska Inst)

ISAAC SCHOUR MEMORIAL AWARD

As a means of honoring the late Isaac Schour (see "Pages of Presidents"), this award is supported by the College of Dentistry, University of Illinois, Isaac Schour Memorial Fund. The award, which is international in scope, consists of \$300 and a plaque. It is presented annually to an individual who has made outstanding contributions in research or teaching or both in the field of anatomical sciences.



Schour Award Winners

- 1967 Harry Sicher (Loyola U)
- 1968 Leo M. Sreebny (U Wash)
- 1969 Arne Bjork (Royal DC, Copenhagen)
- 1970 Jens J. Pindborg (Royal DC, Copenhagen)

COMMERCIALLY SUPPORTED SCIENCE AWARDS

Five additional science awards are available annually for outstanding research accomplishments in dental and related fields. Each award consists of \$1000 and a plaque. A travel allowance also is provided for the recipients. The purpose of these five awards is to encourage and recognize outstanding achievements in basic research in areas of natural sciences having an important relationship to oral biology, periodontal disease, biological mineralization, and prosthodontics; in the prevention and treatment of disease involving any of the tissues related to the oral cavity; or in the development of applicable medicaments.

BASIC RESEARCH IN ORAL SCIENCE AWARD SUPPORTED BY THE PROCTER & GAMBLE COMPANY

- 1963 Richard C. Greulich (UCLA)
- 1964 Herbert Wells (Harvard U)
- 1965 George R. Martin (NIDR)
- 1966 Stephen E. Mergenhagen (NIDR)
- 1967 Ronald J. Gibbons (Forsyth Dent Center)
- 1968 Samuel A. Leach (U Liverpool)
- 1969 Seong S. Hah (U Mich)
- 1970 Sigmund S. Socransky (Forsyth Dent Center)

BASIC RESEARCH IN BIOLOGICAL MINERALIZATION AWARD SUPPORTED BY THE LEVER BROTHERS COMPANY

- 1964 M. J. Glimcher (Harvard U)
- 1965 William F. Neuman (U Rochester)
- 1966 Wallace D. Armstrong (U Minn)
- 1967 Reidar F. Sognnaes (UCLA)
- 1968 David B. Scott (Western Reserve U)
- 1969 John E. Eastoe (RCS, London)
- 1970 Marie U. Nylen (NIDR)



**BASIC RESEARCH IN ORAL THERAPEUTICS AWARD
SUPPORTED BY COOK-WAITE LABORATORIES, INC.**

- 1964 Gerald J. Cox (U Pittsburgh)
1965 Harold C. Hodge (U Rochester)
1966 Finn Brudevold (Forsyth Dent Center)
1967 S. Yngve Ericsson (Karolinska Inst & Stockholm DS)
1968 Joseph C. Muhler (Ind U)
1969 Frank J. McClure (NIDR)
1970 Richard S. Manly (Tufts U)

**BASIC RESEARCH IN PERIODONTAL DISEASE AWARD
SUPPORTED BY THE COLGATE-PALMOLIVE COMPANY**

- 1965 Jens Waerhaug (visiting disting sci, NIH)
1966 Irving Glickman (Tufts U)
1967 Helmut A. Zander (Eastman Dent Center & U Rochester)
1968 Sigurd P. Ramfjord (U Mich)
1969 Harald A. Löe (Royal DC, Århus)
1970 Fermin A. Carranza, Jr. (U Buenos Aires)

**RESEARCH IN PROSTHODONTICS AWARD
SUPPORTED BY CLARK-CLEVELAND, INC.**

- 1967 Julian B. Woelfel (Ohio SU)
1968 Niels Brill (Royal DC, Copenhagen)
1969 George C. Paffenbarger (ADA-NBS)
1970 Louis J. Boucher (U Ga)

THE SCIENCE AWARDS COMMITTEE

In 1961 a committee on awards was appointed to carry on work started by an ad hoc committee with the purpose of planning a program of awards and seeking funds for such a program.⁵ Thus the Awards Committee (now the Science Awards Committee) was formed. The Science Awards Committee has the responsibility of selecting worthy recipients from among the nominations submitted by Association members. The Committee consists of eight members, and for each science award (except the Souder Award) there is a subcommittee. The members of the committee are the chairmen of the subcommittees.

D. Y. Burrill	1962-63	W. A. George	1966-71
W. Lefkowitz	1962-65	R. M. Frank	1967-68
B. M. Levy	1962-65	H. T. Knighton	1967-69
R. S. Manly	1962-65	H. C. Hodge	1967-72



J. A. English	1962-67	F. A. Peyton	1968-70
G. C. Paffenbarger	1962-68	J. L. Hardwick	1968-72
S. S. Arnim	1965-66	F. Brudevold	1969-70
G. Bevelander	1965-66	J. K. Avery	1969-71
S. J. Kreshover	1965-66	L. Sreebny	1969-73
F. A. Arnold, Jr.	1965-67	A. J. Darling	1970-71
R. J. Gillette	1966-69	S. P. Ramfjord	1970-71
J. Waerhaug	1966-69	S. Y. Ericsson	1970-74
R. C. Greulich	1966-70		

Consultants to Committee, 1962-66:

T. J. Hill	H. C. Hodge
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Chairmen of the Science Awards Committee:

R. S. Manly	1962-65	F. A. Peyton	1968-69
G. C. Paffenbarger	1965-68	J. K. Avery	1969-72

THE SUBCOMMITTEES

H. Trendley Dean Award

B. G. Bibby	1964-65	F. J. McClure	1964-69
G. C. Paffenbarger	1964-65	S. Y. Ericsson	1965-66
R. F. Sognnaes	1964-65	F. A. Arnold, Jr.	1965-67
T. J. Hill	1964-66	J. R. Blayney	1965-70
O. Backer-Dirks	1966-68	<i>Chairmen:</i>	

J. W. Knutson	1966-71	G. C. Paffenbarger	1964-65
H. C. Hodge	1967-72	F. A. Arnold, Jr.	1965-67
G. L. Slack	1968-73	H. C. Hodge	1967-72
S. J. Kreshover	1969-74		

Isaac Schour Award

L. R. Boling	1966-69	H. Sicher	1969-72
R. J. Gillette	1966-69	G. N. Davies	1969-72
J. H. Scott	1966-69		
R. O. Greep	1966-70	<i>Chairmen:</i>	



C. F. Jerge 1966-71	R. J. Gillette 1966-69
L. H. Sreebny 1969-71	L. H. Sreebny 1969-71

Oral Science Award

H. C. Hodge 1964-65	R. Ross 1968-73
S. J. Kreshover 1964-66	H. Wells 1968-74
H. W. Scherp 1964-67	
C. A. Ostrom 1964-68	<i>Chairmen:</i>
R. C. Greulich 1964-70	S. J. Kreshover 1964-66
A. I. Darling 1965-71	R. C. Greulich 1966-70
F. A. Peyton 1966-69	A. I. Darling 1970-71
G. Nikiforuk 1967-72	

Biological Mineralization Award

W. E. Brown 1964-65	O. R. Trautz 1967-69
M. Urist 1964-65	J. L. Hardwick 1967-72
S. Wah Leung 1964-65	D. B. Scott 1968-73
A. R. Sobel 1964-66	S. Matsumiya 1969-74
W. D. Armstrong 1964-71	
G. Bevelander 1965-66	<i>Chairmen:</i>
W. F. Neuman 1965-66	W. D. Armstrong 1964-65
R. M. Frank 1965-68	G. Bevelander 1965-66
I. Zipkin 1965-70	R. M. Frank 1966-68
M. L. Moss 1966-67	J. L. Hardwick 1968-72

Oral Therapeutics Award

A. L. Russell 1964-65	J. C. Muhler 1969-72
J. L. Hein 1964-66	S. Y. Ericsson 1969-74
J. A. English 1964-67	
L. C. Hendershot 1964-69	<i>Chairmen:</i>
H. R. Mühlemann 1964-71	J. A. English 1964-67
H. C. Hodge 1965-68	H. T. Knighton 1967-69
F. Brudevold 1966-70	F. Brudevold 1969-70
H. T. Knighton 1967-72	S. Y. Ericsson 1970-74
S. Pearlman 1968-73	



Periodontal Disease Award

N. B. Williams	1964-65	I. Glickman	1968-70
S. S. Arnim	1964-66	S. Ramfjord	1968-73
D. F. Mitchell	1964-66	H. Löe	1969-74
G. Parfitt	1964-66		
D. A. Kerr	1964-67	<i>Chairmen:</i>	
E. M. Schaffer	1965-66	S. S. Arnim	1964-66
J. Waerhaug	1965-69	J. Waerhaug	1966-69
P. Goldhaber	1966-67	I. Glickman	1969-70
B. G. Bibby	1966-71	S. Ramfjord	1970-73
H. A. Zander	1967-72		

Prosthodontics Award

J. E. Ziegler	1966-68	N. Brill	1969-74
J. N. Anderson	1966-69		
D. A. Atwood	1966-70	<i>Chairmen:</i>	
W. A. George	1966-71	W. A. George	1966-70
R. B. Lytle	1966-72	R. B. Lytle	1970-72
J. B. Woelfel	1968-73		

STUDENT TRAVEL AID AWARDS

Starting in 1968, funds were made available, though meager at first, to partly defray the cost of travel to the annual IADR meeting for a few dental students who had research potential and who would derive benefit from attending the scientific sessions of the annual meeting. This program was both successful and well-received, to the extent that, at present, twenty travel grants are available each year. Fifteen grants of \$100 each are available to students in North America, and five grants of \$300 each are available to students outside North America. These students were selected by IADR officers until a formal committee was chosen for this task in 1972. These awards were supported by the Association until 1971 when the Johnson and Johnson Dental Products Company began to support this worthy effort.

SENIOR FOREIGN DENTAL SCIENTIST FELLOWSHIP

This extensive program in essence provides the largest monetary awards of all. The idea was developed that it would be very opportune for an international association such as the IADR to bring dental scientists from abroad to the United States. This view was presented to the NIDR of the National Institutes of Health as a proposal for a grant. It has been funded rather extensively ever since its activation in 1967 and has permitted an interchange of persons and ideas among research personnel from various parts of the world.



SENIOR FOREIGN DENTAL SCIENTIST COMMITTEE

B. M. Levy 1967-72 R. W. Phillips 1967-72
S. Pearlman 1967-72 R. S. Manly 1968-72
G. H. Rovelstad 1967- W. D. Armstrong (*Chairman*, 1967-72)

PARTICIPANTS IN SENIOR FOREIGN DENTAL SCIENTIST FELLOWSHIP PROGRAM

<i>Scientist</i>	<i>Residence</i>	<i>Host Institution</i>	<i>Dates of Contract</i>
Björn Hedegard	Stockholm, Sweden	NWU	1 Jan 1967 - 31 Aug 1967
Takara Yonaga	Tokyo, Japan	U Calif San Francisco	18 Mar 1967 - 17 Mar 1968
Itzhak Gedalia	Hadassah, Israel	Harvard	1 June 1967 - 1 Dec 1967
P. E. B. Caloniuss	Helsinki, Finland	U Md	1 Sept 1967 - 31 Aug 1968
Stig D. Schultz-Haudt	Oslo, Norway	SUNY Buffalo	1 Jan 1968 - 30 June 1968
Arje Scheinin	Turku, Finland	U Iowa	17 Mar 1968 - 16 Nov 1968
Anna Plačková	Prague, Czechoslovakia	U Ill	19 June 1968 - 17 June 1969
Trevor H. Grenby	London, England	Eastman Dent Center	1 Nov 1968 - 30 Apr 1969
Walter T. Klotzer	Zürich, Switzerland	U Conn	1 Oct 1969 - 30 Sept 1970
Kazuo Nagai	Tokyo, Japan	U Ala	23 Oct 1969 - 19 Mar 1970

REFERENCES

1. *J Dent Res* **44**: 307, 1965.
2. *J Dent Res* **49**: 913, 921-922, 940, 969, 1970.
3. *J Dent Res* **33**: 725, 1954.
4. *J Dent Res* **36**: 802, 1957.
5. *J Dent Res* **40**: 781, 1961.



CHAPTER ELEVEN: MEETINGS AND MEMBERS

The very essence of Association activity is its annual meeting, in which its members participate in many ways. Inversely, the primary units of the Association are its individual members (as expounded in one inaugural address¹), who can "gettogether" *en masse* only at the annual meetings. Thus, these two essentials of the IADR—meetings and members—are intrinsically interdependent features of our Association and as such are elaborated upon in this chapter. Which came first, meetings or members? There must have been and was an initial meeting to which prospective members could come! Moreover, upon closer analysis, these two euphoniously compatible elements—meetings and members—are so interrelated that there can be no meetings without members, and members without meetings do not *ipso facto* constitute an organization. Theoretically, IADR members gathering for a purpose comprise a meeting. There are many kinds of meetings—committee meetings, Council meetings, Section meetings, Divisional meetings, Group meetings—but this chapter concerns only the one significant event—the annual general meeting—attended by a large portion of its members. Thus, what could well fill two chapters has been compressed into one.

THE IADR MEETINGS

There have been forty-eight general meetings since the IADR founding, but, since there has been so much planning ahead for future meetings, references are also cited for the Forty-ninth General Session held in Chicago² and the Golden Jubilee Session commemorated in Las Vegas, Nevada.³

In the early days, these meetings were meager affairs. They were designed to be held outside school days, so they usually occurred on Saturdays and Sundays; they now begin on a Thursday morning and continue through the full weekend, with Committee and Council meetings preceding the scientific meetings by a day or two.

At the very first general meeting on Thursday, 21 December 1922, a mere two scientific reports were presented. The men with courage and reports of merit were Charles Bodecker and J. Leon Williams, the IADR President. The very first report was on "The Dento-Enamel Circulation" presented by Bodecker;⁴ the second was on "Permeability of Enamel".⁵ By dramatic contrast, at the Fiftieth Annual Session held in Las Vegas in 1972, there were 730 papers orally presented plus 221 read by title, which made a total approaching a thousand accepted research reports. At this Golden Jubilee gathering a record number of 350 attended an Awards Luncheon and a total of 2041 registered for the entire session.

Preceding the general scientific meetings of the Association, there were for the record "three preliminary meetings for purpose of organization".⁶

City	Site	Date
A New York City	Columbia University Club	10 December 1920



B Boston	Harvard Club	17 December 1920
C Chicago	University Club	30 December 1920

(*Nota bene:* These have been designated by letter to distinguish them from the general scientific meetings that follow. "A" signifies New York, which remained for Gies the apple of his eyes. "B", as one can see, stands for Boston, while "C" can only mean Chicago, which made it under the wire before the year 1920 did retire.)

ANNUAL IADR MEETINGS

<i>City</i>	<i>Site</i>	<i>Date</i>
1 New York	Columbia University Club	Thursday, 21 December 1922
2 Chicago	Congress Hotel	Friday, 7 March 1924
3 Chicago	Congress Hotel	Friday, 20 March 1925
4 Chicago	Congress Hotel	Friday, 26 March 1926
5 New York	Plaza Hotel	Tuesday, 19 April 1927
6 Washington, D.C.	Mayflower Hotel	Sun-Wed, 25-28 March 1928
7 Chicago	Dental School, Northwestern University	Sat-Sun, 23-24 March 1929
8 Toronto	Royal York Hotel	Mon-Wed, 24-26 March 1930
9 Memphis	Hotel Peabody	Sat-Sun, 21-22 March 1931
10 Columbus	Deshler-Wallick Hotel	Sat-Sun, 19-20 March 1932
11 Chicago*	Northwestern University Dental School (nominal meeting)	Saturday, 18 March 1933
12 Chicago	Stevens Hotel	Sat-Sun, 17-18 March 1934
13 Chicago	Stevens Hotel	Sat-Sun, 16-17 March 1935
14 Louisville	Brown Hotel	Sat-Sun, 14-15 March 1936
15 Baltimore	Lord Baltimore Hotel	Sat-Sun, 13-14 March 1937
16 Minneapolis	Hotel Nicollet	Sat-Sun, 12-13 March 1938
17 Cleveland	Hotel Cleveland	Sat-Sun, 18-19 March 1939
18 Philadelphia	Benjamin Franklin Hotel	Wed-Thur, 13-14 March 1940
19 St. Louis	Jefferson Hotel	Sat-Sun, 15-16 March 1941
20 New York	Commodore Hotel	Sat-Sun, 14-15 March 1942
21 Chicago	Drake Hotel	Sat-Sun, 13-14 March 1943
22 Chicago	Drake Hotel	Sat-Sun, 18-19 March 1944
23 Chicago†	Stevens Hotel (curtailed meeting)	Sunday, 27 May 1945
24 Kansas City	Hotel Continental	Sat-Sun, 16-17 March 1946



25	Chicago	Drake Hotel	Sat-Sun, 21-22 June 1947
26	Rochester‡	Sheraton Hotel	Fri-Sun, 18-20 June 1948
27	Chicago	Drake Hotel	Fri-Sun, 24-26 June 1949
28	French Lick Springs	French Lick Springs Hotel	Fri-Sun, 24-26 March 1950
29	French Lick Springs	French Lick Springs Hotel	Sat-Mon, 17-19 March 1951
30	Colorado Springs	Broadmoor Hotel	Fri-Sun, 21-23 March 1952
31	Philadelphia	Benjamin Franklin Hotel	Fri-Sun, 20-22 March 1953
32	French Lick Springs	French Lick Springs Hotel	Fri-Sun, 19-21 March 1954
33	Chicago	Morrison Hotel	Sat-Mon, 18-20 March 1955
34	St. Louis	Jefferson Hotel	Thur-Sat, 22-24 March 1956
35	Atlantic City	Claridge Hotel	Thur-Sat, 21-23 March 1957
36	Detroit	Hotel Statler	Thur-Sat, 20-22 March 1958
37	San Francisco	Sheraton-Palace Hotel	Thur-Sun, 19-22 March 1959
38	Chicago	Morrison Hotel	Fri-Sun, 18-20 March 1960
39	Boston	Statler Hotel	Thur-Sun, 23-26 March 1961
40	St. Louis	Sheraton-Jefferson Hotel	Thur-Sun, 15-18 March 1962
41	Pittsburgh	Penn-Sheraton Hotel	Thur-Sun, 21-24 March 1963
42	Los Angeles	Ambassador Hotel	Thur-Sun, 19-22 March 1964
43	Toronto	Royal York Hotel	Thur-Sun, 22-25 July 1965
44	Miami Beach	Americana Hotel	Thur-Sun, 24-27 March 1966
45	Washington, D.C.	Washington Hilton Hotel	Thur-Sun, 16-19 March 1967
46	San Francisco	San Francisco Hilton Hotel	Thur-Sun, 21-24 March 1968
47	Houston	Shamrock Hilton Hotel	Thur-Sun, 20-23 March 1969
48	New York	Americana Hotel	Mon-Thur, 16-19 March 1970



* In accordance with custom, the Eleventh General Meeting of IADR was to have been coordinated, by agreement, with the annual meeting of the American Association of Dental Schools, and was to be held at the Stevens Hotel, Chicago, 18-19 March 1933, with that of the AADS to follow on 20-22 March. However, on 6 March 1933 all banks in the United States were closed by order of President Roosevelt. Owing to the financial stringency created by the "bank holiday", the AADS meeting was indefinitely postponed. It was then decided that a nominal meeting of IADR was to be held on 18 March under the auspices of the Chicago Section at the Dental School of Northwestern University. At this meeting all the addresses and papers designated on the official program (115 units) were formally declared read by title. This nominal meeting was concluded by unanimous adoption of a motion to transfer the executive proceedings to a later meeting to be held under the auspices of the New York Section. This was held 25 May 1933 at the Western Universities Club, New York City.⁷

† On 5 January 1945 the Director of War Mobilization, acting to curtail nonessential railroad travel, requested that conventions and meetings involving more than fifty out-of-town persons and not specifically connected with the war effort be canceled. Thus, the Twenty-third General Meeting scheduled to be held at Kansas City, Missouri, 17-18 March 1945 was called off. Plans were then made to hold a "Curtailed War-Time Annual Meeting" in Chicago on 27 May 1945 at the Stevens Hotel. Thus, thirty-nine members of the Association met and conducted the annual executive proceedings, declared formally that all addresses and papers listed on the official program be declared read by title, and, finally, installed the new general officers.⁸

‡ This was the one year when the American Association of Dental Schools met in Buffalo instead of following the IADR meeting in Rochester. Moreover, in summation, it can be stated that the annual meetings have been the mainstay of the Association. During the past half-century, they have shown remarkable growth in size but great similarity in pattern—occurring almost always in the latter part of March over an extended weekend, and since 1924, preceding the annual meeting of the American Association of Dental Schools.⁹

The next table outlines the number of papers presented at each general meeting, or session, as the annual event will be termed. In contrast to the practice in the past, the term *meeting* is now being reserved for the many individual gatherings within the *session*, although in the early days, and until recent times, the total annual event was cited as *the Meeting!* Thus, a session will comprise a continuous day-to-day series of meetings. This newer view is defined by *Robert's Rules of Order*¹⁰ as well as by two recent dictionaries,¹¹ although not by Sturgis.¹² This is in contrast to the early meetings, when Gies termed each half-day gathering as a session and numbered the sessions with roman numerals. Nevertheless, beginning in 1971, the annual gathering will be termed the (Forty-ninth) *General Session* of IADR.

PAPERS AT ANNUAL MEETINGS

Over the years, numbers of papers read at an annual meeting increased tremendously from two in 1922 to 789 in 1970. However, it was difficult to ascertain the exact number that appeared on the program for certain meetings. This was because sometimes, but not always, special presentations such as Presidential inaugurations, greetings, banquet speeches, and symposia were also given a number among the scientific abstracts. Therefore, to keep standards consistent, these were not counted among the total scientific reports for each year as summarized here, but they may have been counted in various other reports cited elsewhere in the IADR Proceedings in the *Journal of Dental Research*, or in the final report of the Commission on the Survey of Dentistry.¹³ When available, the report of the Proceedings was further analyzed to learn how many late papers may have been added or withdrawn from the earlier totals for a final accurate count.



(In 1923 no meeting was even planned. In 1933 only officers met, but all papers were declared "Read by Title"—as in 1945 *à cause de la guerre*.)

The "Read by Title" category has been a nebulous phrase since it was originally used; it meant that titles of research reports, with the author's name(s) and institution, were printed in the official program, but the reports were never actually read or evaluated. In 1933 there were planned some forty-nine papers to be presented and sixty-five in the "Read by Title" category. But because only a nominal meeting occurred that year, the total of 114 papers were declared "Read by Title".

The Association decided not to have a "Read by Title" category after 1958. However, it reversed itself in this matter, since it was planned that after 1971 there again would be a "Read by Title" category, but that it should be realistic in the sense that reports so named actually would be *read* by title by the Chairmen of the meetings in which they were included, since their abstracts had been evaluated, accepted, and were to be printed along with the other abstracts that were orally presented on the program.

PAPERS PRESENTED ORALLY AND PAPERS READ BY TITLE AT IADR ANNUAL MEETINGS

<i>Year</i>	<i>Orally Presented</i>	<i>Read by Title</i>	<i>Year</i>	<i>Orally Presented</i>	<i>Read by Title</i>
1922	2	0	1948	104	59
1923	No meeting planned	0	1949	93	38
1924	5	0	1950	82	41
1925	9	0	1951	113	56
1926	5	0	1952	104	42
1927	4	0	1953	145	67
1928	46	0	1954	154	47
1929	35	0	1955	210	54
1930	29	24	1956	207	36
1931	45	33	1957	270	36
1932	52	58	1958	242	65
1933	0 (nominal meeting)	114	1959	256	0
1934	45	65	1960	309	0
1935	52	60	1961	374	0
1936	63	46	1962	372	0
1937	62	51	1963	434	0
1938	52	51	1964	449	0
1939	63	33	1965	461	0
1940	56	31	1966	520	0



1941	72	34	1967	574	0
1942	72	43	1968	641	0
1943	50	31	1969	691	0
1944	49	30	1970	789	0
1945	0 (curtailed meeting)	33		—	—
1946	45	37	Total	8581	1342
1947	74	27			

THE MEMBERS OF IADR

Increased attendance at the meetings is indicative of the increased number of members. Indeed, membership has grown stupendously over the past five decades. At that initial dinner meeting on the evening of 10 December, there were twenty-one men actually present; four others residing in New York City, fourteen in Boston, and one in Chicago could not attend, but had expressed their commitment to the concept of the new organization and so were considered present in spirit. This made a total of forty Founders who had a meeting of minds resulting in the birth of the IADR.

Very unfortunately, there were no records available of the growth rate between 1920 until the time of the Sixth General Meeting in 1928. In the accompanying table on membership, wherever there are other gaps, records were not preserved for the categories cited—that is, members registered at meetings—or for total attendance.

IADR MEMBERSHIP AND ANNUAL MEETING ATTENDANCE

<i>Annual Meeting Number</i>	<i>Year</i>	<i>Members Registered in Attendance at Meeting</i>	<i>Total Attendance at Meeting</i>	<i>Total Membership of IADR</i>
6	1928	47	47	153
7	1929	47	94	174
8	1930	48	?	228
9	1931	32	87	240
10	1932	58	114	280
11	1933	(officers only)	?	302
12	1934	72	?	360
13	1935	72	?	379
14	1936	77	?	418
15	1937	95	?	438
16	1938	122	?	421
17	1939	162	?	495



18	1940	105	?	540
19	1941	146	?	555
20	1942	168	?	588
21	1943	90	?	604
22	1944	137	?	628
23	1945	39 (curtailed mtg)	39	633
24	1946	130	?	627
25	1947	212	308	636
26	1948	138	270	610
27	1949	188	402	648
28	1950	143	286	671
29	1951	193	389	710
30	1952	169	359	756
31	1953	229	581	779
32	1954	215	429	856
33	1955	251	612	856
34	1956	267	584	883
35	1957	298	656	916
36	1958	305	726	939
37	1959	293	691	1003
38	1960	381	820	1121
39	1961	396	895	1097
40	1962	?	993	1385
41	1963	?	1206	1519
42	1964	?	1159	1580 (approx.)
43	1965	?	1298	1656
44	1966	652	1245	2204
45	1967	?	1878	2403
46	1968	946	1904	2840
47	1969	?	1790	2945
48	1970	?	2005	3140



	1920	1970	<i>Percentage Increase</i>
IADR	40	3,140	7750.0%
United States	105,710,620	202,112,686	91.5
World	1,694,096,000	3,659,000,000	116.0

Over the years, and certainly before the age of computers, total membership count usually was taken at the end of each calendar year, but on other occasions there were counts at the end of the annual meetings. Exactly fifty years after its inception, membership had grown to 3140. This figure is close to a hundred-fold increase, which is tremendously greater than the somewhat less than doubling of the United States population and the somewhat more than doubling of the world population during (approximately) the same five decades. Despite this seven thousand, seven hundred and fifty percent increase in membership, standards of eligibility have not been materially lowered. The level of membership eligibility has changed somewhat, but not drastically. The first described attributes for membership were stated in the 1920 Constitution (Article IV, Section 1): "Any person who has conducted, and published an account of, a meritorious original investigation in dental science, or in any of the sciences contributory to stomatology, shall be eligible to membership in this Association, providing such person conforms to the recognized standards of professional ethics."¹⁴ William J. Gies later paraphrased this concept⁶ in his "Brief Review of the History of the International Association for Dental Research" in 1930. Over the years those requirements have been liberalized to the extent that it is not now essential for IADR candidates to have published or presented research reports at an annual meeting. The 1957 Constitution (Article III, Section 1) states that any individual who is interested in Dental Science and Dental Research shall be eligible to membership in this Association, provided that such person conforms to the recognized standards of professional ethics. However, over the years there has been some variation of thought as to how profound that "interest" must be.

It was possible to intensively study IADR membership as displayed in the Biographical Directory¹⁵ plus its addendum,¹⁶ which together comprised an inventory of all members and their attributes on the occasion of the Fiftieth Anniversary. The resultant findings demonstrated some rather impressive facts with revealing extrapolations, as cited elsewhere in part.¹ There have been some very young members and some very old members—some of whom are only one score old, while others have over fourscore years behind them. But what is the average age of all members? It is 45.65 years; indeed, at this average age, maturity and wisdom are hoped to be merits of our composite members. Biographical data also show that this has been a male-dominated organization. Depending on one's point of view, this may be considered unfortunate or otherwise. There has never been a woman holding a major Association office; they have rarely been chairmen of committees ("chairwoman" or even "chairperson" is a strange word). Women have on occasion been councilors, and a few



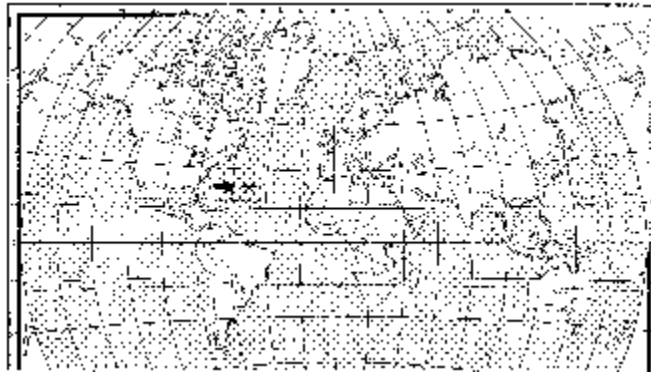
have been active in local Sections and Groups; yet they comprise a little over 3 percent of our total membership. The total number at present is 95. Women are sometimes hesitant about stating their ages, but not our research women. The average age for ladies in the IADR is 43.7, whereas that for men is 45.7 years.

The IADR has always been a conglomeration of individuals with a variety of academic backgrounds. This has been our basis of strength. The Association was founded by a professor of biochemistry at Columbia in conjunction with more than a dozen dentists and others, who were, for the most part, from New York City. Various conjectured opinions have been advanced over the years as to how many of our members hold dental degrees. From information in the Directory and Supplement, by actual count they number 2098, which is just under 78 percent of the total membership.

What are the major fields of research interests among our members? Pathology was listed most often, followed by periodontics. Dental materials was third in frequency, preventive dentistry was next, followed by prosthodontics. The field of orthodontics came next and was followed closely by oral surgery. The basic science of biochemistry led those of physiology and microbiology in that order. A considerable number of persons, however, listed more than one field.

In other areas, there are at least five members holding a chief administrative position in their university, as president or chancellor. A majority of deans of dental schools in the United States are IADR members. An even dozen past presidents of the American Dental Association have been members of the IADR. Just as it is of interest and importance to know the center of population of a country and its geographic movements in the field of demography, so it is also informative to know the center of the IADR membership population! (By the use of standard mathematical methods and a calculator, the bivariate mean was derived from the arithmetic means of X and Y coordinates of all data points. These consisted of IADR sections or other membership concentrations within each geographic division. The same process was repeated with all nine continental IADR divisions or potential divisions, resulting in a single mean point for the world on a Mercator map divided at the International Date Line.) For the North American Division, which consists of many large sections in the United States but with some also in Canada and Mexico, the center point is located at 39° north latitude and 88° longitude west of Greenwich. This is in the town of Willow Hill, Jasper County, in Illinois. After additional effort in time and on (calculator) tape, it was determined that the world center of IADR membership population is a point with a latitude of 33.3° N and a longitude of 50.3° W. This mean point is in the Atlantic Ocean approximately 1700 miles east of Charleston, South Carolina, and 2500 miles north of the mouth of the Amazon River, South America.





Centers of IADR "Membershippopulation"

At the founding of the Association, the center point of membership was in New York City. At the Twenty-fifth Anniversary it had moved westward to Chicago, but now after half a century the "membershippopulation" on a two-dimensional world map divided at the International Date Line has shifted its center point eastward and southward away from the United States. It thus behooved the IADR to consider modifying some of its organizational arrangements accordingly. (See chapter on "The Organization of IADR".)

SPECIAL SPEAKERS AT MEETINGS

The featured event of every annual meeting was usually the banquet and/or a special speaker. Not included in the following list are Inaugural and Retiring Presidential Addresses which are cited separately and also in chapter six on "Pages of Presidents", while the IADR-AADS Joint Meeting Speakers are listed later on the next pages.

BANQUET SPEAKERS

1942 "The Electron Microscope, A New Tool for the Research Worker"

JAMES HILLIER, RCA, Camden, New Jersey

1944 "Medico-legal Adventures of a Physical Anthropologist"

WILTON M. KROGMAN, University of Chicago

1955 DANIEL F. LYNCH, President of ADA, spoke on the topic of the role of research in dentistry

J Dent Res **34**: 666, 1955 (cited but not printed in *Journal*)

1956 "The Antisocial Behavior of Cancer Cells"

EDMUND V. COWDRY, Washington University of St. Louis

J Dent Res **35**: 817, 1956 (cited but not printed in *Journal*)

1965 "International Partnership in Dental Research"

JOHN E. FOGARTY, United States Congressman

J Dent Res **44**: 1099-1103, 1965

1966 "Will You Walk a Little Faster?"



JOSEPH F. VOLKER, University of Alabama Medical Center

J Dent Res **46**: 94-98, 1967

1968 "Future Trends in Health Education and Health Care"

JOHN F. MCCREARY, Faculty of Medicine, University of British Columbia

J Dent Res **47**: 941-942, 1968

1969 "Research in Oral Disease: Portents for the Future"

HAROLD HILLENBRAND, Executive Director, ADA

J Dent Res **48**: 1059-1062, 1969

1970 "The Future of Research in the Health Sciences"

ROGER O. EGEBERG, Assistant Secretary for Health and Scientific Affairs, HEW

J Dent Res **49**: 905-908, 1970. (This was the keynote address presented not at a banquet but at the Fiftieth Commemorative IADR Program.)

IADR-AADS JOINT MEETINGS: KEYNOTE SPEAKERS

1954 WILLARD FRANK LIBBY, University of Chicago, spoke on his epoch-making discovery that carbon 14 determinations could be made a useful and accurate tool in dating the history of the world up to 25,000 years ago.

J Dent Res **33**: 726, 1954 (not printed in *Journal*)

1955 "The Origin of the Solar System"

HAROLD C. UREY, Nobel Laureate from the University of Chicago

J Dent Res **34**: 771, 1955 (not printed in *Journal*)

1958 Symposium Theme: Interrelationships between Research and Education in Modern Dentistry

1. "The Broadening Spectrum of Dental Research"
2. ROY O. GREEP, Dean, Harvard University School of Dental Medicine
3. "The Impact of Research on Dental Education"
4. HARRY LYONS, Dean, Medical College of Virginia
5. "Some Comments on Support of Research Training from the Point of View of the National Institutes of Health"
6. CASIUS J. VAN SLYKE, Associate Director, NIH

1959 Theme: Impact of Dental Research on the Teaching and Practice of Dentistry

1. "Problem Areas in Dentistry and the Attacks"
2. NED B. WILLIAMS, University of Pennsylvania
3. "Contributions of Research in the Physical Sciences"
4. RALPH W. PILLIPS, Indiana University
5. "Contributions of Research in Human Biology"
6. JOHN B. MACDONALD, Forsyth Dental Infirmary for Children
7. "Contributions of Research to the Teaching of Dentistry"
8. RAYMOND J. NAGLE, New York University
9. "Contributions of Research to the Practice of Dentistry"



10. BERYL T. RITCHEY, Colorado Springs, Colorado

1962 Theme: Animal Experimentation as an Approach to Oral Health Problems

1. "Germfree Animal Studies"
2. R. J. FITZGERALD
3. "Periodontal Disease"
4. J. B. MACDONALD
5. "Radiobiology"
6. W. D. ARMSTRONG
7. "Transplantation Biology"
8. H. D. HALL

1965 "The Contributions of Social and Behavioral Sciences to the Health Sciences"

MURRAY G. ROSS, President, York University, Toronto

J Dent Res **44**: 1104-1111, 1965

1966 Panel Discussion: Interrelation of Dental Research and Education

"The Challenges Identified at the National Conference on Dental Research and Education"

JOHN D. COOPER, Dean of Sciences, Northwestern University

Panelists:

MAURICE J. HICKEY, University of Washington

BARNET M. LEVY, University of Texas

HOWARD M. MYERS, University of California at San Francisco

HAMILTON B. G. ROBINSON, University of Missouri at Kansas City

1967 "The Future of Higher Education and Research"

LOGAN WILSON, American Council on Education

J Dent Res **46**: 1216-1221, 1967 (presented at the IADR-AADS Joint Banquet)

PRESIDENTIAL SPEAKERS

The Presidential Address presented at the annual meetings has always been a highlight, since it offers to the audience an unusual insight into the President's thinking about the Association, its *Journal*, and/or dental research. Whether an inaugural or a retiring address has been the more profound and comprehensive has depended upon a man's aspirations before undertaking the office of President and upon his accomplishments or regrets upon leaving this high office. The content of these addresses is often very revealing, and some future historian may want to further analyze each address; hence expeditious references are provided.



PRESIDENTIAL INAUGURAL ADDRESSES

Date	Speaker	Title or Topic	J Dent Res Reference
22 Mar 1931	Webster	Brief thanks	11: 449, 1931
18 Mar 1934	Appleton	(Not printed in <i>Journal</i> or anywhere else)	14: 187, 1934
17 Mar 1935	Beust	The importance of the <i>Journal</i>	15: 150-154, 1935-36
15 Mar 1936	Skillen	Factors contributing to the success of IADR	15: 301-304, 1935-36
14 Mar 1937	Kitchin	Brief thanks	16: 295-297, 1937
13 Mar 1938	Hill	Brief thanks	17: 291-292, 1938
19 Mar 1939	Gies	Other dental organizations and the IADR; needed changes in the organization of IADR	18: 230-236, 1939
14 Mar 1940	Souder	Exploitation of dentistry by manufacturer's false advertising claims	19: 276-278, 1940
16 Mar 1941	Schour	"The Problem of Integration in Dental Research, Training and Clinical Practice"	20: 221-230, 1941
14 Mar 1942	Bodecker	The value of basic research	21: 291-295, 1942
14 Mar 1943	Jay	Some thoughts relative to growth of Association and annual scientific papers	22: 194-195, 1943 (Synopsis only)
19 Mar 1944	Dean	Progress in epidemiology	23: 183-188, 1944
27 May 1945	Armstrong	(No inaugural address given; explanation on p. 198)	
17 Mar 1946	Chase	"Dental Research in the Near Future"	25: 151-154, 1946
22 Jun 1947	Hodge	"Impressions of Operation Crossroads"	26: 435-439, 1947
20 Jun 1948	Brodie	"Our Commons Fields of Research"	27: 717-723, 1948
26 Jun 1949	Blayney	"Dental Education and the IADR"	28: 627-631, 1949
26 Mar 1950	Bibby	"The Scientific Emphasis in Dentistry"	29: 649-655, 1950



18 Mar 1951	Fosdick	(Not printed in <i>Journal</i> or anywhere else)	
23 Mar 1952	Hine	Comments on education, research, and the IADR	31: 455-458, 1952
22 Mar 1953	Arnold	"Trends in Research"	32: 628-632, 1953
21 Mar 1954	Paffenbarger	"The International Aspects of Our Association with Special Emphasis on Japan"	33: 637-643, 1954
20 Mar 1955	Boyle	Narration of trip to Burma (not printed in <i>Journal</i>)	34: 666, 1955
24 Mar 1956	Volker	"The Life of Magitot" (not printed in <i>Journal</i>)	35: 817, 1956
22 Mar 1957	Sognaes	"A Precious Heritage: Footnotes on Ivory Art and Dental Science"	37: 374-383, 1958
21 Mar 1958	Williams	"The IADR and Communications"	37: 951-955, 1958
21 Mar 1959	Robinson	"The Journal of Dental Research, 1919-1958"	38: 640-649, 1959
19 Mar 1960	Knighton	"An Evaluation of Clinical Research in Dentistry"	39: 649-652, 1960
25 Mar 1961	English	"International Aspects of Dental Research"	40: 631-640, 1961
17 Mar 1962	Kreshover	"The Image of Dental Research"	41: 917-918, 1962
23 Mar 1963	Burrill	Need for <i>Journal</i> funding; other organizational changes	42: 1053-1055, 1963
21 Mar 1964	Rushton	Need for more internationality	43: 725-728, 1964
21 Jul 1965	Levy	"The Climate of Research"	44: 1061-1064, 1965
26 Mar 1966	Manly	"The Growth of Dental Research"	46: 5-8, 1967
16 Mar 1967	Phillips	"The Stature of Dental Research in the Scientific Community"	46: 1125-1131, 1967
21 Mar 1968	Macdonald	"Science Education: Backdrop for Discovery"	47: 855-859, 1968
20 Mar 1969	Dummett	"Comprehensiveness, Too, in Research on Oral Health and Disease Prevention"	48: 985-989, 1969
18 Mar 1970	Rovelstad	"The Next Fifty Years—New Goals"	49: 961-965, 1970



RETIRING PRESIDENTIAL ADDRESSES

Date	Speaker	Title or Topic	J Dent Res Reference
27 Jan 1922	Williams	"Disputed Points and Unsolved Problems in the Normal and Pathological History of Enamel"	5: 27-107, 1923
25 Mar 1928	Miner	A discussion of the IADR	8: 395-400, 1928
23 Mar 1929	Miner	The need for dental education more relevant to research	9: 269-272, 1929
25 Mar 1930	Black	"A Dental Research Program"	10: 368-372, 1930
22 Mar 1931	Rickert	"Several Urgent Problems in Dental Research"	11: 438-449, 1931
20 Mar 1932	Webster	"The Value of Research in Dentistry"	12: 412-414, 1932
18 Mar 1933	Bunting	"Certain Trends in Dental Research"	13: 175-181, 1933
18 Mar 1934	Hatton	"Louis-Charles Malassez: 1849-1909"	14: 154-157, 1934
17 Mar 1935	Appleton	The relation of IADR to the <i>JDR</i> ; indexing of dental literature; public welfare and the welfare of dentistry	15: 140-147, 1935-36
15 Mar 1936	Beust	Research and researchers	15: 296-299, 1935-36
14 Mar 1937	Skillen	Preceptors—their importance and influence in dental research	16: 290-294, 1937
13 Mar 1938	Kitchin	On microscopy in dentistry	17: 274-289, 1938
19 Mar 1939	Hill	"The Influence of Saliva upon the Growth of Oral Bacteria"	18: 214-224, 1939
14 Mar 1940	Gies	"The Work and Functions of the IADR"	19: 258-266, 1940
16 Mar 1941	Souder	"Loyalty to Our Association and to Our Protecting Nation"	20: 217-220, 1941
14 Mar 1942	Schour	"The Work and Functions of the IADR"	21: 285-289, 1942
14 Mar 1943	Bodecker	Research on commercial products	22: 191-192, 1943
19 Mar 1944	Jay	The need for improvement in the IADR	23: 181-183, 1944



27 May 1945	Dean	IADR business administration improvements; comments on meeting cancellation	24: 189-191, 1945
17 Mar 1946	Armstrong	Remarks (not printed in <i>Journal</i> or anywhere)	25: 173, 1946
18 Mar 1951	Bibby	The needs of the Association	30: 455-458, 1951
15 Mar 1970		On ad hoc committees and recommendations	49: 911, 914-917, 1970

ANECDOTES—ABOUT MEMBERS AT MEETINGS

Anecdotes. . . are rich treasures to the man of the world.—GOETHE

Regarding the absence of a presidential inaugural address by Wallace Armstrong: Some years later he explained the unique reason. At the very time he was ready to give his inaugural address at the curtailed annual meeting in Chicago, Sunday, 27 May 1945, it just so happened that a parade came down Michigan Avenue past the old Stevens Hotel. Apparently it was a World War II "Victory in Europe" parade, with bugles blaring and drums rolling. Since these outdoor sounds drowned out the meeting anyway, everyone rushed to the windows to see the parade. After about fifteen minutes, when it was over, all returned to their seats, and the Chairman, now being very concerned about the schedule, looked at both the agenda and his watch, and proceeded to call for the next report—completely ignoring the President-Elect's inaugural address! Being the youngest man ever to be President, and being much more timid than at present, Wallace tucked his paper back into his coat pocket and remained utterly speechless. Thus, his address was never presented, acknowledged, or published.

Allan Brodie, as a young man at the University of Illinois, related how he was impressed with the importance of early IADR meetings. It was the biggest event in the research life of his orthodontic department. So, when he was preparing his first report, his mentor, Frederick Noyes, stressed how he must rehearse his presentation many times to be letter-perfect and certainly within the fifteen-minute time limit which he thought was absolute. By the time of the big event, Allan's report was well-nigh perfect, and he presented it in like manner—especially the timing—since he finished with a half-minute to spare. However, a real letdown occurred when the next presentation was by an old-timer who spoke off-the-cuff about his "research" experiences in the dental clinic. He rambled on for at least a half-hour, boring everyone but drawing no admonishment from the Chairman, who must have forgotten his stopwatch.

How did it come to pass that the recent Past-Editor served for an odd number of years (eleven in all) when he was elected for consecutive two-year terms? Well, the explanation is unique. Sometime during his *Journal* stewardship, one of the Editor's two-year terms had been only half-served, when, quite inadvertently,



the then current IADR Secretary-Treasurer placed the Editor's name on the ballot for another two-year term. When the Editor discovered that his name appeared on his own mailed ballot one year too soon, he promptly called the Secretary's attention to the matter, but the latter exclaimed, "For God's sake and mine, don't mention it or it will cost the Association dozens of dollars and weeks of delay in recalling all the ballots and printing new ones before the coming annual meeting. And anyway—what's the difference—didn't you know you are serving for life?"

As stated by Ronald Hartles: Deans, especially those who are IADR members, never really die—they merely lose their faculties.

Heard at a recent IADR meeting: What's the definition of that strange-looking creature, the camel? Well, it's really a horse, but it was put together by an IADR committee.

REFERENCES

1. Orland, F. J.: Historical Perspectives Are a Prologue to the Decades Ahead, *J Dent Res* **50**: 993-996, 1971.
2. Proceedings of the Forty-ninth General Session of IADR, *J Dent Res* **50**: 989-1238, 1971.
3. Proceedings of the Fiftieth General Session of IADR, *J Dent Res* **51**: 1107-1318, 1972.
4. *J Dent Res* **6**: 113-116, 1924-26; **8**: 210, 1928.
5. *J Dent Res* **8**: 211, 1928.
6. Gies, W. J.: A Brief Review of the History of the International Association for Dental Research, *J Dent Res* **11**: 56-57, 1931.
7. *J Dent Res* **13**: 173-175, 1933.
8. *J Dent Res* **24**: 189-190, 1945.
9. *J Dent Res* **41**: 935, 1962.
10. Robert, H. M.: *Robert's Rules of Order Revised for Deliberative Assemblies*, 1943 ed, Chicago: Scott, Foresman and Company, pp 22-23.
11. *Webster's Seventh New Collegiate Dictionary*, Springfield, Massachusetts: G. & C. Merriam Company, 1965, pp 527, 793; *The American Collegiate Dictionary*, New York: Random House, 1962, pp 757, 1107.
12. Sturgis, A.: *Standard Code of Parliamentary Procedure*, 2d ed, new and revised, New York: McGraw-Hill Book Company, 1966, p 109.
13. Hollinshead, B. S. (ed): *Survey of Dentistry: The Final Report of the Commission on the Survey of Dentistry in the United States*, Washington, D.C.: American Council on Education, 1961, pp 436, 575.
14. *J Dent Res* **8**: 202-203, 1928.
15. Orland, F. J.: The Fifty Year History of the *Journal* and the Biographical Directory of the IADR (Special Commemorative Supplement to the September 1969 issue of vol 48 of the *Journal*).
16. Orland, F. J., and Mitchell, D. F.: Addendum to the Biographical Directory of Members of the IADR (Special Supplement to the March 1971 issue of vol 50 of the *Journal*).

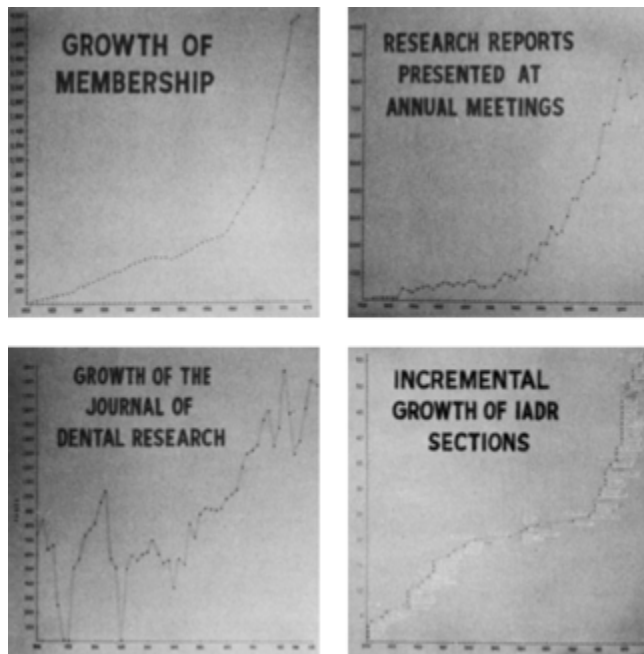


IADR GLOBAL MEMBERSHIP AS OF 1 MARCH 1970

Country	Total Members	Country	Total Members
Argentina	51	Malta	1
Australia	105	Mexico	31
Belgium	3	Mozambique	2
Brazil	20	Netherlands	7
Canada	72	New Zealand	21
Chili	4	Nicaragua	1
Colombia	16	Nigeria	1
Czechoslovakia	1	Norway	14
Denmark	25	Panama	1
Egypt	1	Paraguay	3
England	189	Peru	2
Ecuador	1	Philippines	6
Finland	19	Puerto Rico	13
France	13	South Africa	51
Germany	28	Scotland	28
Greece	3	Singapore	1
Hungary	1	Spain	2
India	5	Sweden	14
Iran	2	Switzerland	17
Ireland	11	Syria	1
Israel	21	Thailand	1
Italy	11	Turkey	1
Japan	112	United States	1,999
Korea	2	Venezuela	28
Luxembourg	1	Wales	10

During the final year of the IADR's first half-century, the above geographic distribution existed. The total membership of almost 3000 included one honorary member, fifteen student members, and ninety-two life members (who had reached age 65 and had been regular members in good standing for the previous quarter of a century).





Originals of these growth curves were on display as part of an informal exhibit by F. J. Orland in the Headquarters Room of the IADR at its Fiftieth Commemorative Meeting in New York City, 1970.



CHAPTER TWELVE: OTHER RESEARCH GATHERINGS

Members comprising IADR have such diversity of interest that many have been participating in meetings of other scientific societies and associations. Aside from the extensive annual IADR session with its composite meetings, there are two other series of orally oriented ongoing meetings which the IADR has always sponsored. One of these is the Nd Section (Dentistry) of the American Association for the Advancement of Science. These gatherings began in 1932.

The contents of many of the Nd programs were published. References for these are listed in the footnotes to the enclosed comprehensive table and also in a list that follows. For information on programs and participants, see the September issue of each specific year of *Science*, the official publication of AAAS. The *Official Proceedings of the AAAS* is the only other source of this information, although the Nd programs and proceedings were consistently announced in the *Journal of Dental Research* between the years 1958-68 while Frank J. Orland was Editor.

The other series of IADR-sponsored gatherings—the International Conference on Oral Biology meetings—started in 1959 and, except for the first, have been held outside North America. The contents of the ICOB gatherings were published as supplements to the *JDR*, while announcements of them appeared in editorials during the F. J. O. Editorship.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

"Through Gies' efforts, the American Association for the Advancement of Science gave dentistry an Associate relationship in 1931, and four years later admitted the North American Division of the IADR to affiliate accreditation, permitting a representative on the Council of the AAAS."¹ The AAAS was persuaded to provide a meeting for discussions in the field of Dentistry, with emphasis on the basic sciences. It was the American College of Dentists, with which Gies was also connected, that conducted the earliest of these meetings.² The dental programs at these meetings of 1932, 1933, and 1934 were conducted by the American College of Dentists, with the cooperation of members of the International Association for Dental Research, the American Dental Association, and the American Association of Dental Schools. In April 1935 the AAAS created in Section N (Medical Sciences) the *Subsection on Dentistry* (N₁—later designated Nd), to consist of the official representatives of said four dental organizations.³ In those days being cosponsor meant paying the bills for the meetings. In assimilating these past programs, it was learned that they varied considerably in quality as well as in length, with none appearing in some years (1935, 1942, 1943, and 1945). However, the first program presented was in Atlantic City in 1932 on "phases of dental science having particular interest for medical men". Arthur D. Black was the motivator, with Leuman Waugh as Co-Chairman of the meeting.

It may be interesting to know that the IADR was the mainspring of the symposia, since it was the IADR



members almost exclusively who were program officers and participants. For additional information, see the comprehensive resumé of W. J. Gies⁴ and also that of George C. Paffenbarger,⁵ as a former member of the AAAS Council.

In addition to the official publications of the AAAS Nd Section by the AAAS, on the one hand, the publications appearing as supplements of the *Journal of Dental Research* and those appearing elsewhere have been the various reports published soon after each Nd meeting. These have been fairly well documented in the *Journal of the American College of Dentists*. Another source is the *JDR*. For all those programs not footnoted in the table as having been published (with references at the end of the chapter), the reader is referred to the AAAS publication *Science* issued the year of the Symposium, usually in the September number before the meeting. Following the very comprehensive table, there are blocks of references, so that the reader can more easily recognize the different publications which covered and cited the AAAS Nd symposia in different years, depending on specific topic interests and available funds.

REFERENCES

1. Orland, F. J.: The Fifty Year History of the *Journal* and the Biographical Directory of the IADR, *J Dent Res* **48**: H-10, 1969 (Special Commemorative Supplement to September 1969 issue of vol 48).
2. Brandhorst, O. W.: *The History of the American College of Dentists*, St. Louis: American College of Dentists, 1971, p 234.
3. *JACD* **3**: n79-80, 1936.
4. Scientific Proceedings of the First Meeting of a Dental Organization with the American Association for the Advancement of Science, Atlantic City, N.J., 30 December 1932, *J Dent Res* **13**: 135-139, 1933.
5. Paffenbarger, G. C.: The Influence of William J. Gies in the Recognition of Dentistry by the American Association for the Advancement of Science, *JACD* **24**: 180-182, 1957.

AAAS ND PROGRAMS

[View Table](#)

SPECIAL AAAS ND SYMPOSIA PUBLISHED BY THE AAAS

- | | |
|--|--|
| 1. Published as <i>Fluorine and Dental Health</i> , AAAS, 1942. | 7. Published as <i>Fundamentals of Keratinization</i> , AAAS Pub. No. 70, 1962. |
| 2. Published as <i>Fluorine and Dental Caries</i> , AAAS Pub. No. 25, 1946. | 8. Published as <i>Mechanisms of Hard Tissue Destruction</i> , AAAS Pub. No. 75, 1963. |
| 3. Published as <i>Fluoridation as a Public Health Measure</i> , AAAS Pub. No. 38, 1954, reprinted 1955. | 9. Published as <i>Environmental Variables in Oral Disease</i> , AAAS Pub. |
| 4. Published as <i>Advances in</i> | |



- Experimental Caries Research*, AAAS Pub. (not numbered), 1955.
5. Published as *Calcification in Biological Systems*, AAAS Pub. No. 64, 1960.
 6. Published as *Aging*, AAAS Pub. No. 65, 1960.
 - No. 81, 1966.
 10. Published as *The Biology of the Mouth*, AAAS Pub. No. 89, 1968.
 11. Published as *Adhesion in Biological Systems*, New York: Academic Press, Inc., 1970.

PROCEEDINGS AND ABSTRACTS OF THE AAAS ND SECTION

1932	<i>J Dent Res</i> 13 : 135-172, 1933
1933	<i>JACD</i> 1 : 44-62, 1934
1934	<i>JACD</i> 2 : 106-120, 1935
1936 (January meeting)	<i>JACD</i> 3 : 79-95, 1936
1936 (December meeting)	<i>JADA-Dent Cos</i> 24 : 1130-1138, 1937
1937	<i>JACD</i> 5 : 73-77, 1938
1938	<i>JACD</i> 6 : 56-70, 184-187, 1939
1939	<i>JACD</i> 7 : 74-87, 1940
1940	<i>JACD</i> 8 : 44-61, 1941
1941	<i>JACD</i> 9 : 229-259, 1942
1942 (canceled meeting)	<i>JACD</i> 10 : 62-75, 1943
1944	<i>JACD</i> 12 : 47-67, 1945
1946	<i>JACD</i> 14 : 207-231, 1947
1950	<i>JACD</i> 18 : 203-204, 1951
1952	<i>JACD</i> 20 : 14-18, 1953
1953	<i>JACD</i> 21 : 303-317, 1954
1954	<i>JACD</i> 22 : 109-115, 1955
1955	<i>JACD</i> 23 : 186-196, 1956
1956	<i>JACD</i> 24 : 180-207, 1957
1957	<i>JACD</i> 25 : 285-300, 1958
1958	<i>JACD</i> 26 : 184-186, 1959
1959	<i>JACD</i> 27 : 137-140, 1960
1960	<i>JACD</i> 28 : 147-149, 1961



SPECIAL ND SYMPOSIA PUBLISHED BY THE *Journal of Dental Research*

1. Conference on Genetic Aspects of Oral Structures. Denver, 27 December 1961. Proceedings in *J Dent Res* **42**: 1259-1369, 1963.
2. Symposium on Growth and Development of the Face, Teeth, and Jaws. Cleveland, 26-27 December 1963. *J Dent Res* **44**: 147-306, 1965.
3. Symposium on the Behavioral Sciences in Dentistry and the Interdisciplinary Symposium on Materials Science in Medicine, Dentistry, and Pharmacy. Berkeley, 27-29 December 1965. *J Dent Res* **45**: 1583-1827, 1966.

Resumés of AAAS Nd meetings were published in "Editorial Views and News" in the *Journal* while Frank J. Orland was Editor: *J Dent Res* **37**: 989, 1958; **38**: 1059, 1959; **39**: 1081, 1960; **40**: 863, 1961; **41**: 1247-1248, 1962; **42**: 1371, 1963; **43**: 637, 1964; **44**: 1217, 1965; **45**: 1685, 1966; **46**: 995, 1967; **47**: 677, 1968.

THE INTERNATIONAL CONFERENCES ON ORAL BIOLOGY

These Conferences sponsored by the IADR have reoccurred triennially.

The four individual oral biology conferences that have been consummated provide strong evidence of the intense and international motivation in conducting research as a basic discipline in the oral area *per se*. They also have given evidence of the wide interest in dental health and applied research aimed at the improvement of health for the peoples of the world. Monetary support was provided by the Colgate-Palmolive Company of Jersey City, New Jersey, for all the Conferences and for subsequent publication of their contents in the *Journal of Dental Research*.

The First ICOB was held in New York City on 7-9 September 1959. Titles of the Conference were: "Enamel", "Biochemical and Nutritional Factors in Dental Caries", "Oral Soft Tissues", "Oral Environment", and "Bone".¹

The Second ICOB was held in Bonn, West Germany, on 2-5 July 1962. Titles were "Epidemiologic Research in Dentistry", "Forensic Dentistry", "Investigations on Oral Neoplasia", "Growth and Development Problems", "Progress in Research in Preventive Dentistry", and "Oral Microbiology".²

The Third ICOB was held 14-16 June 1965 in London, England. Titles were "Connective Tissue", "Repair", "Neoplasia", "Genetics", "Fluid Environment of Teeth", and "Tooth Form and Structure".³

The Fourth ICOB was held on 15-17 July 1968 in Copenhagen, Denmark. The title was "Interface Biology of the Oral Structures".⁴

Planning was completed during 1970 for the Fifth Conference, on "Enzymology," to be held in Zürich, Switzerland, on 8-10 September 1971. Subsequently, the proceedings were published.⁵

ICOB PROCEEDINGS

1. Abstracts of the First International Conference on Oral Biology, *J Dent Res* **39**: 1083-1097, 1960.
2. Proceedings of the Second International Conference on Oral Biology, *J Dent Res* **42**: 184-559, 1963.



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3. Proceedings of the Third International Conference on Oral Biology, *J Dent Res* **45**: 419-746, 1966.
 4. Proceedings of the Fourth International Conference on Oral Biology, *J Dent Res* **48**: 609-856, 1969.
 5. Proceedings of the Fifth International Conference on Oral Biology, *J Dent Res* **51**: 209-442, 1972.



CHAPTER THIRTEEN: HISTORY OF THE DIVISIONS

By simplest denotative definition, a division is simply "a state of being divided". More specifically, it is the "separation of members of a deliberative body" from other members of the same body. In the current IADR connotative sense, "Division" implies separate large bodies of members that have organized on different continents of the world and have at present considerable autonomy, although their members clearly recognized them as constituents of the parent organization.

In the beginning, William Gies, the Founder, envisioned¹ that the Association ". . . could best be formed as a federation of local societies, each to be an autonomous section of a national division of the international association. . ."

However, through the first decade, Sections were the only components cited which became increasingly important active units of the IADR. In a paper presented in full² entitled "A Brief Review of the History of the IADR", William Gies stated that "divisions and sections are autonomous in accordance with the limitations of ordinary federation. Members. . . may organize divisions in any nation and sections in any division." Later, in a letter dated 2 March 1936, Professor Gies pointed out that the "IADR consists of 26 *sections* in eight nations" and that "the sections in a nation constitute that nation's *division*" and that "the financial affairs of a *section* of a *division* are its own concern." He also stated that "*The American Division*, which is merely one of the eight [of] which the Association is composed, was formally organized last spring. Its affairs are as independent of the Association's control as are those of, say, the New York Section." Moreover, in the *Journal of Dental Research* during 1940 on the inside front cover of the issue, there appeared a list of the eight national Divisions referred to in that letter. These were Canada, China, England, Germany, Hungary, Palestine, South Africa, and the United States.

It must emphatically be pointed out, however, that in 1940 there were no divisional organizations as such. The names merely meant that the countries cited had one or more Sections within their borders. The one exception was the one termed by Gies "the American Division". (It is not clear whether this body was supposed to include Canadian members.) The American Division had as its Treasurer B. B. Palmer—the Treasurer of IADR, who according to Gies' letter, thus had "two separate and distinct responsibilities." (See chapter on "Administrative Aspects of IADR".)

The other named Divisions apparently were only paper entities and never functioned *per se*. The first recorded meeting designated specifically for North American members was on Sunday, 23 March 1952, at 11 A.M. in Colorado Springs, Colorado.³ Thereafter, each year during the annual IADR business meetings, a short meeting of the North American Division was convened to transact the separate North American minimal business. Edward Hatton, as the IADR Secretary-Treasurer, called for these gatherings. The North American



Division had no officers until 1966 when some of the officers of the Association were designated also officers of the NAD (Manly, President; Rovelstad, Secretary-Treasurer).⁴ This duality, as a practical measure, was followed until the NAD was fully activated with its own elected officers after 1970.

By contrast, other Divisions, notably the British Division, has had independent officers and meetings since 1953. It emerged from the former London Section. Japanese members organized directly into a Division in 1954, and the Continental European Division was organized in 1964. Later South Africa reorganized from fragments of the demised Johannesburg Section and formed a Division in 1966. Two years later, in 1968, Australian IADR members reorganized into the Australian Division, which was joined by the New Zealand Section in 1969 to become the Australia-New Zealand Division. That same year (1969). Scandinavian members along with the NOF (Nordisk Odontologisk Förening) reorganized and became the Scandinavian-NOF Division of IADR.

Now at the close of the first fifty years of IADR, the Divisions have become significant bodies which are fully represented in the proposed reorganized Council of IADR. Specific Division histories as received are reproduced as follows with some editing.

THE AUSTRALIA-NEW ZEALAND DIVISION

The first IADR organization to be formed in Australia was the "Victorian Section of the Dental Materials Group". Following a preliminary meeting in October 1950, the Materials Group was officially founded in the state of Victoria in 1951. The first office-bearers were Howard K. Worner, Chairman; Edward Marks, Vice-Chairman; and Alan R. Docking, Honorary Secretary. By 1969 there were fifty-one members; the Australian DMG Representative was J. A. Chong. In 1970 the Chairman was Alan A. Grant.

The second IADR organization to be formed in Australia was the Australia Section of IADR. The first meeting was held in Sydney 18 August 1961. The meeting consisted of a welcome address, an inaugural business meeting, election of officers, and an address by Kei Enoki (then President of the Japanese Division, IADR). There followed the presentation of six scientific papers. The meeting was held in conjunction with an Australian Dental Congress. Elected officers were David A. Cameron, Chairman, and Geoffrey S. Molyneux, Secretary. Approximately twenty members attended this first meeting. Membership grew rapidly, and by the end of 1970 there were about 130 full members and thirty associate members.

Initially the body was known as the Australia Section of the IADR, with annual meetings being held in turn, in Sydney, Melbourne, and Adelaide. Now Brisbane is included, and the venue for the 1970 meeting was Perth. Australia sought Divisional status in 1968, which was granted. The Eighth Annual Meeting of the Australia Section (now, however, a Division) was held at the University of Adelaide on 20-22 August 1968 with thirty-four scientific papers presented.⁵ At this time, the New Zealand Section suggested combination, and by 1969 the Division had become the Australia-New Zealand Division of the IADR. The Ninth Annual Meeting



of the Australia and New Zealand members, now the ANZ Division, was held 27-29 August 1969 at the University of Queensland in Brisbane. There were forty abstracts printed in the *Journal* that year.⁶ At the Tenth Annual Meeting held 26-28 August 1970 in Melbourne, there were forty-three papers presented.⁷

This Division now consists of the New Zealand, Brisbane, Sydney, Melbourne, Adelaide, and Perth Sections, each with its own President or Chairman, Secretary, and committee. (See chapter fourteen, "History of Sections".) Geographical barriers and financial problems at present make it difficult to hold annual meetings in Perth and in New Zealand (which currently functions independently). This situation will change, since the Divisional Annual Meeting is planned for New Zealand in 1973. The Divisional Secretary now holds office for a three-year term, and organizes the newsletters, circulars, and clerical and publication work, as well as publication of the Programme and Abstracts. Arrangements for annual meetings are in the hands of the appropriate local committee.

By the end of 1970, the officers of the Division were Ken F. Adkins, President; and Barrie R. D. Gillings, Secretary.

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THE BRITISH DIVISION

The history of the British Division dates back to the period before the Second World War, with the formation of a London Section in 1931. Founding members were Arthur Bulleid, J. Frank Colyer, F. N. Doubleday (Editor), Eric W. Fish (who later became Sir Wilfred Fish), Evelyn Charles Sprawson (Secretary), and Joseph G. Turner. These British research workers had earlier attended the Eighth Annual Meeting of IADR in Toronto in 1930. The Section grew as other British workers became members of IADR, namely, Herbert C. Malleson in 1934, Ernest B. Dowsett, Cyril H. Howkins, and George B. Pritchard in 1935, and John Lewin Payne in 1937. Other enthusiastic dental workers in the London Section were Humphrey F. Humphreys and Martin A. Rushton, the latter being the last member elected to the Section just before World War II in 1939. (He was later elected President of IADR, 1964-65.)

Several of the London Section members were designated Honorary Vice-Presidents of the IADR for their meritorious work. (See chapter on "Honorary Status in the IADR" *re* Honorary Vice-Presidents.) They were J. Frank Colyer, 1932-33; Joseph G. Turner, 1933-34; Evelyn C. Sprawson, 1934-36; Cyril H. Howkins, 1936-37; J. Lewin Payne, 1937-39; Ernest B. Dowsett, 1939-40; and George B. Pritchard, 1940-44. During the Second World War, activities of the London Section came to a halt, but in 1953 the formation of a British Division⁸ was authorized at the request of M. A. Rushton, A. Bulleid, and H. F. Humphreys. The first



meeting of the Division was held at Guy's Hospital Dental School in London on Saturday, 21 March 1953, at which meeting fourteen papers were read under the chairmanship of Professor Rushton.

Members of the British Division reside in the countries of England, Scotland, Wales, Northern Ireland, and the Republic of Eire. The Division has grown continuously since its founding, and at its Eighteenth Annual Meeting in Birmingham, England, in 1970, 139 papers were read. The membership at this time was 272.

ANNUAL MEETINGS OF THE BRITISH DIVISION

First	21 March 1953, Guy's Hospital, London 17 abstracts, <i>J Dent Res</i> 32 : 729-736, 1953
Second	2-3 April 1954, School of Dental Surgery, University of Birmingham 15 abstracts + 3 read by title, <i>J Dent Res</i> 33 729-736, 1954
Third	15-16 April 1955, London Hospital Dental School, Whitechapel 23 abstracts + 2 read by title, <i>J Dent Res</i> 34 : 776-785, 1955
Fourth	13-14 April 1956, School of Dentistry, University of Liverpool, Liverpool 27 abstracts + 3 read by title, <i>J Dent Res</i> 35 : 954-967, 1956
Fifth	11-12 April 1957, Institute of Dental Surgery, University of London 33 abstracts + 1 read by title, <i>J Dent Res</i> 36 : 805-817, 1957
Sixth	10-11 April 1958, Sutherland Dental School, King's College, Newcastle-upon-Tyne 37 abstracts, <i>Dent Res</i> 37 : 748-761, 1958
Seventh	9-10 April 1959, Turner Dental School, University of Manchester, Manchester 57 abstracts, <i>J Dent Res</i> 38 : 1213-1234, 1959
Eighth	7-8 April 1960, Royal Dental Hospital, London School of Dental Surgery, London 42 abstracts, <i>J Dent Res</i> 39 : 1098-1113, 1960
Ninth	6-7 April 1961, University of Bristol 49 abstracts, <i>J Dent Res</i> 39 1275-1290, 1961
Tenth	12-13 April 1962, University of Sheffield 62 abstracts, <i>J Dent Res</i> 41 1249-1271, 1962
Eleventh	4-6 April 1963, Guy's Hospital, London 81 abstracts <i>J Dent Res</i> 1079-1116, 1963
Twelfth	9-10 April 1964, University Dental School, Edinburgh, Scotland 77 abstracts, <i>J Dent Res</i> 43 : 945-974, 1964
Thirteenth	8-9 April 1965, University Dental School, Leeds 90 abstracts, <i>J Dent Res</i> 44 : 1155-1190, 1965
Fourteenth	14-15 April 1966, London Hospital Medical College 90 abstracts, <i>J Dent Res</i> 46 : 103-133, 1967
Fifteenth	6-7 April 1967, Queen's College, Dundee, Scotland 112 abstracts, <i>J Dent Res</i> 46 : 1261-1299, 1967
Sixteenth	3-5 April 1968, Dental School, Welsh National School of Medicine, Cardiff, Wales 124 abstracts, <i>J Dent Res</i> 47 : 965-1008, 1968



Seventeenth 10-11 April 1969, University College, London
115 abstracts, *J Dent Res* **48**: 1095-1135, 1969

Eighteenth 8-10 April 1970, University of Birmingham
139 abstracts, *J Dent Res* **50**: 653-699, 1971

OFFICERS OF THE BRITISH DIVISION

President

Martin A. Rushton, 1959-62	James L. Hardwick, 1965-68
Arthur I. Darling, 1962	Cecil H. Tonge, 1968-71

Secretary-Treasurer

Maurice V. Stack, 1953-57	Norman B. B. Symons, 1969-
Cecil H. Tonge, 1957-65	(Secretary)
H. Stuart M. Crabb, 1965-69	H. Stuart M. Crabb, 1969-
	(Treasurer)

Councilor

Martin A. Rushton, 1953-59	Cecil H. Tonge, 1965-68
Arthur I. Darling, 1959-62	Ronald L. Hartles, 1968-71
James L. Hardwick, 1962-65	

There was no President of the British Division in the years 1953-58; there was only a Senior Officer, namely, Martin A. Rushton as Councilor.

Editors of the Division have been Albert E. W. Miles, 1953-57; Ivor R. H. Kramer, 1957-65; Edward D. Farmer, 1965-68; and J. H. Allan, 1968-.

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THE CONTINENTAL EUROPEAN DIVISION

A Continental European Division of forty-three members was approved as a Division on 19 March 1964 at the Forty-second General Meeting of the IADR.⁹ This Division was effectively established at the Institut Dentaire, Faculté de Médecine in Strasbourg, France, on 12 September 1964. Forty-one members were present, and the First Annual Meeting was held on 12-13 September at the Institut. Twenty-one papers were presented at this meeting and were abstracted in the *Journal*.¹⁰ A workshop on electron microscopical technics in dental research was given in the research center of this laboratory. The Division was created by a Board composed of the following persons: Adolf Kröncke and Rudolf Naujoks (West Germany), Hans Mühlemann (Switzerland), Giovanni Amici (Italy), and Robert Weill and Robert M. Frank (France). Hans Mühlemann was elected the first



Chairman. He was also later designated an Honorary Vice-President of the IADR, 1967-68. The motivation for creating the Division was to bring all dental research workers from Continental Europe together once a year. Members come from France, West Germany, Italy, Belgium, the Netherlands, Luxembourg, Switzerland, Czechoslovakia, Greece, and Hungary.

The Second Annual Meeting¹¹ of the CED was held at the Dental School of the University of Zürich, 25-26 September 1965. Workshops in electromyography, electron microscopy, tooth mobility, and computer sciences were given. There were seventeen abstracts that year. The Third Annual Meeting¹² was held at the Dental School of the University of Würzburg in West Germany, 24-25 September 1966, with a workshop on bacteriology and biochemistry of dental caries. There were twenty-two abstracts published. The next annual meeting was in conjunction with the XIV World Dental Congress of the Fédération Dentaire Internationale in Paris, 12-13 July 1967. "The Fourth Annual Meeting was held in an unusual manner this year. Members and guests presented table demonstrations only, and therefore there were no abstracts of papers to be published for the autumn 1967 meeting. . . ."¹³ The Fifth Annual Meeting¹⁴ was located at the Dental School of the Sacred Heart Catholic University of Rome, 5-6 October 1968, with a workshop on histochemistry. There were twenty-eight papers read. The Sixth Annual Meeting¹⁵ was in the Solid State Physics Department of the University of Groningen in the Netherlands with a workshop on biophysical methods used in dental research. The meeting was held 27-28 September 1969, and there were twenty-five abstracts. A year later, on 19 September 1970, the Seventh Annual Meeting¹⁶ was at the University of Erlangen-Nürnberg, West Germany, with twenty-seven papers presented.

Only persons who have worked effectively in dental research and who have published several papers are admitted into this Division. Membership by 1969 had doubled since the creation in Strasbourg. The following year there were eighty members. There are no Sections in this Division, and the researchers from the several continental European nations have functioned very well in unity and harmony within this truly inter-nation-related organization.

Presidents of the Division have been Hans Mühlemann, 1964-65; Rudolf Naujoks, 1965-66; Robert Weill, 1966-67; Antonio Baratieri, 1967-68; Wiepko G. Perdok, 1968-69; Adolf Kröncke, 1969-70; and Giorgio Cimasoni, 1970-71. Robert M. Frank was Secretary of the Division, 1964-71; moreover, he was to be elected President of the Division for 1972-73. Councilors of the Division were Rudolf Naujoks, 1964-65; Giovanni Amici, 1965-66; Antonio Baratieri, 1966-67; Jarmil Köstlan, 1967-68; Adolf Kröncke, 1968-69; Giorgio Cimasoni, 1969-70; and Klaus G. König, 1970-71. König was expected to be elected President of the Division for 1971-72.

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THE JAPANESE DIVISION

The Japanese Division of the IADR was founded on 6 November 1954 at a meeting held at the School of Dentistry of the Tokyo Medical and Dental University.

At the invitation of Kei Enoki, sixteen researchers were present at this initial meeting. Their membership in the IADR, and the establishment of a Japanese Section, were confirmed at the Thirty-second Annual Meeting in 1954 when George C. Paffenbarger became President of IADR¹⁷ Edward H. Hatton, then Secretary-Treasurer of the Association, stated in a letter dated 6 May 1954, ". . . The officers and members hope that this relationship will be of long standing and of great advantage both to you and to us. . . ."

Previous to this event, the organization of a Japanese Section had been encouraged by Paffenbarger on his visit to Japan in June of 1950 as part of a dental mission sent by the United States government. During this time he met with researchers and educators in order to evaluate the state of dental sciences in Japan. Japanese Division officers elected at this initial meeting were Shinjiro Takahashi, President; Kei Enoki, Secretary; and Masao Onisi, Editor. A Constitution was drawn, modeled after that of the IADR. The newly elected President delivered his inaugural address. A message from IADR President George C. Paffenbarger was read by Col. John S. Oartel, Chief of Dental Services at the Tokyo Army Hospital, who also spoke on the "History and Present Activities of the IADR". Masaru Nagao, President of the Tokyo Medical and Dental University, gave a congratulatory speech in which he noted that a paper of his written in 1919 was the first contribution to the *Journal* from Japan.¹⁸

Eighteen meetings have been held by the Japanese Division since 1954, and the number of members grew to 115 by the end of 1970. Abstracts of papers presented have been published in the *Journal of Dental Research*.

Because the IADR's General Meetings have all been held in North America, members of the Japanese Division have been largely unable to participate in IADR activities, and the converse also was true. Recognizing the need for "cross-fertilization", Seiichi Matsumiya, a member of the International Relations Committee of the IADR, formed the Pan-Pacific Congress of Dental Research to promote the exchange of ideas in that part of the world. The organizing committee of the PCDR included Seiichi Matsumiya as President, and Yojiro Kawamura and Masao Onisi. The first meeting of the PCDR was held in Tokyo on 14-16 April 1969.

Recently, Matsumiya as President of the Japanese Division of the IADR did participate in the Forty-eighth General Meeting of the IADR in New York City in 1970. On this occasion of the Fiftieth Year Observance of the IADR, he presented greetings and a brief statement of activities of the Japanese Division. (See chapter eighteen, this book.)

The following men have been President of the Japanese Division: Shinjiro Takahashi, 1954-59; Seiichi Matsumiya, 1959-61 and 1969-71; Iwao Nagai, 1961-63; Rokuro Suhara, 1963-65; Isamu Nakazawa, 1965-67;



and Iwao Yamamoto, 1967-69. Secretaries of the Division have been Kei Enoki, 1954-63; Toshihiko Niikuni, 1963-65; and Masao Onisi, 1965-. Councilors of the Division have been Gen Minoguchi, 1955-64, and Yojiro Kawamura, 1964-72. Editors have been Masao Onisi, 1954-59; Shosaburo Takuma, 1959-61; and Yojiro Kawamura, 1961-.

ANNUAL MEETINGS OF THE JAPANESE DIVISION

First	6 November 1954, School of Dentistry, Tokyo Medical and Dental University, Tokyo
Second	6 April 1955, School of Medicine, University of Kyoto, Kyoto
Third	11 October 1955, Hotel Seiunso, Hakone 5 abstracts, <i>J Dent Res</i> 36 : 652-653, 1957
Fourth	13 October 1956, Nihon University School of Dentistry, Tokyo
Fifth	8 December 1957, School of Dentistry, Tokyo Medical and Dental University, Tokyo
Sixth	1 November 1958, Osaka University Faculty of Dentistry, Osaka 11 abstracts + 1 read by title, <i>J Dent Res</i> 38 : 200-205, 1959
Seventh	26 October 1959, Tokyo Dental College, Tokyo 16 abstracts, <i>J Dent Res</i> 40 : 223-231, 1961
Eighth	14 November 1960, Hill-Top Hotel, Tokyo 17 abstracts, <i>J Dent Res</i> 41 : 503-509, 1962
Ninth	9-10 December 1961, Kaganio Hotel, Wakayama 22 abstracts, <i>J Dent Res</i> 41 : 729-738, 1962
Tenth	23 November 1962, Osaka University Dental School 16 abstracts, <i>J Dent Res</i> 42 : 753-762, 1963
Eleventh	7 December 1963, Nihon University School of Dentistry, Tokyo 17 abstracts, <i>J Dent Res</i> 43 : 936-944, 1964
Twelfth	6 December 1964, Nihon University School of Dentistry, Tokyo 18 abstracts, <i>J Dent Res</i> 44 : 1146-1154, 1965
Thirteenth	5 December 1965, School of Dentistry, Tokyo Medical and Dental University, Tokyo 23 abstracts, <i>J Dent Res</i> 46 : 134-142, 1967
Fourteenth	4 December 1966, School of Dentistry, Tokyo Medical and Dental University, Tokyo 23 abstracts, <i>J Dent Res</i> 46 : 1251-1260, 1967
Fifteenth	3 December 1967, Osaka University School of Dentistry, Osaka 26 abstracts, <i>J Dent Res</i> 47 : 955-964, 1968
Sixteenth	16-17 November 1968, Osaka University School of Dentistry, Osaka 30 abstracts, <i>J Dent Res</i> 49 : 675-685, 1970
Seventeenth	22 November 1969, Tokyo Dental College, Tokyo 21 abstracts, <i>J Dent Res</i> 49 : 667-674, 1970
Eighteenth	28-29 December 1970, Tokyo Dental College, Tokyo 23 abstracts, <i>J Dent Res</i> 50 : 1142-1150, 1971



THE NORTH AMERICAN DIVISION

In essence, the North American Division came into being in various subtle stages, but it is now proposed that it be activated so as to exist in full and final autonomy.

In early correspondence, William J. Gies often referred to the "American Division", which by innuendo was more officially named the North American Division (as explained in the introduction to this chapter). The formation of the NAD became official on 23 March 1952 in Colorado Springs.³ Thereafter there were nominal NAD meetings. Officers were designated (but not elected until 1972, when individuality was proposed for this newly activated Division). Such designated Presidents have been those of the IADR, but were specifically named: Richard S. Manly, 1966-67; Ralph W. Phillips, 1967-68; John B. Macdonald, 1968-69; Clifton O. Dummett, 1969-70; and Gordon H. Rovelstad, 1970-71. NAD Secretary-Treasurers were designated as follows: Gordon H. Rovelstad, 1966-67, and Arthur R. Frechette, 1967-.

From a practical standpoint, because of vast numbers of members, their activity and monetary support in the United States, the weight of continuity and importance of the parent body, the IADR was carried for many decades by this Division. (This kind of support was not unlike the earliest years of IADR when the New York Section in effect was the most active component of the parent body.) In 1970 there were 2102 members belonging to the North American Division, which included the United States, Canada, and Mexico. This enormous Division, which for so long existed only on paper, consisted of thirty-seven Sections with Councilors to the IADR, but not to the Division until the NAD activation in 1972. (See the chapter on "History of Sections" for an elaboration of the many grass-roots components in the various research communities, especially in the United States.) All the General Secretaries, Treasurers, and Secretary-Treasurers of the Association as well as all the Editors of the *Journal* were from the North American Division. All the Presidents of IADR except one were from this Division, and the vast monetary effort to operate both the *Journal* and the Association came from this Division to date, but much more international participation is planned and expected in the second fifty-year IADR history.

THE SCANDINAVIAN-NOF DIVISION

According to records, approval was given by the IADR Council to the Norway and Denmark Sections on 22 March 1958 at its Thirty-sixth General Meeting to form a Scandinavian Division.¹⁹ Apparently this was never activated by the Scandinavians at that time. However, a Division of IADR *per se* was recently established officially in 1969, even though its membership and its forerunning organization has a long history indeed. The



Nordisk Odontologisk Förening (NOF) was founded 7 January 1917 in Gothenburg, Sweden. The objectives of NOF were, and are, to promote the advancement of dental science and the teaching of dentistry. The first annual meeting was held the same year in Stockholm, Sweden, on 31 August. The President was the Swedish Uno Hylin, who also was President at the second meeting in Oslo in 1918.

Although the number of members was small in these first years, the association was ambitious enough to take over the journal *Odontologisk Tidsskrift (OT)*, which in 1918 became the property and also the responsibility of the NOF.

Since 1917, thirty-four annual meetings have been held; the meeting places have rotated between the four Scandinavian countries: Denmark, Finland, Norway, and Sweden. In the years 1939-45 no meetings were held because of World War II. The meeting places and Presidents of the NOF since then are listed below:

1946 Oslo: Guttorm Toverud	1952 Oslo: Rolf Wang-Norderud
1947 Copenhagen: Kai O. Mehlsen	1954 Copenhagen: Poul O. Pedersen
1948 Gothenburg: Olof Osvald	1955 Gothenburg: Östen Kling
1950 Malmoe: Erik Nilsson	1957 Helsinki: Erik Vaenerberg
1951 Helsinki: Per von Bonsdorff	1958 Oslo: Tormod Mörch
1960 Copenhagen: Jens J. Pindborg	1965 Bergen: K. Karlsen
1961 Stockholm: Helge Berggren	1967 Gothenburg: Nils Sällström
1962 Århus: Asger Frandsen	1968 Turku: Kalervo K. Koivuma
1963 Helsinki: Kalervo K. Koivuma	

In 1967 the Danish Section of NOF proposed to the general meeting that NOF should contact the IADR and seek recognition as the Scandinavian Division of IADR. As a result of the discussion at the general meeting, a committee was appointed. The Committee Chairman was Mogens Skougaard, and the commission was to prepare amendments to the NOF Constitution necessary for the possible association of NOF with the IADR. The result of the committee work was several proposed amendments to the Constitution. These were submitted for the general meeting in Turku, Finland, in 1968 and passed almost unanimously on condition that the association was approved by the Council of the IADR. At the Forty-seventh General Meeting of IADR in Houston, Texas, in March 1969, the following request was placed before the IADR Council:

On behalf of Nordisk Odontologisk Förening (NOF), we hereby request that a proposal regarding NOF joining the IADR be placed before the IADR Council Meeting. Depending on the acceptance by the IADR Council, NOF has made amendments to its Constitution necessary for an association. The amendments are as follows:



1. Name: the name of NOF should be changed to NOF-Scandinavian Division of IADR.
2. In each of the Scandinavian countries, Denmark, Finland, Norway, and Sweden should be founded a Section of this association. [EDITOR'S NOTE.—An IADR Section was founded in Denmark in 1950, in Finland and Norway in 1953, and in Sweden in 1969. These Sections merged with the NOF Sections in those countries in 1969.]
Each Section elects a Chairman, Secretary, Treasurer and two additional committee members. At least three of the committee members in each Section must be individual members of IADR.
These committee members are appointed as President, Secretary, and Councilor of their own Section of IADR.
The journal *OT* is the property of NOF. The name should be: *OT-Scandinavian Journal of Dental Research*.

Abstracts of papers given at the annual meeting are published in the *Journal of Dental Research* in the same issue as abstracts from. . . [the other] Divisions.

It is our hope that the proposed association of the two organizations will be accepted by IADR and will promote international cooperation within dental research.

The IADR Council unanimously approved that the Nordisk Odontologisk Förening and its Danish, Finnish, Norwegian, and Swedish Sections (and the merger with the Denmark, Finland, Norway, and Sweden Sections of IADR) constitute the Scandinavian Association for Dental Research as the Scandinavian-NOF Division of IADR. The officers in 1969 were Nils Sällström as President and G. Oldén as Secretary.

The first annual meeting of NOF as the Scandinavian Division was held 21-23 August 1970 in Copenhagen. The Secretary of the Division was Erik Hjørting-Hansen. The President was Mogens R. Skougaard (who was to be elected President of the IADR for the year 1973-74). The meeting was an all-time record; a total of 106 papers were presented, and the meeting was attended by 450 members and guests. Abstracts of eighty papers were published in the *Journal*.²⁰

Also in 1970, the NOF journal changed its name from *Odontologisk Tidsskrift (OT)* to the *Scandinavian Journal of Dental Research*. It gained a new Editor (J. J. Pindborg) and underwent a facelifting and a new editorial policy: all papers are now published in English.

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THE SOUTH AFRICAN DIVISION

The earliest appearance of IADR activity in South Africa was the formation of a Johannesburg Section in 1934. Founding Johannesburg members were Geoffrey Friel, John C. Middleton Shaw, and W. A. Wilson. Other early members, according to Professor Julius Staz (himself a member) were Thomas W. B. Osborne, R.



Dart, Teunis Ockerse (presently a life member of IADR), J. N. Noriskin, James T. Irving, and Alfred J. Clement. Two members were honored by being designated Honorary Vice-Presidents of IADR—Geoffrey Friel, 1936-37, and John C. Middleton Shaw, 1935-36 and 1937-44.

Correspondence indicates that there were long periods of dormancy during the life of the early Johannesburg Section. After a planned scientific meeting in 1955 failed to materialize, the Section seemed to "fade away and die" according to one correspondent. It disappeared from the *Journal's* roster of Sections in 1963.

Mervyn Shear of Johannesburg while in Chicago was invited by Isaac Schour to attend a meeting of the Chicago Section while on a visit to the United States in 1963. Elected to honorary membership in the Chicago Section, Mervyn Shear discussed with Dan Y. Burrill (then IADR President) an idea which had been on his mind for a long time. This was the resuscitation of the Johannesburg Section or the establishment of a South African Division. President Burrill was in wholehearted agreement. After his return to South Africa, Mervyn Shear corresponded with Barnet M. Levy (who succeeded Dan Burrill as IADR President) and Arthur R. Frechette, IADR Secretary-Treasurer, and finally he conferred with his fellow academicians in Johannesburg. The outcome of all these discussions was the issuance in 1966 of 1200 invitations to attend a meeting on 22 September 1966 to constitute the new Division. Thirty-two South African IADR members were present at the meeting; responses favoring the action were received from a number who were unable to attend. A. E. Dodds, Dean of the Faculty of Dentistry at the University of the Witwatersrand, was elected President of the Division. Mervyn Shear was elected Secretary and Councilor. Committee members were T. R. Barrowman, Cornelius Dreyer, Johannes van Reenen, and John Lemmer.

The first scientific meeting of the South African Division was held at the Oral and Dental Hospital, University of the Witwatersrand in Johannesburg on Saturday, 16 September 1967. There were eighteen papers read at that meeting.²¹ The Guest of Honor was Ralph W. Phillips, who was then IADR President. (Photo in chapter eleven & in *JDR*.²²) Colgate-Palmolive, Ltd., of South Africa, which made Professor Phillips' visit possible, also awards an annual prize to a South African Division member under age thirty-five whose paper is judged to be the best as presented at the annual Divisional meeting.

The Second Annual Meeting was held on 21 September 1968 in the city of Pretoria. There were fourteen abstracts that year.²³ The next year the University of the Witwatersrand was again the site of the Division's annual meeting. The Third Annual Meeting was on 20 September 1969. There were seventeen abstracts printed in the *Journal* from this meeting.²⁴ The Fourth Annual Meeting was held in the city of Cape Town on 18-19 September 1970 with an all-time high of twenty-two abstracts.²⁵ By this time there were fifty-one regular members and five associate members in the Division.

Presidents of the Division have been A. E. Dodds, 1966-68; Johannes van Reenen, 1968-70; and



Mervyn Shear, 1970-. (The correct title of the Secretary of the SAD is in fact, "Honorary Secretary". The adjective is customarily used in South Africa to indicate that the individual holds the post of Secretary in an unpaid capacity. In other parts of the world, "Honorary" means the person does *no* work in the office, but holds it as an honor while someone else conducts the duties of the office.) Mervyn Shear was Honorary Secretary, 1966-70. D. H. Retief has had the office, 1970-. Mervyn Shear has also been Councilor, 1966-70, while Johannes van Reenen is Councilor now, 1970-72.

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REFERENCES

1. *J Dent Res* **6**: 101, 1924-26; **8**: 197, 1928.
2. *J Dent Res* **11**: 55-59, 1931.
3. *J Dent Res* **31**: 522, 1952.
4. *J Dent Res* **45**: 1573, 1966.
5. *J Dent Res* **48**: 1083-1094, 1969. [EDITOR'S NOTE.—The *Journal* erroneously refers to the Eighth Annual Meeting as the Sixth.]
6. *J Dent Res* **49**: 649-662, 1970.
7. *J Dent Res* **50**: 735-750, 1971.
8. [EDITOR'S NOTE.—The British Division, although formed as a Division in 1953, is first mentioned as an entity in the *Journal* in 1955 (*J Dent Res* **34**: 776, 1955). Previous to this time it is referred to as the Great Britain Section in the 1953 roster on the inside cover of the *Journal* and in their Scientific Proceedings in *J Dent Res* **33**: 729, 1954.]
9. *J Dent Res* **43**: 736, 1964.
10. *J Dent Res* **44**: 1129-1137, 1965.
11. *J Dent Res* **44**: 1138-1145, 1965.
12. *J Dent Res* **46**: 1241-1250, 1967.
13. *J Dent Res* **47**: 1009, 1968.
14. *J Dent Res* **48**: 1135-1147, 1969.
15. *J Dent Res* **49**: 686-695, 1970.
16. *J Dent Res* **50**: 752-763, 1971.
17. *J Dent Res* **33**: 637, 1954. [EDITOR'S NOTE.—The Japanese Division as an entity is first mentioned in the *Journal* in the published Abstracts of its Third Annual Meeting of 1955 appearing in *J Dent Res* **36**: 652-653, 1957. On the inside cover of the *Journal* in the roster, Japan appeared as a Non-Divisional Section for a few initial years until the Association and especially its *Journal* became aware that Japan achieved enough members for Divisional status. Then it was listed as a Division in the roster by mid-1960.]
18. *J Dent Res* **1**: 159-202, 1919.
19. *J Dent Res* **37**: 958, 1958.
20. *J Dent Res* **50**: 705-730, 1971.
21. *J Dent Res* **47**: 949-954, 1968.
22. *J Dent Res* **46**: 1556, 1967.



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23. *J Dent Res* **48**: 1155-1159, 1969.
 24. *J Dent Res* **49**: 696-701, 1970.
 25. *J Dent Res* **50**: 764-822, 1971.



CHAPTER FOURTEEN: HISTORY OF SECTIONS

A section of anything is obviously a part of the whole. In IADR parlance, a Section in the earliest days meant the local body of members functioning somewhat independently in the several cities such as New York, Boston, and Chicago. These three Sections were established within the same month of IADR organization, namely December 1920. In the next few years the Section in Toronto and a few others were established. Later, with the development of Divisions consisting of members residing at first in a nation and then on an entire continent, the various Sections became parts of the respective Divisions rather than Sections of the Association as originally defined in the Constitution.

New York City was the site of the first Section; available records, however, do not show just when or where it was formally organized, but it can be deduced that at the meeting of organization of the IADR itself on 10 December since all the members were from New York, they coincidentally constituted a New York Section. On 17 December the Boston Section was founded, and then on 30 December the Chicago Section.

WHAT CONSTITUTES A SECTION?

On this matter of Sections, the 1920 as well as the revised 1940 Constitution stated, "Members in any geographical center, with the approval of the corresponding national Division, may organize a Section for the local advancement of the objects of the Association." But the 1956 proposed Constitution and By-Laws, more specifically, cites that "Each section shall consist of ten or more members of the Association. New Sections may be organized only with the approval of the National Division." By 1930 the following cities contained Sections of the IADR: New York, Boston, Chicago, Toronto, Ann Arbor, San Francisco, Halifax, Minneapolis, Philadelphia, Pittsburgh, St. Louis, Vienna, Cleveland, New Haven, and Winnipeg. Records of the founding dates of all the Sections were located with some effort. Sections in existence at the end of 1970 and their founding dates follow.

Similarly to the listing on the IADR pages in the *Journal of Dental Research*, these Sections are grouped respectively by Division: Australia-New Zealand, British, North American, Scandinavian-NOF, and Non-Divisional. Dates given are usually the date when the Sections were formally recognized by the Association, rather than preliminary organizational dates. A second date indicates reactivation.

Adelaide	1968	New Orleans	1937; 1967
Brisbane	1969	New York	1920
Melbourne	1969	North Carolina	1963
New Zealand	1963	Philadelphia	1928
Perth	1969	Pittsburgh	1928
Sydney	1969	Portland	1966



		Richmond	1933; 1960
Birmingham-Bristol-Cardiff	1970	Rochester	1933
		Rocky Mountain	1969
Ann Arbor	1923	(now Frederick S. McKay Section)	
Augusta	1969	St. Louis	1928
Baltimore	1933; 1962	San Antonio	1968
Birmingham	1952	San Francisco	1924
Boston	1920	Seattle	1966
British Columbia	1966	Southern California	1950
(formerly Vancouver Section)		Toronto	1921
Buffalo	1965	(now Ontario Section)	
Chicago	1920	Washington, D.C.	1931
Cincinnati	1964	Wisconsin	1960
Cleveland	1930		
Columbus	1932	Denmark	1950
Houston	1939	Finland	1953
Indianapolis	1941	Norway	1953
Iowa	1936	Sweden	1969
Kansas City	1950		
Kentucky	1965	Argentina	1967
Lincoln-Omaha	1965	Caracas	1969
Mexico	1948-62; 1969	Israel	1940; 1967
Minnesota	1928	(formerly Palestine Section)	
Nashville	1937; 1967	Maracaibo	1969

EXTINCT SECTIONS

Unfortunately, as in the case of members, there also have been deaths among Sections. In fact, a total of ten are now in the discontinued category. The following Sections which disappeared completely are here listed with the dates of their life spans: Budapest, 1934 to World War II; Chengtu, 1934-49; Detroit, 1937-53; Halifax, 1928-52; Louisville, 1932-57; New Haven, 1930-40; Prague, 1932 to World War II; Tennessee, 1944-53; Vienna, 1929-40; and Winnipeg, 1930-53. The dates of birth are definite and exact, but the dates of demise are quite uncertain except in the case of the Chengtu and New Haven Sections. Most just faded away, and the date when the *Journal* ceased listing them among the living is accepted as the final date of demise.

Some Sections are no longer on the roster because they changed their name or status. The Iowa City Section became the Iowa Section. The Oregon-Washington Section (begun in 1948) had become the Pacific



Northwest Section by 1952 and in 1966 split three ways into the Vancouver (now British Columbia) Section, the Seattle Section, and the Portland Section. The London Section (begun in 1931) grew into the British Division, and the Johannesburg Section (begun in 1934) grew into the South African Division. The Australia Section (begun in 1961) became a Division in 1968 and amalgamated with the New Zealand Section in 1969 to become the Australia-New Zealand Division. The Palestine Section originated in 1940 and later became the present Israel Section. After 1970 the Rocky Mountain Section became the Frederick S. McKay Section and Toronto became the Ontario Section.

A few Sections or potential Sections never were activated, even though approved by the IADR. At the Thirtieth General Meeting in 1952, new Sections were approved for three key locations in South America: Buenos Aires, Rio de Janeiro, and Uruguay.¹ At the Thirty-second General Meeting, the newly elected President in the opening of his Inaugural Address mentioned that an IADR Section in Germany had been accepted.²

CONTRIBUTORS AND SOURCES

Contributors of the various Sectional histories were usually the respective 1970 Secretaries, although in some cases the Presidents responded. In other instances, where no data were forthcoming from a Section, the Editor and his Assistant, David P. James, gleaned information from other sources, especially the *Journal*. Then there was almost always some background material provided by the "old-timers" whose memories bridged at least a generation, but this required many letters and phone calls. Persons other than current officers sometimes wrote adequate histories, such as Merrill G. Wheatcroft of Houston, Gerald J. Cox of Pittsburgh, Robert S. Redman of Minnesota, Basil G. Bibby of Rochester, Joseph L. T. Appleton of Philadelphia, Ellery C. Stowell of Southern California, Howard M. Myers of San Francisco, George C. Paffenbarger of Washington, D.C., Frances Krasnow of New York, and Sholom Pearlman of the F. S. McKay Section. Peter Adler of Hungary contributed much to his histories of the extinct Budapest and Vienna Sections, and R. Gordon Agnew contributed the history of the extinct Chengtu Section.

An effort was made to document rather extensively the Sections' more important programs and presented papers when known. Titles and some abstracts of papers read at local Section meetings were sometimes published in the *Journal of Dental Research* for the respective years. During the period of F. J. Orland's Editorship, 1958-69, they were always published and usually in separate supplements of the *Journal* along with the Proceedings of the IADR and all the Divisional Meeting programs.

THE AUSTRALIA-NEW ZEALAND DIVISION

THE ADELAIDE SECTION

When the Australian Section was advanced to Divisional status at the Eighth Annual Meeting of the Australian Section in August 1968, there were sufficient interested members in Adelaide to form a Section



immediately. The founding members were A. M. Horsnell, J. C. Thonard, M. J. Barrett, J. A. Cran, E. A. Fanning, T. Brown, N. G. Clarke, O. F. Makinson, T. Gotjamanos, G. Heithersay, J. Lavis, R. Aladjem, R. Hume, and W. Wiebkin.

Office-bearers for 1969 were Tasman Brown, President; John G. Waterson, Vice-President; Frederick R. Henning, Secretary-Treasurer; and John C. Thonard, Councilor. At the end of 1970 the officers were James A. Cran, President; Frederick R. Henning, Vice-President; Tasman Brown, Secretary-Treasurer; and John C. Thonard, Councilor.

There have been several scientific meetings per year with visiting as well as local speakers contributing.

THE BRISBANE SECTION

The inaugural meeting of the Brisbane Section was held at the Dental College, University of Queensland, on Friday, 5 September 1969. Founding members were B. J. Kruger (Chairman), B. T. Homan (Secretary-Treasurer, Councilor), K. F. Adkins, G. Brown, J. P. Brown, G. N. Davies, J. D. Jago, N. Livingstone Ward, E. Marlay, K. H. Martin, D. J. MacGibbon, F. N. Monsour, K. Romaniuk, S. Roveda, J. A. Sagar, G. L. Simmonds, J. M. Smyth, L. Stevens, and B. A. Shrimpton.

Monthly meetings have been held at which both visiting speakers and members of the Section have discussed research methods and specific projects.

The officers at the end of 1970 were Neil Livingstone Ward, Chairman; John P. Brown, Secretary-Treasurer; and Bernard T. Homan, Councilor.

THE MELBOURNE SECTION

In February 1969 a group of twenty dentists met at the School of Dental Science, University of Melbourne, and agreed to form a Melbourne Section. This group included the following members of the IADR: H. F. Atkinson, D. S. Barker, M. J. A. Campbell, A. R. Docking, A. A. Grant, J. K. Harcourt, J. E. L. Jeffrey, A. V. Leong, W. A. McDougall, B. G. Radden, E. Storey, P. R. N. Sutton. Henry F. Atkinson was elected Chairman and David S. Barker Secretary and Councilor.

The first scientific meeting of the Section was held on Thursday, 29 May 1969, at the School of Dental Science, where three research papers were presented. At the 1969 Annual Meeting of the Australia-New Zealand Division in Brisbane on August 28, the formation of the Melbourne Section was ratified.

The second annual meeting of the Melbourne Section was held at the School of Dental Science on 29 April 1970. Bryan G. Radden was elected Chairman, David S. Barker reelected Secretary, and Harry A. McIntosh elected Councilor. The elections were followed by a scientific meeting during which two papers were presented.



THE NEW ZEALAND SECTION

The inaugural meeting of the New Zealand Section was held in Christchurch on 20 July 1963. Founding members of this Section were T. G. Ludwig, L. J. Coxhead, C. M. Littlejohn, M. R. Kean, H. S. Gray, H. N. Aitken, F. R. Shroff, A. Smillie, G. H. Leslie, R. Malthus, B. Healy, J. Gavin, D. J. Beck, I. Short, M. McCann, D. Watt, M. E. Bell, G. N. Davies, V. Cooper, and Sir John Walsh.

Meetings have been held annually since 1963, with venues in Christchurch, Auckland, Wellington, and Dunedin. The city of Dunedin, the location of New Zealand's only Dental School, was the most frequent host to the Section meeting. Student and postgraduate participation at meetings has been encouraged.

On several occasions the idea had been put forward that the New Zealand Section amalgamate with the Australian Division of IADR to form an Australia-New Zealand Division, with New Zealand becoming a Section within this framework. In 1969 both Australian and New Zealand members unanimously declared their support for the formation of such a joint Division. The IADR Council, meeting in Houston, Texas, March 1969, gave their full approval for the formation of a joint Australia-New Zealand Division of IADR with New Zealand being a Section within the new Division.

By the end of 1970 officers of the New Zealand Section were Martin R. Kean, President; Terence W. Cutress, Secretary; and Harry G. Huxley, Councilor. The membership numbered twenty-five.

The New Zealand Section looks forward to being host to the Division meeting to be held in August 1973.

THE PERTH SECTION

Western Australia is far removed from the eastern seaboard where all the other Sections are located. But in 1969 motivation to form a Section came from R. F. Stockwell and P. J. Henry. Together with D. J. Cock, they called a meeting of interested parties, and it resulted in the eventual formation of the Section.

The Perth Section was approved by the Australia-New Zealand Division in 1969. The 1969 and 1970 officers were David J. Cock, President; Rodney F. Stockwell, Secretary; and Patrick J. Henry, Councilor.

THE SYDNEY SECTION

A Section was constituted in 1969 by IADR members residing in the Sydney urban area. It was approved at the Australia-New Zealand Divisional Meeting that same year. Its office-bearers for 1969 and 1970 have been Eric M. Bevan, President; Barrie R. D. Gillings, Secretary; and Peter D. Barnard, Councilor.

THE BRITISH DIVISION

THE BIRMINGHAM-BRISTOL-CARDIFF SECTION

At the request of members living in the area of Birmingham and Bristol, England, and Cardiff, Wales, a Section was formed at the Eighteenth Annual General Meeting of the British Division in April 1970. The



members in the area of these three cities felt that one annual meeting per year of the British Division did not provide sufficient opportunity for current exchange of ideas. As the sole function of the Birmingham-Bristol-Cardiff Section was entirely to provide a forum for further scientific discussion, it was deemed unnecessary that the Section should possess officers.

THE NORTH AMERICAN DIVISION

THE ANN ARBOR SECTION

This Section received early recognition at the University of Michigan and therefore was the fifth to be organized as part of the IADR in 1923. Soon thereafter, U. G. Rickert assumed the duties of Section Secretary. The first known record of IADR members of the Ann Arbor Section is recorded in the *Journal of Dental Research* in 1928.³ Early members were Russell W. Bunting, Marcus L. Ward, Chalmers J. Lyons, and Erman O. Scott. The first scientific contribution from this Section to an annual IADR meeting was made by Bunting at the fourth meeting, held in Chicago, 26 March 1926. It was on one of his favorite topics, entitled "Studies of the Relation of *Bacillus Acidophilus* to Dental Caries".

In 1927 Russell Bunting was elected Vice-President of the IADR, and uniquely was reelected to this office in 1930, becoming President in 1932.

On 10 May 1928 the Ann Arbor Section held its first local IADR scientific meeting, having both afternoon and evening sessions. The following year Philip Jay joined and became coeditor of the Ann Arbor Section; Marcus Ward was the other coeditor. At this time Ura Rickert was selected President-Elect of IADR and became President, 1930-31.

The second local meeting was held on 16 May 1929 with two papers presented in afternoon and evening sessions; membership of the Ann Arbor Section increased to nine soon after. Following the death of Rickert in 1938, secretarial duties were assumed by Philip Jay, who remained in that post for many years and in 1943 was elected President of IADR.

Studies of the effect of fluorine on mottling of enamel and caries was an early investigation at the University of Michigan under Jay. Under the direction of Ward, other developments included prosthodontic materials, cements, amalgams, gold alloys and substitutes, chromium-cobalt alloys, colloidal and polymeric impression materials, refractory investments for casting, and corrosion studies.

By 1950 cephalometric studies to measure growth were being conducted by George C. Moore as well as studies involving the diagnosis and treatment of oral cancer. Measurements of the vibration of dental hand pieces, and of temperature rise in tooth tissue during cutting, as well as improvements in dental burs and studies involving stress analysis of restorations and prosthetic devices, were being made.

During the late 1950s, in addition to extending many of the previously mentioned studies, there have been studies of the electromyography of oral and facial muscles, transplantation of teeth, thermal conductivity



of tooth substances and filling materials, cell biology, electron microscopy, dental X-ray techniques, shell casting, and differential thermal analysis of dental materials.

Several members of the Ann Arbor Section have been honored by the IADR for their contributions to dental progress and to the organization. Floyd A. Peyton and James K. Avery have served as chairmen of the Science Awards Committee. Peyton and Kamal Asgar have been recipients of the Souder Award, while Seong S. Han received the Oral Science Award and Sigurd P. Ramfjord received the Basic Research in Periodontal Disease Award. (See chapter on "Awards".)

By the end of 1970 the officers were M. M. Ash, Chairman; Edward W. Tillitson, Secretary; and Seong S. Han, Councilor. The membership was thirty-eight.

THE AUGUSTA SECTION

The Augusta Section was founded in 1969 in Georgia. Charter members were the following: J. E. Williams, J. Weatherred, D. E. Beaudreau, T. J. Zwemer, Louis J. Boucher, B. Fritz, D. F. Bowers, Leon Leonard, T. R. Dirksen, J. E. Grasso, W. B. Hammer, D. Gardner, J. C. Hickey, George W. Burnett, Steve Kolas, William Wege, B. M. Pennel, R. G. Topazian, B. H. Rice, L. P. Gangarosa, and A. O. Rahn.

As a new Section its meetings have been of an organizational nature, yet its membership reached eighteen.

The officers at the end of 1970 were Thomas R. Dirksen, President; William R. Wege, Secretary; and Louis P. Gangarosa, Councilor.

THE BALTIMORE SECTION

This Section was first organized in 1933. Founding members were M. S. Aisenberg, E. C. Dobbs, E. V. McCollum, and A. H. Shultz. Other early members were G. M. Anderson, J. Ben Robinson, H. Goldstein, and H. E. Kelsey. The Baltimore Section hosted the IADR annual meeting in 1937.

Due to later inactivity, the Section was reorganized in 1962. Members at this time were Irving Abramson, Alvin D. Aisenberg, Myron S. Aisenberg, George M. Anderson, Edward C. Dobbs, Frank A. Dolle, A. Bernard Eskow, Conrad C. Ferlita, Alvin F. Gardner, William E. Hahn, William Kress, H. Berton McCauley, Jose E. Medina, George Piavis, Kryle W. Preis, D. Vincent Provenza, Norton M. Ross, Douglas J. Sanders, Joseph H. Seipp, Jr., and Donald E. Shay.

The officers at the end of 1970 were Martin J. Lunin, President; Donald J. Forrester, Secretary; and Donald E. Shay, Councilor. Membership numbered thirty-three.

THE BIRMINGHAM SECTION

The Birmingham Section of the IADR was established at the University of Alabama Medical Center in the autumn of 1951, with five members. The founding officers were J. F. Volker, President and Councilor; L. H.



Robinson, Secretary; and J. P. Lazansky, Editor. In the intervening years the Section has grown considerably and in 1970 the membership was forty-four.

The principal and continuing activity of the Section has been to sponsor seminars and lectures on oral research. These programs expanded substantially with the establishment of the Institute of Dental Research at the University of Alabama in Birmingham School of Dentistry. There also have been conferences organized and sponsored by the Birmingham Section. One of these, though cosponsored by other groups, was a world report on new research findings entitled "Diet and Oral Health" held 23 April 1956. Another notable gathering on 25-27 September 1959 had essayists from the local Section as well as O. Backer-Dirks of the University of Utrecht, F. S. Mehta, Secretary of the All-India Dental Association, and Bengt Gustafsson of Lund University. Birmingham's primary member, Joseph F. Volker, became IADR President in 1956-57.

At the end of 1970 the officers were Sidney B. Finn, President; John M. Shackleford, Secretary; and Arthur H. Wuehrmann, Councilor.

THE BOSTON SECTION

The Boston Section was founded on Friday, 17 December 1920 at the Harvard Club of Boston. Among those founding members were Robert R. Andrews, Lawrence W. Baker, George A. Bates, Fred R. Blumenthal, Percy R. Howe, A. Leroy Johnson, V. H. Kazanjian, L. M. S. Miner, William Rice, Alfred P. Rogers, H. Carlton Smith, Eugene H. Smith, Kurt H. Thoma, and George H. Wright. Also attending this meeting were Frederick B. Noyes of Chicago and William J. Gies of New York. (The dinner bill for the occasion came to \$58.60 for sixteen dinners, cigars, and even cigarettes.)

Other early members were W. G. Bridge, F. P. Chillingworth, H. DeW. Cross, Adelbert Fernald, and C. E. Hatch.

In the late 1920s and early 1930s, a great deal of acrimony was evidenced between William J. Gies and the Section concerning the responsibility for the collection of subscriptions to the *Journal of Dental Research* of which Gies was Editor.

After the Second World War, the membership increased to forty by 1948, and by 1970 it consisted of 115 members. Notable members during this period were F. Brudevold, P. Boyle, J. M. Dunning, P. Goldhaber, H. Goldman, R. O. Greep, J. Hein, J. Irving, P. Keyes, J. Macdonald, R. S. Manly, H. Majerison, C. Moorrees, P. Munson, J. Shaw, and R. Sognnaes, among others.

The Boston Section was host to the IADR annual meeting in 1961.

Three members were honored by election to the IADR Presidency: Leroy M. S. Miner, for two terms, 1927-28 and 1928-29; Reidar F. Sognnaes, 1957-58; and Richard S. Manly, 1966-67.

Currently, an annual award is made at the spring meeting for the best paper presented by a novice student, who would therefore likewise participate at the annual meeting.



As dental research has grown, so has the number of institutions currently represented by the membership, which is now drawn from Boston University, Forsyth Dental Center, Harvard University, Massachusetts Institute of Technology, and Tufts University.

At the end of 1970, the officers of the Section were Poul Grøn, President; Edward A. Sweeney, Secretary; and Irving Glickman, Councilor.

THE BRITISH COLUMBIA SECTION

The history of the British Columbia Section is brief because of its recent formation. The Section initially developed within an amalgamation of IADR members in Oregon and Washington as the Pacific Northwest Section. The first meeting as a separate Section was held in 1966; for three years the Section existed without a legal constitution, due to an oversight on the part of some officers. However, this was no impediment to the first combined meeting of the Northwest regional members and the new Section which met at the new Faculty of Dentistry of the University of British Columbia in 1967. While there were a few pioneer members of the IADR in British Columbia for many years prior to the formation of a Dental Faculty in Vancouver, the Section's history parallels the development of this recent addition to dental education in Canada. The Faculty responsible for the initial development of the Section were Leon Krintz, the initial Chairman of the Section; Dan G. Middaugh, initial Secretary of the Section; and Dean S. Wah Leung, Councilor since the inception of the Section; John B. Macdonald, President of the University of British Columbia; and Richard H. Roydhouse.

The Section must always be grateful for the material support and use of facilities provided by the University of British Columbia. One of the clear objectives both of the Faculty and IADR has been the fostering of research. The success of their aims, due to the leadership of the Dean and the provision of funds and facilities by the University and the National and Medical Research Councils of Canada, is clearly shown in the "Catalogue of Dental Research Projects in the United States and Canada Fiscal Year 1970".⁴ Thirteen projects at the University of British Columbia are listed, a greater number than at any University in Canada and exceeded only by a half-dozen or so other universities in North America. Thus the Section claims to be active, perhaps not in formal meetings, but certainly as individuals in research endeavor.

The officers at the end of 1970 were Richard H. Roydhouse, Chairman; Shadi L. Khanna, Secretary; and S. Wah Leung, Councilor; members numbered fourteen.

THE BUFFALO SECTION

The Buffalo Section was founded on 30 March 1965 at the Dental School of the State University of New York at Buffalo. The original members were S. A. Ellison, F. Emmings, J. A. English, S. L. Fischman, J. Guttuso, S. P. Hazen, K. Langeland, M. E. Neiders, G. T. Phipps, S. E. Sorenson, P. H. Staple, and R. P. Wagner. Officers elected that year were Solon A. Ellison, President; Mirdza E. Neiders, Vice-President and



Secretary; and Grant T. Phipps, Councilor. At the end of 1970 the officers were the same, and membership totaled thirty-eight.

THE CHICAGO SECTION

On Thursday evening, 30 December 1920, there was a meeting at the University Club of Chicago at which William J. Gies cited the need for organization among dental research-minded persons. The following men had been invited by Frederick B. Noyes to attend: Ludvig Hoektoen, Frederick B. Moorehead, Arthur D. Black, William H. Welker, William G. Skillen, Edward H. Hatton, and Newton G. Thomas. Professor Gies presented in detail the features of the organization under the name of the International Association for Dental Research with the purpose of relating, under that name, local societies organized in various communities throughout the world. National organizations were to be known as Divisions and community organizations as Sections of the Association.

After the presentation of William Gies and a very thorough discussion which ensued, a motion was adopted that a Section be organized in Chicago to affiliate with the International Association for Dental Research.⁵ Elected to membership that evening were William Bebb, William G. Skillen, and Newton G. Thomas. Officers were then also elected: Frederick B. Noyes, President; Newton G. Thomas, Secretary; and Ludvig Hoektoen and Arthur D. Black, Councilors.

At the next two meetings, 31 March and 2 June 1921, the IADR original Constitution was discussed and approved. Since the new Constitution called for more Councilors, the following five were elected from the Chicago Section: Thomas L. Gilmer, Frederick B. Noyes, Arthur D. Black, William H. Welker, and Newton G. Thomas. At the next meeting (the fourth in 1921 and all held at the University Club in downtown Chicago) the first scientific presentation was made by Edward H. Hatton of Northwestern University. Subsequent meetings were regularly held about four times a year in those early years. There were a few presentations at each gathering, and the gatherings grew with the years.⁶

On 14 December 1945 a Silver Anniversary dinner meeting was held. A letter from William J. Gies was read, as well as one from Wallace D. Armstrong, then IADR President. Frederick B. Noyes, now Dean Emeritus of the College of Dentistry, University of Illinois (and who was called the Father of the Chicago Section in Gies' letter), reviewed the birth and development of the Chicago Section. Edward H. Hatton discussed current activities and J. Roy Blayney, Director of the Zoller Memorial Dental Clinic, prepared a paper entitled "Research in the Future". Sectional meetings thereafter were usually held at the dental schools of Northwestern University, University of Illinois, and Loyola University, and at the Zoller Memorial Dental Clinic, University of Chicago.

By the end of the thirtieth year of activity of the Chicago Section of IADR, there had been held ninety-three meetings at which there had been presented 333 scientific reports by 211 different investigators. A Thirty-



Year Summary with all the minutes, meeting programs, and members' names, including all the officers, was bound in a volume presented to the Institute of Medicine of Chicago, of which the Chicago Section had been an affiliate member since 1954. Later volumes⁷ are likewise being prepared by Frank J. Orland, an active past office-bearer of this versatile Section.

An IADR Honorary Vice-Presidency was conferred upon Edgar D. Coolidge (1958-59) for great activity as a member and researcher.

Titles of papers read at the Chicago Section meetings were often, though not regularly, published in the *Proceedings of the Institute of Medicine* and the *Journal of Dental Research*.⁸

The Chicago Section was host to the annual IADR meeting for a record fourteen times⁹ through 1970. Section members formed the Local Arrangements Committee of IADR on these significant occasions. (See chapter on "Meetings and Members" for exact dates and sites.)

This Section was also honored by having the most men elected to the IADR Presidency while they were members of the Section: Frederick B. Noyes, 1925-26; Arthur D. Black, 1929-30; Edward H. Hatton, 1933-34; William G. Skillen, 1936-37; Isaac Schour, 1941-42; Allan G. Brodie, 1948-49; J. Roy Blayney, 1949-50; Leonard S. Fosdick, 1951-52; Dan Y. Burrill, 1963-64; and Gordon H. Rovelstad, who was elected while in Chicago but was transferred to Washington, D.C., where he served his term of 1970-71. It should be mentioned that there might have been another IADR President from the Chicago Section; unfortunately, Rudolf Kronfeld, who was President-Elect, 1939-40, died 13 February 1940, exactly one month before his inauguration as President.

One of the highlights of the Section was its Fiftieth Anniversary Dinner Meeting held (almost on its birth date) on 28 December 1970. In addition to many members and wives, several guests attended from other Sections who were in Chicago for the AAAS Nd Section Meeting down the street (see chapter on "Other Gatherings" for topics and site). After the cutting of the elaborate birthday cake, F. J. Orland, President-Elect of IADR, portrayed the total though concise history of the Chicago Section in chart form. Next on the historical program, G. H. Rovelstad, IADR President, spoke on "The Next Fifty Years".

The officers of the Chicago Section at the end of 1970 were H. William Lyon, President; Allen F. Goldberg, Secretary; John P. Waterhouse, Treasurer; and Patrick D. Toto, Councilor.

Moreover, there were at the time of the Section's Fiftieth Anniversary Meeting a total of 165 members (more than in any other Section), ninety-five of whom were regular IADR members and seventy associate members.

THE CINCINNATI SECTION

The Cincinnati members of IADR voted to form a Section in January 1964. It was recognized by the parent organization in March of the same year at the Forty-second General Meeting in Los Angeles, California.



Founding members were J. A. Gray (President), R. W. Broge (Councilor), A. W. Radike (Secretary), J. Ennever, W. E. Cooley, O. P. Sturzenberger, W. W. Briner, M. D. Francis, W. J. Griebstein, and A. H. Meckel.

The officers at the end of 1970 were Marion D. Francis, President; Robert W. Lehnhoff, Secretary; and James S. Widder, Councilor. Membership added up to an even twenty.

THE CLEVELAND SECTION

The Cleveland Section was founded in 1929 and approved in 1930. Some of the founding members were Samuel Chase, Frederick Waite, Robert P. Dressel, Weston Price, and Victor Meyers. Shortly after the Section was formed, Thomas J. Hill and T. Wingate Todd joined as members. Among later additions to the Section was William L. Wylie in 1946 who became Dean of Western Reserve University School of Dentistry.

The Seventeenth IADR General Meeting was held in Cleveland in 1939, and the Cleveland Section served as host at that time.

Several members of the Cleveland Section have been recognized for their distinguished contributions to dental research. In the 1940s, Carl Sheu conducted significant research on hygroscopic investment materials, and E. Carl Miller did clinical research on silver amalgam restorations. He expanded the original work of James T. Sweeney by investigating such factors as cavity design, matrix preparation, and mercury-alloy ratios. In 1968 the IADR award for basic research in biological mineralization was conferred on David B. Scott, now Dean of the School at WRU.

Several Cleveland Section members served distinguished terms as President of the IADR: Thomas J. Hill served in 1939-40; Samuel Chase, whose research of the development of the tooth bud is internationally known, was President in 1946-47; and Francis A. Arnold, who later became Director of the National Institute of Dental Research, held the position in 1953-54, but while a member of the Washington Section. The eminent oral pathologist and previous Dean of Case Western Reserve University School of Dentistry, Paul E. Boyle, was IADR President in 1955-56.

The distinguished records of these outstanding scientists have reflected great credit on the Cleveland Section in the past. The Section is currently quite active, and makes several yearly contributions to the dental research literature. Currently, the Cleveland Section meets with the Columbus and Cincinnati Sections in the spring each year prior to the IADR meeting for a scientific and social program. This practice has helped to foster better communications with the other two Ohio Sections.

The officers at the end of 1970 were James R. Swancar, President; Robert T. Ferris, Secretary; and Lawrence J. Scaletta, Councilor. There were twenty-three members at this time.

THE COLUMBUS SECTION

The Columbus Section of IADR was founded in 1932 in the Ohio State University Colleges of Dentistry and Medicine. The Section hosted the IADR annual meeting that same year. The charter members were H. C.



Brown, A. J. Bush, H. V. Cottrell, Bernice T. Horton, S. J. Randall, R. D. McFarland, and P. C. Kitchin. Past-Presidents of the Section have been H. V. Cottrell, F. Starr, L. F. Edwards, C. O. Boucher, S. Arnim, H. B. G. Robinson, P. Weisenstein, C. Conroy, D. Permar, J. Woelfel, D. McConnell, S. Kolas, G. App, and W. Bruce. Paul C. Kitchin, while an active Columbus member, became IADR President in 1937-38, which truly was an honor for the Section.

Since 1964, the Columbus Section has participated with two other active Sections, those of Cleveland and Cincinnati, in a yearly "Ohio Sections Meeting" which has traditionally consisted of an exchange of professional reports and exchange of fellowship among the members, twenty-three of which currently belong to this Section.

The officers at the end of 1970 were William A. Bruce, Chairman; George G. Blozis, Chairman-Elect; Dennis W. Foreman, Secretary; and Samuel Rosen, Councilor.

THE HOUSTON SECTION

The Houston Section was established in 1939. The charter members were W. H. Scherer (President), Emmerich Kotanyi (Councilor, Editor, and Secretary), and F. C. Elliott, Dean of the University of Texas Dental School. In addition to the three members, the dentists of Houston were invited to attend the first meeting. At this meeting President Scherer presented a brief discussion of the IADR, including its founding, its aims, and other interesting announcements, such as that subscriptions to the *Journal of Dental Research* could be obtained for \$5 per year. Emmerich Kotanyi was the principal speaker of the evening, presenting a paper entitled "The Morphological Origin of Most of the Cysts in the Jaw and Their Clinical Aspects". This versatile man had been a member of the Vienna Section for ten years and served as its Secretary for five years prior to coming to the United States.

In 1969 the Houston Section was host to the IADR annual meeting.

The officers at the end of 1970 were Kenneth O. Madsen, President; James J. Vogel, Secretary; and Edwin L. Smith, Councilor. Members added up to fifty-one at this time.

THE INDIANAPOLIS SECTION

The Indianapolis Section was initiated in September 1940 by William H. Crawford, Dean of the Indiana University Dental School, as Editor, and Virgil D. Cheyne as Councilor. Hannah E. Silberstein was the first Secretary. It was not until 30 July 1941, however, that the Charter was granted.

The first business meeting was held 3 March 1942, and the membership had grown to include Thomas D. Speidel, Harry J. Healy, Glen Pell, and Thaddeus G. Gregory. By 15 October 1942 the membership consisted of nine members and was a growing concern. Meetings were held biannually from 1942 to 1955.

When the IADR general meetings were held in French Lick Springs, Indiana, in 1950, 1951, and 1954, the Indianapolis Section made the arrangements and played host.



The Section meetings had a tenor of research in the reports of scientific investigation given at each meeting. A sample program could be taken from the 13 March 1957 meeting at which papers to be presented before the annual IADR meeting were read and discussed. There were seventeen such papers, ranging from "The Effect of Thyroid Gland Function on Salivary Flow and Viscosity in the Rat" by William G. Shafer to "Studies on the Solubility of Certain Dental Materials" by Richard D. Norman.

Membership has remained active in basic and clinical research as inspired by the founding fathers. By 1970 there were fifty members in the Indianapolis Section.

Some of the members who have been President of the Section are Ralph W. Phillips, 1958-61; S. Miles Standish, 1962-63; David Bixler, 1963-64; Charles L. Howell, 1964-65; and Richard D. Norman, 1965-71. Past-Secretaries of the Section are Hannah E. Silberstein, 1941-42; Ralph W. Phillips, 1944-45; Henry M. Swenson, 1945-56; Charles L. Howell, 1956-58; Marjorie L. Swartz, 1958-64; and LaForrest D. Garner, 1964-70.

The activities of the Indianapolis Section have included support programs held in conjunction with the Dental Research Council, as well as special research programs during which time papers are read in preparation for annual IADR presentations.

The Indianapolis Section has been honored by the election of Maynard K. Hine (1952-53) and Ralph W. Phillips (1967-68) to the Presidency of the IADR. Hine, Dean of the School at IU, has been active in many facets of the Association and helped guide the scientific growth of the IADR during his term as President. Phillips, likewise, has had a varied background of experience in organizational affairs and helped direct basic organizational changes during a rapid membership growth period of the Association. On the occasion of his election, a testimonial dinner was held in his honor, with 110 people responding by their presence.

All in all, the Indianapolis Section of IADR has had extremely good success in stimulating active clinical and basic research at Indiana University School of Dentistry over the past twenty-nine years.

The officers at the end of 1970 were Richard D. Norman, President; LaForrest D. Garner, Secretary; and Marjorie L. Swartz, Councilor.

THE IOWA SECTION

The Iowa Section was formally initiated in 1936. The founding members were C. L. Drain (Secretary), A. W. Bryan (Councilor), G. S. Easton (Editor), L. B. Higley, A. O. Klaffenbach, and R. H. Volland. Other early members were W. J. Simon and K. E. Wessels. Since that time, the Section has increased from six to thirty-five members.

On 8 December 1937, L. B. Higley presented a paper entitled "A New and Scientific Method of Producing Temporomandibular Articulation Radiograms." Thirty-three years later, some Iowa Section members are still involved in the same type of research.



The Iowa Section is an active component of IADR with a considerable number of young researchers, which contributes greatly to the dental profession. The entire membership of this Section, which includes the administration, faculty, and students of the University of Iowa College of Dentistry, is currently looking forward to the completion of new dental facilities so they can increase their contribution to dental research.

The officers at the end of 1970 were Narendar N. Soni, President; Leslie H. Higa, Secretary; and William H. Tade, Councilor.

THE KANSAS CITY SECTION

An organizational meeting of the proposed Kansas City Section was held 27 April 1950 at the University of Kansas City School of Dentistry, Kansas City, Missouri. The following officers were elected by unanimous vote: Hugh I. Myers, Councilor; Ben W. Warner, Secretary; and Leon J. Kramer, Editor. It was decided to hold meetings at least once every two months. Speakers on science, research, and related fields were to be scheduled for future meetings. It was suggested by Leon Kramer that the membership in the Section be built by electing associate members interested in this field. The vote for the Section's first honorary member was extended to the Dean of the School of Dentistry, Roy James Rinehard.

In 1946 the IADR annual meeting was in Kansas City, and the Section was the gracious host.

Soon after transferring to this Section as the new Dean, Hamilton B. G. Robinson, who had been Editor of the *Journal* for over two decades, was elected President of the IADR, 1959-60.

By 1969 the Kansas City Section consisted of nineteen active members; however, meeting attendance is usually around thirty-five. Three or four dinner meetings are held each year, and the programs consist of speakers from the group or outside speakers who might be in the area at the time. Officers are elected for three-year terms. By the end of 1970 the officers were Jack L. Stewart, President; Robert L. Briggs, Secretary-Treasurer; and Viola D. Flanagan, Councilor.

THE KENTUCKY SECTION

The first Section in Kentucky was the Louisville Section, established in 1932, but it became extinct in the late 1940s (*re* Louisville Section, see "Extinct Sections" further on in this chapter). Interest in reestablishing a Section in Kentucky appears to have been generated in 1962. Alvin L. Morris, then Dean of the College of Dentistry at the University of Kentucky, and Norbert J. Burzynski of the Dental Faculty at the University of Louisville were the proponents of this new contemplated Section originating in Lexington. Emmett R. Costich and Raymond C. Bard set about the task of determining the requirements and procedures necessary to organize those individuals in the Kentucky region, concerned with dental research, into a body eligible for affiliation with the IADR. Although it was determined by the end of 1963 that there was a sufficient number of qualified individuals to create a Kentucky Section, it was decided to postpone the final organizational meeting until after



the 1964 meeting of IADR. This permitted those individuals approved for membership in the IADR during its spring meeting to be included in the initial meeting.

In August 1964, A. L. Morris appointed Sheldon Rovin, Donald E. Knapp, and John R. Mink to the nominating committee, charged with the duty of preparing a slate of provisional Section officers to be presented at the first formal organizational meeting which was held on 3 September 1964. At this meeting Wesley O. Young was elected Chairman; N. J. Burzynski, Vice-Chairman; Harmon C. Bickley, Secretary-Treasurer; and Emmett R. Costich, Councilor. Subsequently, a petition was sent to the IADR but was referred to the North American Division for official recognition. At the business meeting of the NAD held in Toronto, Canada, July 1965, the organization of the Kentucky Section was finally approved.

At the end of 1970 the officers were Raymond P. White, Chairman; William K. Elwood, Secretary; and Donald A. Welk, Councilor. Membership totaled fifty-six, which included nineteen young associate members.

THE LINCOLN-OMAHA SECTION

This Section of the IADR was organized in 1965 by Richard P. Suddick of Creighton University in Nebraska. Charter members of the Section were R. P. Suddick, T. J. Urban, R. E. Bradley, D. O. deShazer, R. L. Ireland, B. Kutler, V. E. Levine, K. W. Bruce, J. J. Buresh, W. S. Kramer, R. M. Knapp, and S. Weinstein. The first officers were Richard E. Bradley, President; Theodore J. Urban, Secretary; and Richard P. Suddick, Councilor. Since then, the Section has met three times each year to hear presentations of original research from its members. One of these meetings is held in conjunction with the Nebraska Academy of Science's annual meeting in April of each year. Two of the Section members hold positions in the Nebraska Academy (T. J. Urban on the Policy and Educational Program Committee and D. O. deShazer on the Editorial Board) which facilitates these cooperative undertakings. Abstracts of the dental research papers are published in the Annual Proceedings of the Academy, while full papers are eligible for publication in the *Transactions of the Academy*.

Membership of the Section has expanded greatly since 1965; by mid-1970 there were forty members plus ten associate members. The officers at this same time were Theodore J. Urban, President; J. Ursick, Secretary; and Richard P. Suddick, Councilor.

THE MEXICO SECTION

According to IADR records, there were thirteen members in Mexico in 1947, but the next year a Mexican Section was approved at the Twenty-sixth General Meeting of IADR. The Section in 1948 consisted of seven members: Honorata V. Acosta, Ramon Cordova, Samuel Fastlicht, Ramon S. Gamboa, Felix R. Leycegui, Miguel D. Mercado, and Carlos E. Pomes. Serving on the Editorial Board of the *Journal of Dental Research* (1950-57) representing Mexico was Samuel Fastlicht. There was a considerable period of inactivity, and records show that Sectional status was lost in 1962.



In 1967 there were again thirteen members but no Section. But in 1969 when membership increased to twenty-five, the Section was reorganized and approved at the Forty-seventh General IADR Meeting. There were thirty-one regular members and twenty-four associate members listed in 1970, and the officers at the end of the year (who were also officers in 1969) were Jesus A. Sarabia Aguilar, President; Eduardo Galindo Benton, Secretary; Roberto Villegas Malda, Editor; and Manuel Rey Garcia, Councilor.

The first Seminario Anual was held 19-23 October 1969; some of the participants were Barnet Levy, Ira Shannon, and William From, who all came from Houston.

The second Seminario Anual¹⁰ was held 29 August-2 September 1970 in San José de Purua, Michoacán, Mexico. This elaborate meeting was presided over by Jesus A. Sarabia, Presidente Sección Mexicana. Martin Cattoni was awarded "un Diploma de Honor". Arthur R. Frechette, Secretario-Tesorero of the parent IADR, presented the Declaratoria Inaugural.

THE MINNESOTA SECTION

The Minnesota Section was founded on 2 May 1927. It was approved by the IADR Council in 1928. Chronologically, it was the tenth Section of the Association and has remained one of the most active components. Its first meeting was held in the Men's Union on the Minneapolis campus of the University of Minnesota. The ten charter members as recorded for election to membership in the Sixth General Meeting of the IADR in March 1928 were as follows: Elmer S. Best, Herman A. Maves, Frederick S. Meyer, William D. Vehe, Carl W. Waldron, Daniel E. Ziskin, Boyd S. Gardner, Irwin A. Epstein, Carl J. Grove, and George S. Monson. William Vehe was elected President, and Daniel Ziskin, the primary organizer, was elected Secretary-Treasurer.

The research interests of the Section were quite diverse from its inception. This is readily apparent from the activities and interests of the charter members. Elmer Best's interest in research had led him to organize, some years prior to the founding of the IADR, the Academy of Pierre Fouchard as well as its publication. Herman Maves and Fred Meyer were interested in clinical research in crown and bridge; Bill Vehe, in fused porcelain techniques; Carl Waldron, in maxillofacial surgery, and Dan Ziskin, in hospital dentistry. It seems significant that Boyd Gardner, from the Mayo Clinic, espoused a view of dental health as part of the patient's general health according to Irwin Epstein, one of the few remaining charter members.

During the first years a pattern of meetings became established which has been continued ever since: a spring meeting being conducted at the Mayo Clinic in Rochester and at least one other meeting in Minneapolis or St. Paul.

For many years the programs were informal affairs, consisting of dinner, a brief business meeting, and an exchange of the members' research ideas and experiments. There were no formal presentations; rather, there was a mutual encouragement and constructive criticism of one another's research enterprise. The encouragement was important because neither the College of Dentistry nor the Mayo Clinic Department of Dentistry had much



in the way of funds or facilities for doing research. Indeed, some of the administrators actually discouraged their faculty and staff from engaging in research because they felt it would interfere with teaching and other staff activities.

Despite these difficulties, many of the members were able to accomplish significant research and provide leadership in showing the relationship between research and improvements in dental practice. Because of his interest in mineral metabolism in calcified tissues, it was logical that Wallace D. Armstrong became a member of the Minnesota Section soon after taking a position in the Department of Biochemistry in the School of Medicine. In 1935 Armstrong was elected Secretary-Treasurer of the Minnesota Section; he had subsequently held, at one time or another, all of the offices of the Section, as well as the Presidency of the IADR, 1945-46. His research on fluorides and teeth is well known; what may not be as widely recognized are his administrative and organizational talents. Very probably, he was instrumental in having the IADR hold its annual meeting in Minneapolis in 1938.

As private and government funds provided increasingly better support for dental research, both the number and the academic credentials of individuals that were attracted to careers in dental research improved. The number of members increased from the initial ten in 1928 to twenty-five in 1948 and sixty-one at present. Currently, members include faculty of the University of Minnesota Schools of Dentistry and Medicine, faculty and staff of the Mayo Graduate School of Medicine and the Mayo Clinic Section of Dentistry, as well as dental researchers in the Minnesota Department of Health and in industry.

Since 1961 abstracts of papers presented at Section meetings have been published in *Northwest Dentistry*, official journal of the state dental associations of Minnesota, North Dakota, and South Dakota. This has been a valuable service to the members of both the dental associations and the Minnesota Section.

In March 1947 the Section donated \$100 to the Minnesota Dental Foundation, Inc., a nonprofit organization which provides small grants and otherwise promotes research and teaching in dentistry. The Section also established the William H. Crawford Award in 1963 as a memorial to the man who served the School of Dentistry as Dean from 1945 to 1964. Dean Crawford encouraged the faculty to excel in research endeavors while continuing to provide the finest kind of teaching and service.

The officers of the Minnesota Section at the end of 1970 were Lars E. A. Folke, President; E. Severn Olsen, Secretary; and Burton J. Shapiro, Councilor.

THE NASHVILLE SECTION

The Nashville Section was organized 5 December 1967 at Meharry Medical College in Tennessee and was approved by the IADR Council at its annual meeting in San Francisco in 1968. (An earlier IADR Section in the state was the extinct Tennessee Section, 1944-53.) The founding members of the Nashville Section were Albert G. Berry, Theodore E. Bolden, W. J. Bryant, Arturo Buenahora, Paul D. Elcan, Fred C. Fielder, James L.



Martin, Katherine M. Massey, Eugenia L. Mobley, Henry A. Moses, Elisha R. Richardson, and John C. Taylor.

The officers at the end of 1970 were Elisha R. Richardson, President; Katherine M. Massey, Secretary; and Fred C. Fielder, Councilor. Membership amounted to twelve.

THE NEW ORLEANS SECTION

The first New Orleans Section of the IADR was organized in 1937 by four dentists: Sidney L. Tiblier, C. S. Tuller, Frederick J. Wolfe, and Alton D. Brashear. In the 1942-43 academic year, Harold W. Peterson, James T. Ginn, and Emmerich Kotanyi (from the Vienna Section) became members. But Kotanyi left to become a charter member of the Houston Section, and Ginn left to become Dean at the University of Tennessee Dental School. During 1945-46 Thomas F. Spiedel, Alton K. Fisher, and Duane W. Lovett became members of the Section. Harry Clausen, Thomas L. Hagan, and C. C. Bass were inducted into the local Section at the 29 January 1948 meeting. Titles of papers presented at some of these meetings were: "Fibrous Dysplasia of Facial Bones" and "Amelogenesis" by A. K. Fisher; "Enamel Attachment Cuticle" and "Calcification of the Dental Enamel" by C. C. Bass. Later in 1948, T. F. Spiedel left for the Minneapolis Section and Alton K. Fisher transferred to the Iowa Section.

Early meetings were open to guests of members and other interested individuals. All members were urged to be active participants. Lively discussions were held at monthly meetings. Other members taken into the Section in 1949 were Harold Fullmer and Paul Cook, but Fullmer left in 1953 for the NIDR and transferred to the Washington, D.C. Section.

The New Orleans Section became somewhat inactive, but was reinstated in 1967 at the Forty-fifth General Meeting of IADR. The new and active officers were: Malbern N. Wilderman, President; Kurt J. S. Odenheimer, Secretary; and Victor Halperin, Councilor.

At the end of 1970 officers were Victor Halperin, President; Rosa I. Carvel, Secretary; and Kurt J. S. Odenheimer, Councilor. At the same time, there were thirty-two Section members.

THE NEW YORK SECTION

The New York Section was in effect the earliest and had been one of the most significant of the Sections. Since New York City was the site of the founding of the IADR itself,¹¹ the same men, almost all residing in the largest city of the United States, formed the nucleus of this early Section. There is on record, as William J. Gies pointed out in statements from his "Brief Review of the History of the IADR" in 1930, that: "On May 27, 1921 the groups in these three cities by adopting the Constitution now in force, formally created the New York Section, the Boston Section and the Chicago Section as of the respective dates of the first meetings of the Association in these three cities."¹²

The New York Section's first scientific meeting took place exactly eight months later, on 27 January 1922. This is a well-recorded fact, unlike much other information about the New York Section. There was



somewhat of an intermingling pattern with the parent IADR, since it was at this meeting of the Section on January 27 that J. Leon Williams, then President of IADR, made the only vital statement regarding IADR during his term of office. These remarks, duly documented elsewhere, preceded his lengthy scientific presentation on "Disputed Points and Unsolved Problems in the Normal and Pathological Histology of Enamel".¹³

This successful first public meeting of the New York Section was chaired by Arthur H. Merritt and was attended by its members as well as by several notable guests from as far away as Boston, Buffalo, Washington, D.C., and San Francisco.¹⁴

By the end of March 1928, the following had become members of the New York Section: C. F. Bodecker, L. A. Cahn, M. W. Carr, J. D. Eby, W. K. Gregory, J. M. Inouye, M. Karshan, Frances Krasnow, H. J. Leonard, J. O. McCall, F. S. McKay, E.G. Miller, Jr., H. F. Osborn, Alfred Owre, and B. W. Weinberger, thus bringing the total membership up to thirty-six.

There is meager information as to early officers. Leuman Waugh was Secretary of the Section in 1927, while Bissell B. Palmer was Secretary in 1928 and 1929.

In 1930 the membership had grown to forty, and by the end of the year on December 10 there was a special tenth-anniversary meeting at the Columbia University Club. Here William J. Gies gave the first address of the evening, and it proved to be noteworthy on the ten-year history of the IADR.

In the twentieth anniversary year of 1940, there were sixty-nine members. The anniversary meeting of the New York Section was held on December 20 at the St. Moritz Hotel. Editor Frances Krasnow recorded the interesting details for the *Journal*.¹⁵ Speakers for the occasion, introduced by Chairman Charles G. Darlington, were Charles Bodecker, E. M. Bluestone, Brigadier General Leigh C. Fairbank, and, of course, William J. Gies. In 1945 Frances Krasnow compiled the proceedings of the twenty-fifth anniversary meeting¹⁶ which was held at the Men's Faculty Club, Columbia University. Daniel E. Ziskin was Chairman of the Section. As before, William J. Gies spoke on the origin and history of the Association. Other speakers were John R. Dunning, discussing atomic energy, and the attorney, Emanuel D. Becker, "who won the case for the New York Section in proving that any presentation before its scientific sessions may be questioned by the Association [i.e., the New York Section] and can be withheld from inclusion in its published proceedings if so determined." (This was probably the only time a legal situation had arisen. A paper had been presented before the New York Section on 8 June 1943, but was rejected for inclusion in the published proceedings due to "its lacking any newness". Court action had been instituted, but the case was won by the Section as stated.)

In succeeding years there were many well-planned scientific meetings, usually in the spring and autumn, especially during the Chairmanship of Frances Krasnow (1947-49) and thereafter.

The New York Section had been host to the IADR annual meeting quite a few times (four and a half) in



December 1922, April 1927, May 1933 (business meeting only—because of the Depression), March 1942, and the Fiftieth Anniversary Meeting in 1970. (See chapter on "Meetings and Members".)

Five men of the New York Section were honored in the earlier days by elevation to the Presidency of IADR: J. Leon Williams, 1921-23; Paul R. Stillman (for an interim period when J. L. Williams was ill), 1923-24; Leuman M. Waugh, 1926-27; William J. Gies, 1939-40; and Charles F. Bodecker, 1942-43.

Soon after the demise of William J. Gies in 1956, a Tribute to him who had meant so much to the New York Section was written by Harry H. Shapiro; in part it eulogizes:

To adequately express the feeling of loss at the passing of our guiding spirit, Dr. William J. Gies, is impossible. He epitomized the essence and meaning which underlie the scientific method and he remains an inspiration to those of us, fortunate enough to have been included among his colleagues.

On behalf of the membership body of the New York Section of the International Association for Dental Research we wish to express our devotion to his ideals and our everlasting indebtedness to him, who was our constant friend and advisor. . . .

The New York Section did indeed devote itself to the ideals of the Founder by continuing with its scientific meetings down to current times when its membership reached almost one hundred.

Current officers at the close of the first fifty years in 1970 were David J. Smith, Chairman; Eli D. Goldsmith, Secretary; and Leo Zach, Councilor.

THE NORTH CAROLINA SECTION

The North Carolina Section was approved at the Forty-first General Meeting of IADR on 23 March 1963. Presidents of the Section have been Clifton E. Crandell, 1963-66, and Duane F. Taylor, 1967-72. Secretaries of the Section have been D. F. Taylor, 1963-66; J. B. Sowter, 1967-72. Councilors to the IADR have been Robert B. Sager, 1963-66, and Andrew D. Dixon, 1967-72. Members added up to thirty-two by the end of 1970.

THE PHILADELPHIA SECTION

The leading dental society of Philadelphia (founded in the early 1890s) was the Academy of Stomatology. It had a reserve sum amounting to about \$10,000. The Academy established a Committee on Research and authorized the income from that fund to be used for supporting research. Small allotments were made to cover costs of making and printing photographs, typing, and purchase of research reprints. Other evidence of the early climate of research in the city was that the library of the College of Physicians of Philadelphia afforded a rich background of literature and that a genetically homogeneous strain of the albino rat with specimens of known ages fortunately was available at the Wistar Institute.

In 1927 Joseph L. T. Appleton, who was conducting bacteriological research at the School of Dentistry,



University of Pennsylvania, was asked by William J. Gies if he would be interested in organizing a Philadelphia Section of the IADR.

Soon after, there was a meeting of the IADR in Washington, D.C., in March 1928. Several individuals residing in the Philadelphia metropolitan area, who reported on scientific projects at this meeting, asked Professor Gies what were the proper steps to be taken for the formal establishment of the Philadelphia Section of the IADR. With his help this was accomplished with little delay. William J. Gies was the Secretary of the Organizing Committee; the other members were J. L. T. Appleton, E. Driscoll, and William A. Jacquette. Thus the Philadelphia Section was formally organized later in 1928, although there had been earlier preliminary meetings. The founding members were J. L. T. Appleton, Carrie K. Bryant (Secretary), J. A. Detlefsen, R. H. Ivy, Joseph McFarland, J. V. Mershon, W. R. Pentz, Hermann Prinz, A. Hopewell-Smith, and C. R. Turner. The Philadelphia Section was host to the annual IADR meeting on two occasions, in 1940 and in 1953. Two Section members were honored by election to the IADR Presidency: Joseph L. T. Appleton (1934-35) and Ned B. Williams (1958-59).

There were many meetings held, usually at the University of Pennsylvania School of Dentistry. Invited speakers were often asked to present their latest research to the members, University faculty, and graduate students. For example, F. J. Orland from the University of Chicago was asked to present his unique research on the germ-free animal dental caries project; this he did on the eve of 9 May 1955 in the School's Evans Dental Institute.

At the end of 1970 there were seventy members, and the officers were Joseph J. Aleo, Chairman; Arthur S. Miller, Secretary; and Irving M. Shapiro, Councilor.

THE PITTSBURGH SECTION

In the *Journal of Dental Research*, for December 1928, it is stated that since the Sixth Annual Meeting "... additional sections have been organized successively in Pittsburgh, St. Louis, Halifax, Minneapolis, and Philadelphia." The first meeting of the Pittsburgh Section was held on 30-31 March 1928. Members of the Section were listed as T. W. Brand, Kaethe W. Dewey, F. C. Friesell, H. E. Friesell, W. F. Swanson, L. E. Van Kirk (Secretary), and W. H. Wright (all now deceased).

The Pittsburgh Section has continued its meetings since its founding. An outstanding meeting was held on 18 May 1931, in which, by invitation, H. V. Churchill, a chemist of the Aluminum Company of America, presented a paper on water fluoride as the cause of mottled enamel, and F. C. Friesell, Dean of the School of Dentistry, University of Pittsburgh, read a paper sent for presentation by Margaret C. Smith, Edith Lantz, and Howard V. Smith of the University of Arizona, Tucson, on fluoride as the cause of mottled enamel in St. David, Arizona. These papers were published in the February 1932 issue of the *Journal of Dental Research*. So it was at this Pittsburgh Section meeting that the true cause of mottled enamel was first revealed.



From time to time, the Pittsburgh Section sponsored symposia concerned with recent developments. One such symposium on dental caries was held 23 June 1932 under the Section's auspices at the Mellon Institute. Another conference with many IADR members participating was held 19 April 1950, also at the Mellon Institute, on dental caries and periodontal disease. (See photos in chapter on "Meetings and Members".) Moreover, the IADR Annual Meeting was held in Pittsburgh in 1963.

By the end of 1970, officers were Robert Rapp, President; Daniel H. Fine, Secretary; and David Platt, Councilor. Membership was forty-eight.

THE PORTLAND SECTION

In 1946 Harold J. Noyes had come from Chicago to the University of Oregon as Dean of its Dental School. Under his guidance and leadership a Section of IADR was founded. In 1948 the Oregon-Washington Section was organized at the University of Oregon Dental School by C. R. Baker, J. C. Brauer, V. D. Cheyne, E. B. Jump, D. B. Law, H. J. Noyes, M. L. Snyder, and B. O. A. Thomas. It soon became known as the Pacific Northwest Section. It can be surmised that, from the first meeting onward, Dean Noyes saw the need for better communication between the West Coast schools on the subject of dental research and teaching. Consequently there followed a series of three annual conferences hosted in turn by the Universities of Oregon, Washington, and British Columbia from 1949 to 1951.

In 1966 the Northwest Section was reorganized into the Portland, Seattle, and Vancouver (later British Columbia) Sections. Annual meetings have been continued, however, on a collective basis, now rotating among the three cities. The original officers of the Portland Section were Walter B. Hall, President; John C. Mitchem, Secretary; and Ellis B. Jump, Councilor. Recently the Section has taken over the responsibility of a Faculty Research Club at the University of Portland and thus expanded its local usefulness.

At the end of 1970, there were fifty-six members, and officers were Oscar N. Lucas, President; John C. Mitchem, Secretary; and Ellis B. Jump, Councilor.

THE RICHMOND SECTION

The Richmond Section was founded in 1933. Founding members were Harry Bear, Sigmund F. Bradel, and J. C. Forbes. The following year Harry Lyons and J. B. Williams joined.

Due to inactivity in the late 1950s, the Section was reorganized in 1960 on 9 September at a luncheon meeting held in the Campus Room at the Medical College of Virginia. Membership at this time was comprised of Charles Barr, Alton D. Brashear, George W. Burke, Jr., O. Wendell Clough, Herbert D. Coy, William M. Feagans, John C. Forbes, Roscoe D. Hughes, Holmes T. Knighton, Harry Lyons, Alexander L. Martone, John J. Salley, and Harold M. Syrop. Those actually present for the meeting were Burke, Clough, Feagans, Hughes, Knighton, Salley, and Syrop. The following officers were elected: Harold M. Syrop, Chairman; George W. Burke, Secretary; and John J. Salley, Councilor.



The Richmond Section had again become rather inactive except for electing officers. On 8 May 1970 the Section met and elected the following officers: Philip J. Modjeski, President; Douglas B. Knuckles, Secretary; and Charles B. Sabiston, Councilor. At this meeting a Constitution and By-Laws (the first) were adopted. The Richmond Section now includes the Richmond area, which brought in three IADR members from the University of Virginia in Charlottesville. All members now pay \$2 annual dues—another first. The Section and Holmes Knighton were honored when he was elected to the IADR Presidency, 1960-61. On 3 November 1970 there were fourteen regular members and twelve associate members in the Richmond Section.

THE ROCHESTER SECTION

Like the Association itself, the Rochester Section in upstate New York had humble and informal beginnings. It was approved on 25 May 1933 at the General Meeting of the IADR held at the Western Universities Club in New York City. This New York gathering was essentially a business meeting to take care of matters not taken up in conjunction with the scientific session, which was held in Chicago two months earlier. The four founding members of the Rochester Section were Basil G. Bibby, Cyril D. Marshal-Day, Harold C. Hodge, and H. J. Sedwick, all of whom were dental fellows at the School of Medicine and Dentistry at the University of Rochester. The first-named served as Secretary of the Section, but there was no formal appointment of officers.

With the exception of two interested dental practitioners, Ralph Voorhees and Paul Lalone, membership of the Rochester Section was composed almost entirely of Research Dental Fellows at the University of Rochester. In addition to those already named, membership during the first decade included A. D. Brashear, R. E. Brawley, W. E. Taylor, H. T. Knighton, G. Van Huysen, M. K. Hine, M. LeFevre, H. B. G. Robinson, J. F. Hall, M. W. McCrea, R. S. Manly, V. D. Cheyne, and J. F. Volker. Meetings of the Rochester Section were called each year, generally in conjunction with one of the afternoon dental research seminars at the School. The meeting prior to the annual meeting of the IADR was designated as the time that the election of officers would take place for the following year. It became policy to elect new officers at least every other year, so as many as possible of the dental research trainees would gain experience in the workings and problems of a scientific association.

A large expansion of membership took place following the initiation of research activities at the Eastman Dental Center, and in recent years the majority of the members have been associated with that institution. It has become policy to alternate the annual meetings of the Rochester Section between the Dental Center and the University and to divide the responsibilities and honors of office as well.

When the *Journal of Dental Research* underwent its crisis in late 1935 and early 1936, it was decided at the March IADR meeting that it be put under management of certain members of the Rochester Section. Hamilton B. G. Robinson accepted responsibility for the editorship and business management of the *Journal*



and with Harold C. Hodge and Maynard K. Hine helped to put it on a more secure basis. In 1948 the Rochester Section hosted the annual meeting of the IADR (the only time) independently of the American Association of Dental Schools which met in nearby Buffalo, New York. There were many original members of the Rochester Section who had been elected President of the IADR. However, the only two who were Section members at the time were Harold C. Hodge (1947-48) and Basil G. Bibby (1950-51).

In the Fiftieth Anniversary year, officers of the Rochester Section were Richard E. Stallard, President; James E. Kennedy, Secretary; and Erling Johansen, Councilor. At the end of that same year, 1970, there were twenty-six regular IADR members in the Section.

THE ROCKY MOUNTAIN SECTION

The Rocky Mountain Section (which later became the Frederick S. McKay Section) was organized in Denver, Colorado, on 20 November 1968. The Section was approved officially at the IADR annual meeting in 1969. Founding members were Leslie R. Burrows, Gordon J. Christensen, R. P. Dunkley, G. P. Ivancie, Webster S. Jee, George A. Krikos, Jack Kring, Sholom Pearlman, H. R. Raper, R. G. Schallhorn, Charles L. Wilson, and Jaime Yrastorza.

The Section encompassed two major academic foci of dental research at the University of Utah in Salt Lake City and at the University of Colorado Dental School in Denver, and a third important focus at Colorado State University in Fort Collins.

The Section meetings alternate across the Continental Divide from year to year, and they already are serving an important function in bringing together dental investigators who would not ordinarily make the opportunity for such intensive scientific communication.

Dental research in the Rocky Mountain region has never received the visibility that it deserves. The basic epidemiology of fluorosis had its American origins in this locality through the efforts of Frederick S. McKay. Years later, significant research activity was conducted over a long period by Balint Orban, Beryl T. Ritchey, and others in Colorado Springs; and a substantial number of independent practitioners have continually generated numerous contributions in periodontal research, operative dentistry, and other important areas of endeavor.

Members of the Section expressed a desire to call attention to dental research more vigorously throughout the region and make it more meaningful to the public and professional community. Accordingly, it was planned to rename the Section in honor of Frederick S. McKay. (He began to study mottled teeth in Colorado as early as 1902. These observations led to the discovery of fluorosis in 1931, and the later beneficial effect on caries prevention when minimal fluoride is in drinking water.) It was then decided that Section members would hold a special dedicatory ceremony at their Denver meeting in March 1971 with Mrs. McKay as special guest of honor. A personal history of the late F. S. McKay was presented by Robert A. Downs,



Assistant Director of the Colorado Health Department, who had known and worked with McKay over a long period of time. A brief outline of the magnitude and significance of McKay's contribution was presented by Sholom Pearlman.

With the establishment of the University of Colorado School of Dentistry, membership in this Section may be expected to grow apace. It is the only unit of the IADR in the vast region of the Rocky Mountains and at present has twelve active members.

Officers at the end of 1970 (who were also the founding officers in 1969) were George A. Krikos, President; Robert G. Shallhorn, Secretary; and Sholom Pearlman, Councilor.

THE ST. LOUIS SECTION

The St. Louis Section of IADR was founded in 1928. Founding members were B. E. Lischer, E. B. Owen, G. B. Winter, and C. O. Simpson (who was Secretary of the Section, 1928-36). In 1930 the following were new members: W. A. Chamberlain, E. H. Hayes, Howard R. Raper, Russell C. Wheeler, and J. D. White.

In 1935 Otto Brandhorst became a significant member. In 1936 E. P. Brady and L. R. Main were added to the group, while in 1937 H. B. G. Robinson transferred from the Rochester Section to St. Louis, bringing the *Journal of Dental Research* with him as Editor. He also became Secretary of the St. Louis Section that year.

Leroy R. Boling, Edward Hampp, W. E. Koch, and W. B. Gurley were added to the rapidly growing membership in 1938. In the early 1940s William Bauer from Innsbruck, Austria, joined the Section.

Barnet M. Levy was a member of the St. Louis Section from 1944-49, as was Holmes T. Knighton, 1946-50. Theodor Rosebury joined the Section in 1949 and served several terms as a very active Councilor. It was he who presented an excellent tribute to William J. Gies upon his demise.¹⁷

The St. Louis Section has hosted several IADR annual meetings, in 1962, 1956, and notably the one on 15 March 1941. (See especially that 1941 banquet photograph in the chapter on "Meetings and Members".) Sectional meeting sites alternate between St. Louis University and Washington University Dental Schools. The faculties and graduate as well as some undergraduate students produce many of the scientific papers presented. Semiannual scientific sessions are attended by thirty to forty regular and associate members.

In 1928 there were only four members, but by 1948 there were twenty-one, and thirty-three by the end of 1970, when the officers were Bruno W. Kwapis, President; Richard W. Brand, Secretary; and John R. Ring, Councilor.

THE SAN ANTONIO SECTION

The organizing date of the San Antonio Section was 24 May 1968. Motivation behind the organization was the presence of a major military dental research organization, two very active and productive dental residency programs, and a private foundation that conducts dental research. The Dental Sciences Division of the USAF School of Aerospace Medicine is the military research unit, the Wilford Hall USAF Medical Center and



the Brooke Army Medical Center are the residency programs, and the Southwest Foundation for Research and Education is the private foundation. It was felt to be highly desirable to have a forum for the presentation and discussion of all the research being conducted in the San Antonio area.

The original members of the San Antonio Section were Arden G. Christen, Gaylord L. Hall, Andrew G. Hendricks, Malcolm D. Jendresen, Albert C. Jerman, Roland M. Meffert, Charles D. Miller, Robert M. Morrow, O. M. Reed, James E. Richardson, Vincent A. Segreto, and Robert K. Wettlaufer.

Since its organization, the San Antonio Section has conducted two program meetings, one at Lackland Air Force Base and one at the USAF School of Aerospace Medicine, Brooks Air Force Base. Ten papers of original research were presented at each meeting preceding a dinner meeting where a featured paper was presented.

Because the majority of the members of the San Antonio Section are in the Armed Forces, there has been a continual change in the membership due to transferral in and out of San Antonio. By May 1970 the membership was fourteen. It is hoped that with the presence of a new dental school in San Antonio, now under construction, the membership will be greatly increased.

Officers at the end of 1970 were Vincent A. Segreto, President; Albert C. Jerman, Secretary; and O. M. Reed, Councilor.

THE SAN FRANCISCO SECTION

Founded in 1924 as the sixth Section of the Association, the San Francisco Section has had continuing representation at the annual meetings. Founding members were J. S. Shell (Secretary), H. M. Bean, J. A. Marshall, E. H. Mauk, G. S. Millberry, F. H. Orton, and F. V. Simonton. Among the more prominent members over the past fifty years have been R. G. Agnew, L. H. Baume, H. Becks, W. C. Fleming, H. E. Frisbie, H. M. Leicester, J. H. Nuckolls, W. L. Wylie, H. M. Myers, and G. Ryge.

In the early years, the California Stomatological Research Group was a center for intense activity, which added to the Section's membership.

In 1953 the Section was deeply involved in a symposium on Diet and Dental Caries which received widespread national and international attention. The symposium was sponsored by the California Dental Association and brought outstanding figures to the area for several days of vigorous debate.

In 1960 D. H. Copp presented a paper at a Section meeting prior to its publication which described his discovery of calcitonin.

As a guest of the San Francisco Section, one of the recipients of the Senior Foreign Scientist Fellowship of the IADR was Takara Yonaga of the Tokyo Medical and Dental University. He spent the year 1967 in San Francisco, where he presented papers on his vital Pb staining technique, which he also discussed at New York and Boston Section meetings.



The Section was pleased to be host for the annual IADR meeting in both 1959 and 1968.

A member of the San Francisco Section, Gunnar Ryge, was elected Vice-President of the IADR during 1970. This marks the second time a local member was elected to this office; F. V. Simonton was Vice-President (1928-29) but then resigned from all academic endeavors, while Ryge was later elected IADR President (1972-73).

Officers at the end of 1970 were Herschel S. Horowitz, President; L. D. Cagnone, Secretary; and Isadore Zipkin, Councilor. Membership climbed to ninety-three.

THE SEATTLE SECTION

The Seattle Section initially developed within an amalgamation of IADR members known as the Pacific Northwest Section, which trichotomized in 1966. (See the histories of the British Columbia and Portland Sections in this chapter.) The first meeting as a separate Section was held late in 1966. Officers elected were Irving B. Stern, President; Martha H. Fales, Secretary; and Patricia J. Keller, Councilor.

The officers at the end of 1970 were A. Ian Hamilton, President; Benjamin C. Moffett, Secretary; and Leo M. Sreebny, Councilor, while membership was an even thirty.

THE SOUTHERN CALIFORNIA SECTION

The Southern California Section was founded in the latter part of 1949 at a meeting held at the Dental School of the University of Southern California. Included in the group of founders were Spencer Atkinson, Lucien Bavetta, Sol Bernick, Jean Brauer, Ben Ershoff, Ben Rabinowitch, Robert Rutherford, Max Shapiro, and Norman Simmonds. Bavetta was elected Secretary. Rabinowitch became Councilor shortly thereafter, when Brauer moved to Australia. After two or three years of activity, interest waned and the Section became inactive. As a new decade approached, fresh impetus to dental research in Southern California was provided from several areas. The School of Medicine at UCLA was well established and growing rapidly, and plans for a dental school were taking shape. An increasing number of the faculty at Loma Linda University Dental School were actively pursuing research interests. W. W. Wainwright was brought to the University of Southern California to launch a program in basic dental research. In collaboration with J. B. Taylor, Chief of Dental Service at the VA Hospital, Long Beach, he initiated a study of microleakage of restorations, as part of the program of the Veterans Administration to contribute materially to dental research throughout the country. With the arrival of Reidar Sognaes as Dean of the future School of Dentistry at UCLA, and of Harold Dute as Chief of Dental Service at the VA Center in Los Angeles, conditions were ripe for a reactivation of this IADR Section. Due largely to the initiative of Wainwright, the second phase in the history of the Southern California Section was launched with a meeting in the temporary quarters of the UCLA Dental School on 3 November 1960. A panel including H. Dute, R. F. Sognaes, E. C. Stowell, J. B. Taylor, and W. W. Wainwright presented a program on the



applications of isotopes to oral problems. Three meetings a year were held thereafter until recently, when the schedule became more irregular.

Sognaes has served as Councilor since the reactivation; Wainwright was Secretary until his departure, when he was succeeded by McGaughey. The President was Harold Dute; since then, the office has rotated between the three dental schools and the Long Beach VA Hospital.

The program format has ranged from multiple short papers to a full presentation of original studies or a survey of a particular field. In recent times it has sponsored student research competitions with grants of \$100.

The Section served as host to the IADR meeting held in Los Angeles in March 1964.

In 1967 the Section became affiliated with the Pacific division of the AAAS in time to participate jointly with the San Francisco Section in a symposium on the role of fluorides in skeletal tissues at the regional AAAS meeting held at UCLA. The symposium took place 19 June 1967 with John Knutson as moderator and included papers by Herschel Horowitz, Henry Leicester and Paul Thomassen, John Bethune, Howard Myers, and Richard Mumma.

Despite geographical separation from other IADR Sections, interest and participation in this Section has been maintained, and further growth is expected in the immediate future.

A member of this Section was very recently honored by election to the IADR Presidency: Clifton O. Dummett, 1969-70. (Reidar F. Sognaes had also been President in 1957-58, but this was before he came to California.)

The officers at the end of 1970 were Harold C. Slavkin, President; C. G. McGaughey, Secretary; and Reidar F. Sognaes, Councilor. Membership had increased to ninety-seven by this time.

THE TORONTO SECTION

In Canada the Toronto Section was established in 1921—the fourth Section of the IADR. It was the first Section organized beyond United States borders, thus providing practical meaning to William Gies' international concept of the parent Association. Moreover, Albert E. Webster of the University of Toronto was elected and served as President of the IADR in 1924-25. Toronto members by 1928 were J. F. Adams, G. R. Anderson, H. K. Box, A. J. Broughton, Thomas Cowling, W. E. Cummer, A. W. Ellis, C. J. Fraser, Andrew Hunter, F. C. Husband, A. J. McDonagh, E. W. Paul, H. S. Thomson, W. C. Trotter, and Albert E. Webster, who was uniquely honored a second time by being reelected President of the IADR in 1931.

On two occasions the Toronto Section was host to the IADR annual meeting. This was in 1930 and again thirty-five years later; the 1965 occasion was especially significant because of an excellent meeting¹⁸ presided over by Martin A. Rushton of England, who was the IADR President that year and the first man to hold that office from outside North America. (See chapter on "Meetings and Members" as well as the "Pages of Presidents".)



Another Toronto man was elected to the IADR Presidency. This was John B. Macdonald in 1968-69, who, before returning to Toronto, had been active in the British Columbia and Boston Sections.

Officers by the end of 1970 were M. C. Johnston, President; Arthur T. Storey, Secretary; and Robert M. Grainger, Councilor. The Toronto Section, which had twenty-four members, became known as the Ontario Section after 1970, as it gained more members beyond the city of Toronto.

THE WASHINGTON, D.C. SECTION

In 1931 William J. Gies, while Secretary of the IADR, asked George C. Paffenbarger to organize a Washington, D.C. Section, since he, Arthur B. Crane, Robert A. Keilty, Wilmer Souder, William T. Sweeney, Norris O. Taylor, and F. E. Rodriguez were all IADR members from the Washington, D.C. area. An organizational meeting of this, the seventeenth IADR Section, was held 13 October 1931 with the aforementioned persons.

Arthur B. Crane was elected Chairman of the Section and George C. Paffenbarger, Secretary-Treasurer; both continued to serve in these positions until 1936. In 1932 C. Willard Camalier, H. Trendley Dean, Aaron Isaacs, Clinton T. Messner, and Harry Kaplan were elected to membership in IADR and became members of the Washington Section, along with Henry Klein and E. V. McCallum of Johns Hopkins University from Baltimore, which had no Section at that time. Usually two meetings were held annually, a business and an academic one, with the latter usually featuring an outstanding scientist.

The Section grew with the admission of the following IADR members elected in 1933-36: Aleš Hrdlicka, Harrey E. Harvey, Eugene R. Stone, Roland Barber, Harold W. Krogh, Daniel F. Lynch, Joseph L. Bernier, B. Edwin Erikson, Luzerne G. Jordon, Sterling V. Mead, and Irl C. Schoonover.

At the eleventh meeting of the Section on 9 April 1936, the following officers were elected: George C. Paffenbarger, Chairman; Harold W. Krogh, Secretary-Treasurer; B. Edwin Erickson, Councilor; and Eugene R. Stone, Editor. At this time, plans were made for annual joint scientific meetings with the District of Columbia Dental Society.

The well-known oral and plastic surgeon V. H. Kazanjian was guest essayist at such a joint meeting on 12 April 1938. These combined meetings were continued until 1948 with the following guest speakers: Isaac Schour, Philip Jay, J. Roy Blayney, Thomas J. Hill, Stanley D. Tylman, Wilmer Souder, William T. Sweeney, and George C. Paffenbarger.

In 1938 there were twenty-three members of the Section, with the addition of Francis A. Arnold, who transferred from the Cleveland Section, and J. E. Ash, LeRoy P. Hartley, and John R. Beall.

During these early years the Washington Section was engaged in a number of activities that aggressively promoted and fostered dental research.

In 1953 the Washington Academy of Sciences accepted the Washington Section of the IADR as an



affiliated society of the Academy, and thus in the Washington area dental research and researchers were recognized by their peers in other research fields. Of course, prior to this, many dental researchers were members of the Washington Academy of Sciences.

It became the custom to have Section meetings at the National Bureau of Standards, the Cosmos Club, the U.S. Public Health Service, the Army Medical Museum, the Army Institute of Pathology, Walter Reed Army Medical Center, Georgetown University, Howard University, and the National Institute of Dental Research. At many of these meetings brief reports of research being conducted by the host laboratory were presented by their respective staffs. Some of these meetings attracted an attendance of 125 including guests, while Section membership attained a high of sixty-five (1968-69).

Thus, the Washington, D.C. Section in its thirty-nine years of continuous activity has stimulated collaborative research in dentistry with a host of other researchers who were trained in a great variety of disciplines and who became participating members of the Washington Section.

Washington Section members who had the honor to serve as IADR President were: Wilmer Souder, 1940-41; H. Trendley Dean, 1944-45; Francis A. Arnold, 1953-54; George C. Paffenbarger, 1954-55; James A. English, 1961-62; Seymour J. Kreshover, 1962-63; and Gordon H. Rovelstad, 1970-71 (who became President-Elect while still in the Chicago Section). The Washington Section was host to the IADR annual meeting twice in the past—in 1928 and 1967—and the 1973 meeting is planned to be held in Washington, D.C. as well. (See chapter on "Meetings and Members".)

At the end of 1970 membership was reported as twenty-two, while the officers were Walter E. Brown, President; Eugene F. Huget, Secretary-Treasurer; and Harold M. Fullmer, Councilor.

THE WISCONSIN SECTION

Previous to 1960 there were a few members of the IADR located throughout the state of Wisconsin. Some were active at the national level and participated in annual scientific sessions.

After initiation of graduate programs in the School of Dentistry, Marquette University, a Wisconsin Section of IADR was formed. Members of the faculty felt that a group through which each member could develop and improve his research skills was needed for guidance of graduate students.

In part through efforts of members of the Dental Materials Department (which had a vigorous research program) and partly through efforts of other members of the dental faculty interested in research and graduate education, a Wisconsin Section was formed in 1960. From among the eleven charter members, officers were elected and regular meetings held.

Early programs consisted of subjects dealing with statistics, research methodology, research problems, and also guest presentations. In preparation for the annual IADR meetings, papers scheduled for presentation were rehearsed.



Membership grew in the following years. Invitations were extended to interested colleagues throughout the state, as well as to faculty members, graduate students, and allied scientists.

Past-Presidents since 1960 are C. W. Fairhurst (1960-61), R. V. Winders (1962), L. J. Boucher (1963), C. J. Wilson (1964-65), K. Leinfelder (1966-69), and P. S. Sharma (1970-73). Those who have served as Councilors since 1960 are G. Ryge (1960-61), R. Brown (1962-63), R. W. Moss (1964-65), R. Brown (1966-69), and F. J. Knap (1970-73). Past Secretary-Treasurers since 1960 are R. Winders (1960), L. Boucher (1961-62), C. J. Wilson (1963), L. J. Boucher (1964), D. Weber (1965-69), and R. Winders (1970-73).

During the formation of the Wisconsin Section, it would seem appropriate to recognize the initial thrust applied by Gunnar Ryge, then Chairman of the Dental Materials Department, Marquette School of Dentistry, and other members of his department. Ryge's continued support for and participation in the activities of the IADR have been an inspiration to many. His current ascension to the Vice-Presidency of the parent organization is further testimony to his efforts, although he transferred to the San Francisco Section.

The Wisconsin Section, after enjoying an active beginning, became less active during the later 1960s. Departmental and faculty changes at Marquette University displaced many of the charter members.

However, a resurgence has occurred in 1970; in an effort to reactivate the Section, meetings and programs have been held and a recruitment drive is under way. Members totaled nineteen at the end of 1970. It is hoped that the Wisconsin Section of the IADR can continue to be an effective forum for dental research in the state of Wisconsin and further contribute to the IADR with dedicated members and worthy scientific efforts.

THE SCANDINAVIAN-NOF DIVISION

THE DENMARK SECTION

Before World War II, P.O. Pedersen had corresponded with William Gies about initiating a Danish Section of IADR. In a letter to Edward H. Hatton, IADR Secretary-Treasurer, dated 12 March 1950, Pedersen again asked the IADR to consider this matter. The Denmark Section was approved at the Twenty-eighth General IADR Meeting in 1950. Later, in another letter to Hatton (11 February 1952), Poul Pedersen mentioned that the Denmark Section had elected the following: Johannes J. Holst, Councilor; Poul O. Pedersen, Secretary; and Will Krogh-Poulsen, Editor. Other members at this time were Ove Brinch, Halfdan Eggers-Lura, Frode E. Hilming, and Jens J. Pindborg, who was designated as Honorary Vice-President of IADR, 1967-68. By the end of 1970 the officers were, Erik Hjørting-Hansen, Secretary, and, as President, Mogens R. Skougaard, who later was to be elected to the IADR Presidency (1973-74).

THE FINLAND SECTION

The Helsinki Section of IADR was approved in 1953 at the Thirty-first General Meeting of IADR. Some members in 1953 of this far northeasterly Section in Europe were Mauri Pohto and Yrjö V. Paatero, with Kalevi Koski as Secretary.



The Helsinki Section was renamed the Finland Section during 1969 because more and more members of this Section came from outside Helsinki, as from the city of Turku, where they belonged to the Turun Yliopiston hammaslääketieteen laitos (Institute of Dentistry, University of Turku).

The officers at the end of 1970 were Kalervo K. Koivumaa, President, and Lennart Forstén, Secretary.

THE NORWAY SECTION

In 1939 Ingjald Reichborn-Kjennerud wrote to Edward H. Hatton about forming an IADR Section in Norway. However, World War II broke out, and during the next five years of occupation, Norway was isolated from the research world. On 12 July 1945 three Norwegians met to organize an active Norwegian Section and appoint officers. They were Guttorm Toverud, Secretary; Ingjald Reichborn-Kjennerud, Councilor; and Reidar F. Sognaes, Editor. That same day they sent a letter to Wallace D. Armstrong, then President of IADR, informing him of their meeting. However, there was a lack of interest in Norway in the ensuing years because the functions of arranging annual research meetings and publishing a scientific journal were taken care of by the Nordisk Odontologisk Förening. The Section was not officially approved until the Thirty-first IADR General Meeting in 1953. Some members at this time were Thorvald Kvam, Birger Nygaard-Ostby, Kaare Reitan, Harald F. Sand, Reidar Selmer-Olsen, Jens Waerhaug, Egil P. Harvold, and Guttorm Toverud (Secretary).

Even after establishing the Norway Section in 1953, Norwegians had little interest or activity in the IADR because of NOF activity in that country. This situation changed, however, in 1969 when the IADR Council approved an agreement by which NOF assumed the functions of a Scandinavian Division of IADR. At the same time, the Norwegian Section of NOF merged with the Norway Section of IADR. (See chapter on "History of the Divisions".)

Officers at the end of 1970 were Knut A. Selvig, President; Sigurd H. From, Secretary; and Tore Kristoffersen, Councilor.

THE SWEDEN SECTION

The Sweden Section was approved in 1969 at the same time that the Scandinavian-NOF Division was established. (See "History of the Divisions" for details.) One of Sweden's outstanding researchers, S(ten) Yngve Ericsson of the Karolinska Institute, was designated an Honorary Vice-President of the IADR, 1967-68. The officers of this Section in 1969 as well as at the end of 1970 were Nils Sällström, President, and G. Oldén, Secretary.

THE NON-DIVISIONAL SECTIONS

THE ARGENTINA SECTION

During 1959 and 1960, the Argentine Society of Periodontology (Sociedad Argentina de Periodontología) held research meetings devoted mainly to periodontal problems but also to other fields. These



events motivated a relatively large number of investigators to have an organization that would concentrate their scientific efforts, thus offering an open forum for discussion.

As a result of these successful meetings, a group of investigators in dental sciences met on 14 December 1961 at the Faculty of Dentistry, University of Buenos Aires, and resolved the creation of the Sociedad Argentina de Investigación Odontológica (SAIO—the Argentine Society of Dental Research). After that, this Society met yearly (1962- 67) for presentation and discussion of scientific papers, with membership increasing from eleven founding members in 1961 to forty-eight in 1967.

After conversations between Fermín A. Carranza, Jr., Secretary-Treasurer of the SAIO, and Gordon H. Rovelstad, Secretary-Treasurer of the IADR, it was agreed to establish the Argentina Section of IADR on the basis of the existent local society. This was accepted by the IADR Council in March 1967. Then, on 24 November, 1967, the Argentine Society of Dental Research was dissolved.

The first annual meeting of the Argentina Section was held on 29 November 1968, and fifty-eight papers were presented. Actually, it was the ninth meeting of the same group of investigators. For reference, abstracts of papers presented before the meetings of the Argentine Society of Periodontology (1959 and 1965) and the SAIO (1961-67) have been published in "Revista de la Asociación Odontológica Argentina".

In 1968 the Argentina Section of IADR had fifty-four members, but at the end of 1970 there were seventy-six members. Officers then were Fermín A. Carranza, Jr., Presidente, and Francisco C. H. Devoto, Secretario. Margarita Muruzábal, who has been active in the area of scientific literature as Director of the Library of the Asociación Odontológica Argentina, was to become the President-Elect in 1972.

THE CARACAS SECTION AND THE MARACAIBO SECTION

The two main cities of Venezuela have IADR Sections, both of which were approved by the Council in 1969. The Caracas officers for 1969 and 1970 were W. O. Hohn H., President; Ernesto Muller M., Secretary; and Hugo Paolini R., Councilor. The Maracaibo officers for 1969 and 1970 were G. Jiminez, President, and F. Martinez, Secretary.

Both Sections continue to be active and hold regular annual meetings, usually in combination. At the end of 1970 Maracaibo had fourteen members and Caracas had seventeen.

THE ISRAEL SECTION

IADR members in Palestine began in late 1939 to organize the Palestine Section, which was approved in 1940. Founding members were Heinrich Berger, Hugo Brasch, Samuel Lewin-Epstein, Erwin Mansbach, Abraham Sussman, Jacob Yardeni, Bernhard Gottlieb, and Ernst Kellner (the latter two had been active in the Vienna Section). Officers for 1939-40 were Bernhard Gottlieb as Chairman, Councilor, and Editor, with Samuel Lewin-Epstein as Secretary. Moreover, Gottlieb was further honored by being designated as an Honorary Vice-



President of the IADR in 1940-41, as he also had been in 1932-33 while at the University of Vienna. (See chapter nine on "Honorary Status in the IADR".)

Due to inactivity, the Palestine Section slowly faded away despite attempts at revitalization and reorganization in 1952. It had disappeared completely by 1958, when efforts were made to establish an Israel Section. In October 1965, Kurt A. Rosenzweig, Head of the Department of Pedodontics, Hebrew University-Hadassah School of Dental Medicine in Jerusalem, contacted all IADR members in Israel in order to learn their interest in forming a local Section. Ino Sciaky, Dean of the School, initiated a campaign aiming to provoke the interest of these members into organizing. When positive views were obtained, the members voted in January 1966 to elect Mario Ulmansky as President and Edith Kaye as Secretary-Treasurer. By March 1967 the Section had been approved by IADR Council. Late in April 1967 the Section was informed by IADR Secretary-Treasurer Frechette of the necessity of preparing a constitution and by-laws for the Section. Activities in this respect were interrupted by the outbreak of the Six Day War and its sequelae. But by December 1967, when Arthur R. Frechette visited Jerusalem, a constitution and by-laws had been worked out.

The first Sectional meeting took place on 5 January 1968. It was a combination business and scientific meeting. The constitution was voted upon and approved. Ino Sciaky was elected as first Councilor of the Section and J. Yardeni as Honorary Member. A number of new members were accepted to the Section.

By the end of 1970 the officers were Edith Kaye, President; Shlomo Shapiro, Secretary; and Mario Ulmansky, Councilor. The membership totaled eighteen at this time.

EXTINCT SECTIONS

THE BUDAPEST SECTION

The Budapest Section was begun by Béla Bonyhárd and Ferenc Köszeg in 1934. Other founding members were Károly Balogh, István Bánhegyi, János Brand, Béla De Simon, Károly Ferenczy, Elek Földi, Dezső Hattasy, Oszkár Kaufmann (who soon hungaricized his name to Kömüves), Ervin Lörinczy-Landgraf, Gusztáv Morelli, Rudolf Rehák, Henrik Salamon, László Sugár, József Szabó, Steven Varga, and Dénes von Máthé. József Szabó was designated Honorary Vice-President of the IADR, 1935-36. By 1947 the *Journal* listed the Section as inactive, and at the Thirty-first General Meeting of IADR in 1953, the "inactivation" of the Budapest Section was approved by the IADR Council.¹⁹

The main reason for the death of the Budapest Section was the deaths of so many of its members who were victims of the terror of World War II, such as Bonyhárd, Kömüves, Köszeg, and indirectly, probably Salamon. Szabó and Földi died during the war years, and "natural" deaths were recorded for Bánhegyi and von Máthé. Rudolf Rehák died in late 1969. As of 1970, Ferenczy, Sugár, Hattasy, Balogh, and Lörinczy-Landgraf were still alive. Ferenczy was at that time lecturer on dental roentgenology at the University Dental Faculty of Budapest and received the Arkövy Medal of the Budapest Dental Faculty that is awarded every two years for an



outstanding accomplishment: in his case, it was for an excellent textbook on dental and oral roentgenology. László Sugár is lecturer in periodontology and oral diseases at the same school and in 1970 was Secretary-General of the Hungarian Dental Association. Balogh and Hattyasy are professors emeriti in Budapest; Lörinczy-Landgraf is just retiring from the aforementioned school.

Despite the demise of the Budapest Section, there is one extremely versatile IADR member in Hungary, and that is Peter Adler of Debrecen.

THE CHENGDU SECTION

The inauguration of the "China Section of the IADR" took place in 1934 at the School of Dentistry of the College of Medicine and Dentistry, West China Union University, at Chengdu, the capital of the densely populated province of Szechwan in western China. This large city has a history extending far back into the life of ancient China. Its high walls and great gates stood massively in a fertile plain, the basin of a prehistoric lake, surrounded by mountains. For long centuries, Chengdu has been one of the three major educational and cultural centers of China (Peking in the North, Nanking in the East, and Chengdu in the West). It was through perhaps fortuitous circumstance that this western center was the site of the first organized and university-level school of Dentistry in the whole of China. In this large and originally Western-sponsored university there was a fine medical school with excellent basic science teaching. A Canadian missionary dentist, Ashley W. Lindsay, in 1918 sensed the basic need in China for formal, standard-creating dental education. Over some years, other Western dental educators from different countries, and in other fields, participated. Qualified male and female Chinese students were given instructional and research training, often including overseas study and experience. Their degrees of M.D. or of D.D.S. were also recognized by the Board of Regents of the University of the State of New York, which facilitated subsequent graduate study in America. The courses interrelated so closely that a common and creatively linked biological and clinical foundation was provided. Graduates in Dentistry, many with extensive graduate training, are now active in dental education and in scientific investigation in various parts of mainland China and abroad.

The IADR Section, although never large in number, included members from the Faculties of Dentistry, Medicine, and Science. For example, in 1937 the membership consisted of Mary C. (Mrs.) Agnew, R. Gordon Agnew, H. Bruce Collier, Leslie G. Kilborn, Ashley W. Lindsay, and Harrison J. Mullett. Three of these men were honored by being designated Honorary Vice-Presidents of the IADR: R. G. Agnew, 1933-37, 1939-44; A. W. Lindsay, 1937-38; and H. J. Mullett, 1938-39. Research in dentistry, while actively conducted by Western professors familiar with occidental patterns of investigation, had, of course, to be encouraged, and gradually over the years the enthusiasm for orderly scientific enquiry grew very considerably, and publications of merit have appeared in the literature.

In terms of field research, the Tibetan mountains and plateaus offered great incentive from the



standpoint of investigations relevant to Dentistry—dental and oral epidemiology, systemic interrelations, ecologic factors of habitat (high altitudes, living conditions, diet, occupation, communication), of overall health and disease, of psychologic and philosophic status. (For example, R. Gordon Agnew, Professor of Pathology, West China Union University, 1924-46, conducted some seven expeditions into Eastern Tibetan country.) The political changes since 1949 in mainland China, and the collapse of communication, have unhappily closed doors to the Western World, to the detriment of all concerned. Thus, the Chengtu Section was doomed, and it involuntarily dissolved in 1949.

The stimulus, guidance, and "excitation" offered to Dentistry through the IADR has been increasingly productive in many parts of the world. The existence of the Chengtu Section was symbolic of a much-needed professional and scientific discipline in the development of Dentistry in China.

R. G. Agnew, now Professor Emeritus, University of California, San Francisco campus, School of Dentistry and School of Medicine, looks forward hopefully to an early opportunity to revisit mainland China and to offer assistance toward the reestablishment of communication and cooperation in research and education between mainland China, America, and dental centers internationally.

THE DETROIT SECTION

This Section was founded in 1937, by Charles Lane, S. J. Lewis, and Percy C. Lowery. Later members were Horton D. Kimball, Thomas L. Patterson, and Edwin S. Smyd. This Section was last listed in the 1953 roster in the *Journal* and had certainly disappeared before 1958. Yet the IADR General Meeting for 1958 was held in Detroit, since plans for annual meetings have to be made years in advance.

THE HALIFAX SECTION

This Section was established in Nova Scotia, Canada, in 1928. The founding members were J. Stanley Bagnall, Alden W. Faulkner, W. G. Dawson, Warren C. Oxner, S. G. Ritchie, R. P. Smith, and George K. Thomson. Other members who joined later were R. J. Bean, E. G. Young, A. B. Haverstack, Donald Mainland, Oliver W. Clough, and H. M. Eaton. Almost all of these were on the staff at the Dalhousie University Faculty of Dentistry in Halifax. The Section was listed on the IADR roster until mid-1952.

THE LOUISVILLE SECTION

The first organizational meeting of the Louisville Section was held on 19 April 1932. The founding IADR members were Theodore B. Beust, Raymond E. Myers, and John T. O'Rourke. The next meeting was held on 2 November 1932 at the School of Dentistry of the University of Louisville. There were seven abstracts presented at this meeting.²⁰

The Section was honored, as was its most active early member, when Theodore B. Beust was elected to the IADR Presidency in 1935-36. Moreover, the IADR General Meeting was held in Louisville in 1931 with the



Section and School acting graciously as hosts.

Through the next ten years, others joined the Section. They were William M. Randall, Brooks Juett, Holmes T. Knighton, Kenneth R. Pfeiffer, George B. Diefenbach, Dan Y. Burrill, William R. Wolfe, and Henry M. Wilbur. Though still listed in the *Journal* in the 1950s, the Section was somewhat inactive. From Dan Burrill, it was learned that in 1946 when Burrill first came to the University of Louisville, the Section was already relatively inactive, although Raymond Myers, Dean of the School, who was interested in dental materials research, would at times try to upgrade the Louisville Section, of which he was Secretary and Burrill was Councilor and Editor. According to the best records available, there were no meetings held in some of its years before the Section's demise. It probably became nonexistent in the early 1950s. When D. Y. Burrill left Louisville to come to Chicago in 1957, and F. J. Orland, the new Editor of the *JDR*, heard that the Section was defunct, it was finally removed from the official *Journal* listing.

THE NEW HAVEN SECTION

As early as 1930, a New Haven Section was founded in Connecticut. Charter members were C. G. Burn, A.M. Crosby, R. G. Hussey, W. G. Downs, Jr., J. P. Pigott, and G. H. Smith. Other early members were B. G. Anderson, H. A. Miller, J. J. Wolfe, S. S. Arnim, David Weisberger, and L. W. Burket.

There were five abstracts presented at the 12 February 1931 meeting of the Section.²¹ At this meeting B. G. Anderson presented a preliminary paper entitled "Incidence of Dental Caries among the Chinese". The complete paper ("A Study of the Incidence of Dental Caries in One Thousand Chinese") was presented at the 3 October 1932 meeting.²² Meanwhile, at the Section meeting of 7 December 1931, Bert G. Anderson presented a paper, "An Endemic Center of Mottled Enamel in China".²³ The material for this paper was collected while the author was a member of the staff of the Peiping Union Medical College, Peiping, China.

By the late 1930s membership had dwindled due to death, resignation, and members transferring to other Sections. In early 1940 the last surviving member was active Bert G. Anderson, who painfully recommended to Edward H. Hatton that the New Haven Section be formally discontinued. It was officially inactivated later that year.

THE PRAGUE SECTION

The Prague Section was organized in 1932. The founding members were Karel Cerný, Jan Jesenský, František Kostecka, A. E. Loos, Friedrich Neumann, František Neuwirt, and Karel Wachsmann. By 1934 there were two Karel Wachsmanns (father and son) in the Section. Others who joined the Section that year were Jaromir Krečan, V. F. Náprstek, Cestimir Parma, Josef Příbyl, Ferdinand Škaloud, and Hans Wermuth. In 1937 Karl Haupl joined the Section. In 1938 Karel Wachsmann, Sr., died. During World War II more and more members died, so that by 1948 there were only nine members: Cerný, Kostecka, Krečan, Neumann, Neuwirt, Parma, Příbyl, Škaloud, and Wermuth. The Section became inactive in the postwar period, and the



"inactivation" of the Prague Section was approved by the IADR Council at the Thirty-first General Meeting in 1953.¹⁹

Some of the founding members of the Section had been honored by being designated as Honorary Vice-Presidents of IADR: Jan Jesenský, 1933-35; Karel Wachsmann, Sr., 1935-38; Karel Cerný, 1938-39; and František Neuwirt, 1939-40.

In 1970 there was only one IADR member left in Prague: Anna Placková, who was awarded an IADR "Senior Foreign Dental Scientist" Fellowship. This enabled her to come to Chicago in 1968-69 and participate in several IADR research meetings while traveling in the United States to visit a few dental research centers.

THE TENNESSEE SECTION

In 1931 the Ninth IADR Annual Meeting was held in Memphis, Tennessee, but this did not provoke any IADR members to organize a Section there that early. However, a Section was founded in 1944 in Tennessee. The founding members were M. Don Clawson (Professor and Director of Dental Education and later President of Meharry Medical College), Marguerite Dean, R. A. Dean, E. A. Jasper, O. A. Oliver, H. P. Steinmeyer, and C. R. Wood. Other early members were Clifton O. Dummett and J. T. Ginn, both Deans at different periods in the history of the College. The Tennessee Section was last listed in the 1953 roster of the *Journal* and probably disappeared shortly thereafter.

THE VIENNA SECTION

The Vienna Section came into existence in 1929, in all probability due to the personal influence of Balint Orban, who during a stay in the United States became quite interested and active in the Chicago Section of IADR, serving as its Secretary-Treasurer, 1928-29. Consequently, after the Seventh General Meeting of IADR held in Chicago in March 1929, a Section in Vienna, Austria, was organized. The founding members of this Vienna Section were Bernhard Gottlieb, Ernst Kellner, Emmerich Kotanyi, Rudolf Kronfeld, Moriz Leist, Arthur M. Schwarz, Georg Stein, Joseph Weinmann, and Hermann Wolf, all of Wien, Austria. Kotanyi was the first Secretary of the Section.

In 1930 several new members emerged in the Section, namely, Arved Berg, Karl Breitner, Fritz Driak, Richard Grohs, Otto Hofer, Balint Orban (who had returned by then to Vienna), Hans Pichler, Otto Preissecker, Franz Schönbauer, Harry Sicher, Karl Spring, and Richard Trauner. Among the fifty-one abstracts listed at the Eighth General Meeting of IADR, eight came from the Vienna Section.²⁴

At this time Pichler was elected to a professorship in dentistry and to the Directorship of the Zahnärztliches Universitätsinstitut of the University Medical School of Vienna. Pichler, a graduate of this school, had earlier studied dentistry at Northwestern University Dental School under G. V. Black's preceptorship and had translated Black's *Operative Dentistry* into German. When the University Dental School moved to a freshly adapted wing of the old Vienna Garrison Hospital, a special department came into existence,



headed by B. Gottlieb, that might be termed a department of experimental oral biology. It was in this department that M.D. graduates who specialized in dentistry aggregated around Pichler and Gottlieb and also joined the IADR.

Thus, the new Vienna Section flourished, as demonstrated by the growing number of abstracts presented at the general meetings of the Association. At the Tenth General Meeting in 1932, Abstracts Nos. 54-73 came from the Vienna Section.²⁵ In fact, all but three members of the Section submitted papers. A variety of topics were discussed, not only from the field of experimental oral biology, but also from clinical oral surgery. Some of the papers were published *in extenso* in German, not only in dental journals, but sometimes in surgery specialty journals. At the Eleventh General Meeting, Abstracts Nos. 57-71 were also published in the *Journal* from this active Section.²⁶

In 1934 Fritz Driak became Secretary of the Section, and Hermann Mathis joined the Section. At the Twelfth General Meeting of IADR, Abstracts Nos. 48-61 were sent from the Vienna Section to be read by title.²⁷ Moreover, at the Thirteenth General Meeting, Abstracts Nos. 62-79 were from Vienna,²⁸ while at the Fourteenth General Meeting, Abstracts Nos. 75-93 were also from this versatile Section.²⁹

It is noteworthy that the influential nature of the Vienna Section and its members was instrumental in originating the IADR Sections in Budapest as well as in Prague.

In 1936 there were personal contacts with visitors from the United States to Vienna because of the Congress of the *Fédération Dentaire Internationale* held in the city. There were seventeen papers read by title at the Fifteenth General Meeting in 1937 sent in from Vienna.³⁰

Several Vienna men were designated as Honorary Vice-Presidents of the IADR. They were Bernhard Gottlieb, 1932-33; Hans Pichler, 1933-34 and 1939-42; Hermann Wolf, 1934-37; Otto Hofer, 1937-38; and Arthur M. Schwarz, 1938-39.

The worsening political atmosphere in Central Europe, especially in Austria, adjacent to Hitler's *Drittes Reich*, led to a reduction in the number of papers submitted to the Sixteenth General Meeting of IADR³¹ (Abstracts Nos. 65-74). Moreover, the membership list decreased by one as Balint Orban moved to the United States permanently in late 1937.

The German occupation of Austria in March 1938 (*Anschluss*) and the imminent threat of a new World War prevented the remaining members from keeping in contact with organizations in the free world, especially the United States. Thus at the Seventeenth General Meeting in 1939 there were no papers from the Vienna Section *per se*, though former members who had emigrated from Austria presented papers from their new Sections. Membership of the Vienna Section dropped from twenty before the German occupation to fourteen in 1939 and twelve in 1940. No abstracts were submitted to the Eighteenth General Meeting of IADR, and no further contact whatever existed with the Vienna Section through the years of World War II.



After the war and liberation of Austrian territory, with reestablishment of the Republic of Austria, Fritz Driak (who became First Deputy Director of the University Dental School) attempted to revive the Vienna Section. The formal revival, under the name of the Austria Section (Vienna Center), was accomplished in the early 1950s. By 1956 IADR members in the Section were A. Berg, F. Driak (Honorary Vice-President of the Section in 1953 and 1954), R. Grohs (Secretary in 1953 and 1954), O. Hofer, O. Preisseecker, F. Schoenbauer, A. M. Schwarz, and R. Trauner. Recently deceased members at this time were H. Pichler, W. Demuth, and K. L. Spring. There were also fifteen associate members apparently elected locally, including E. Zitka, who had been Secretary of the Section since 1954. Driak functioned as Councilor during this final period. It is difficult to say what activity the Section had, as communication between the Section and the IADR Office seemed almost nonexistent. The Section faded away, and its name was finally removed from the *Journal* roster in mid-1962.

The Vienna Section of IADR had been very productive and gained an excellent reputation, developing many outstanding personalities of the dental profession who migrated to other parts of Europe and, especially, to the United States. Hence, the Vienna Section was a very active link between Central Europe and the United States, a link that proved to be of extreme value in promoting the systemic disease concept with regard to the oral area.³²

THE WINNIPEG SECTION

This Section was founded in 1930. Charter members were E. Roy Bier, Fred T. Cadham, Matthew H. Garvin, Kenneth Johnson, Anne G. E. Mackenzie, Howard J. Merkeley, and W. J. Riley. Later, G. A. Buchanan became an associate member of the Section. By 1940, due to moving away, devoting interests elsewhere, or enlisting in the Canadian Army Dental Corps, there were only three members left: Bier, Riley, and Merkeley. In a letter to Edward Hatton, IADR Secretary, dated 9 February 1940, E. Roy Bier discussed the situation that prevailed in the Winnipeg Section. He told Hatton what had happened to various members and mentioned that Fred Cadham had withdrawn his financial and scientific interest earlier. In addition, he wrote that William Gies, who was IADR President, had somehow refused to drop his name or allow new election of members. Bier also said,

I tried and succeeded by correspondence to create interest in forming an Edmonton, Alberta Sectional division of the IADR where the only dental teaching faculty exists in Western Canada, but to my knowledge Dr. Gies also blocked that constitutionally.

I do not believe very much dental research will ever be carried on without a dental teaching faculty and or a dental college supplying research workers or interns to carry on detailed experiments. Winnipeg has no dental faculty in our University. The Medical faculty will not co-operate due to pressure of their own work. . . . You may think the status of our Winnipeg Section moribund and you can take such action as you see fit.

Thus this early Section died a dismal death! The Section was last listed in the 1953 roster of the *Journal*



but had probably disappeared before then.

REFERENCES

J Dent Res **31**: 521, 1952.

J Dent Res **33**: 637, 1954.

J Dent Res **8**: 697, 1928.

Catalogue of Dental Research Projects in the United States and Canada Fiscal Year 1970, DHEW Publication No. (National Institutes of Health) 72-101.

J Dent Res **8**: 7-9, 1928.

J Dent Res **8**: 613-614, 1928; **9**: 609-610, 1929.

These volumes will be available for study at the Library of the Institute of Medicine of Chicago, 332 South Michigan Avenue, Chicago, Illinois 60604.

J Dent Res **34**: 790-793, 1955; **37**: 762-763, 1958; thereafter, titles of all papers were published annually in a supplement to the *Journal*.

J Dent Res **50**: 993, 1971.

J Dent Res **50**: 751, 1971.

J Dent Res **6**: 101, 1924-26.

J Dent Res **11**: 55-59, 1931.

J Dent Res **5**: 27-107, 1923.

J Dent Res **5**: 107-108, 1923.

J Dent Res **20**: 1-4, 1941.

J Dent Res **25**: 293-296, 1946.

J Dent Res **36**: 800, 1957; not printed in the *Journal*, but see Rosebury, T.: The Challenge to Dentistry: A Tribute to William J. Gies, *Science* **126**: 1056-1058, 1957.

See the Proceedings of the Forty-third General Meeting of IADR, *J Dent Res* **44**: 1065-1095, 1965.

J Dent Res **32**: 717, 1953.

J Dent Res **13**: 275-280, 1933.

J Dent Res **11**: 235-236, 1931.



J Dent Res **12**: 709-712, 1932.

J Dent Res **12**: 591-593, 1932.

J Dent Res **10**: 406-413, 1930.

J Dent Res **12**: 483-512, 1932.

J Dent Res **13**: 213-222, 1933.

J Dent Res **14**: 187-206, 1934.

J Dent Res **15**: 192-203, 1935-36.

J Dent Res **15**: 344-360, 1935-36.

J Dent Res **16**: 335-344, 1937.

J Dent Res **17**: 320-324, 1938.

More background about the contributions of Vienna in this field relating to research and teaching can be found in the folio written by F. J. Orland in association with the silver and gold commemorative medal entitled "The Vienna School in the U.S.A." issued as part of The Medallic History of Dentistry by the Medical Heritage Society.



CHAPTER FIFTEEN: HISTORY OF THE GROUPS

The concept of Groups within the IADR did not enter into the thinking of the founding fathers or of any one else in the early life of the IADR. By its very nature, the Association name indicated it was ". . . for Dental Research". But dental research even then was a very broad area taking on the aura of the earlier omnibus societies in that it covered a great expanse of a scientific as well as a clinical field. Yet the Association had little impetus to subdivide into separate disciplines during most of its first two decades.

The urge to recognize academic categories came more from outside than from within the IADR. An active body of men in dental materials research had begun corresponding and had loosely organized by 1938 seeking affiliation with the IADR. Not all of the "materials men" were bona fide IADR members, and many were employees of companies selling dental products. A long period of negotiation commenced between several of these men and William Gies. (In those days Professor Gies took a very strong paternal view of "his" IADR and did not want any contamination with commercialism.) Finally Gies was convinced, however, that the affiliation could be a favorable event. Then "materials" members formed a Group of the IADR in late 1938. It was officially approved in 1939 and later became known by the acronym DMG. The success of this one large group proved a vital point in basic policy—that it could be acceptable to present research findings even if the investigative work was supported by funds from a commercial source or if the investigator was an employee of a profit-making agency.

The revised Constitution of 1940 (Article V, Section 3) provided a definition of a Group¹ "Members in any branch of dental science, with the approval of the Association, may organize a Group for the group advancement of the objects of the Association." The proposed Constitution of 1956 (Article V, Section 2) rephrased the definition² "Members in any branch of dental science, or in fields related to dental science, with the approval of the Association may organize a group to further the objectives of the Association in special scientific or professional fields." Although others were thus encouraged to so organize, the next body to be designated as a Group, comprising all those members concerned with craniofacial biology research, was not organized until 1965, some twenty-six years after DMG. The Periodontal Research Group was accepted in 1969 and the Behavioral Sciences Group not until 1971, although it formed a preliminary organization before the end of 1970. Several other academic disciplines were contemplating Group formation, but only the histories of the three Groups that were in existence within the first fifty-year life span of IADR follow in the order of official Association listing, which is alphabetical.

THE CRANIOFACIAL BIOLOGY GROUP

The nucleus for the Craniofacial Biology Group was formed at the Orthodontic Workshop held at the University of Michigan in June 1958. The report of the research section of that workshop carried a



recommendation that an International Society for Orthodontic Research be established. The following June, at the meeting of the Pacific Coast Society of Orthodontists, this suggestion was pursued in private discussion with George M. Anderson, then President-Elect of the American Association of Orthodontists, and his support for a research society was obtained.

In 1959 two meetings were held in which further interest was rallied for an International Society for Orthodontic Research. In July of that year the Second Cephalometric Workshop convened at Western Reserve University, bringing together orthodontists, anatomists, and physical anthropologists. In December of that year the Gatlinburg symposium on congenital anomalies of the face provided an additional gathering for the core group of biologists that formed this society.

In April 1960, during the annual meeting of the American Association of Orthodontists in Washington, D.C., George M. Anderson, then President of the Association, provided for a facility for the organizational meeting of an international society for orthodontic research. It is noteworthy that at that meeting a lively discussion developed as to whether the best interests of this embryonic research society would be served by affiliation with the International Association for Dental Research or whether it should continue under the aegis of the American Association of Orthodontists. After this meeting, a conference on growth funded by a gift from the Tweed Foundation for Orthodontic Research and sponsored by the organizational committee of the new society was held at the Kenwood Country Club near Washington, D.C.

On 16 April 1961 the first program and organizational meeting of the proposed International Society for Orthodontic Research was held in Denver, Colorado³ The meeting was held in conjunction with the annual meeting of the American Association of Orthodontists and was sponsored by the Research Section of the Association. The major address of that meeting was delivered by William L. Straus, Jr., Professor of Anatomy and Anthropology at Johns Hopkins University. He spoke on "Evolution of the Head". The discussers included Bertram S. Kraus and Melvin L. Moss.

At the organizational meeting that followed, the name of the society was changed to the International Society for Craniofacial Biology to provide a broader base of representation in the biological sciences and to limit the identification with a given discipline. The officers elected included Allan G. Brodie, Sr., President; Wilton M. Krogman, President-Elect; Bertram S. Kraus, Vice-President; Samuel Pruzansky, Secretary-Treasurer; and Melvin L. Moss, Editor.

The Executive Committee included the following: A. Lundstrom of Stockholm, J. F. Bosma, N. A. DiSalvo, W. L. Straus, Jr., M. V. Stack of London, and R. E. Moyers. The Membership Committee was chaired by C. F. A. Moorrees and included S. M. Garn, M. L. Moss, and J. D. Subtelney. The Constitution of the Society was fully accepted in 1962.



In 1964 the Society became truly international by virtue of a joint meeting with the European Orthodontic Society in Athens, Greece. A second joint meeting with the European Orthodontic Society was held in Bern, Switzerland, in 1967. The scientific program for that occasion was extremely well organized by Coenraad Moorrees of Harvard and attracted outstanding papers from a variety of disciplines. The first joint meeting with the IADR was held in Toronto⁴ in 1965. An affiliation with this major research society in the dental sciences was sought to attract a more diverse membership to its annual meetings. To conform with the organizational structure of the IADR, it was renamed the Craniofacial Biology Group of IADR. Since that time it has continued to meet on an annual basis in affiliation with the parent organization. The Group has continued to attract clinical and laboratory investigators from several disciplines, all joined in a common interest in the biology of craniofacial structures.

As a Group, it may be said that the membership is concerned with problem-solving in areas that can not be confined to conventional specialistic categories. As individuals, they possess pluralistic interests and temperaments that make for effective communication across the barriers of jargon and tradition that separate the disciplines.

On the occasion of the Fiftieth Anniversary Meeting of the IADR in 1970, the Craniofacial Biology Group convened four different sessions at which forty-eight papers were read.⁵ It has sponsored and will continue to plan to sponsor a special luncheon session with a distinguished guest speaker at these annual IADR sessions.

The growth and continued interest in the forum created by the Craniofacial Biology Group attests to its value within the structure of the International Association for Dental Research, though it will continue to plan occasional joint meetings with other professional societies. There were 127 members in 1970.

OFFICERS OF THE CRANIOFACIAL BIOLOGY GROUP

President

1966	Sam Weinstein (University of Nebraska)	1969	Robert J. Gorlin (University of Minnesota)
1967	Samuel Pruzansky (University of Illinois)	1970	Robert E. Moyers
1968	Coenraad F. A. Moorrees (Harvard University)		

Secretary

1966	Saul M. Bien (New York University)	1969	Howard Adus (University of Illinois)
1967	Saul M. Bien	1970	Howard Adus



1968 Saul M. Bien

Councilor

1966	Robert E. Moyers (University of Michigan)	1968	Samuel Pruzansky
		1969	Samuel Pruzansky
1967	Robert E. Moyers	1970	Samuel Pruzansky

SAMUEL PRUZANSKY, D.D.S.
Director, Center for Craniofacial Anomalies
University of Illinois at the Medical Center
Chicago, Illinois

THE DENTAL MATERIALS GROUP

INTRODUCTION

Dental research studies and clinical practice may be considered generally as being concerned with both preventive and restorative operations. Studies related to prevention are directed to the causes and effects of dental disease or the means to avert it, while restorative practice deals with the replacement of natural tissues that are lost by accident or disease. Such restorations are fashioned from the natural or synthetic materials available to the dental profession. Thus, it always has been that missing teeth and oral tissues are replaced by artificial restorations fabricated from contemporary materials, manipulated and adapted to provide a functional, aesthetic replacement of the lost tissues.

During the period from 1900 to 1935-40, in the years before the Dental Materials Group was organized, research studies on restorative materials were being conducted in limited amounts, and reports of some studies appeared in a variety of scientific journals. Results of studies on materials were being described from some of the dental schools, such as the University of Michigan,⁶⁻⁸ Northwestern University,⁹⁻¹⁰ the University of California,¹¹ and others.¹²⁻¹⁴ Some reports had appeared in the literature from investigators associated with the dental trade.¹⁵⁻¹⁸ Reports of studies conducted by private practitioners and clinic teachers in dental schools also were in the literature.¹⁹⁻²¹ Valuable results and reports were provided from the program of testing, standardization, and research related to restorative materials at the National Bureau of Standards and encouraged by the action of the Research Commission of the American Dental Association to establish the first research fellowship in 1928.²²⁻²⁵



BACKGROUND FOR ORGANIZATION OF THE DENTAL MATERIALS GROUP

As indicated by the titles of textbooks,²⁶⁻²⁹ the early courses taught in this field in the dental schools usually were described as dental metallurgy. Such courses for dental students continued until about 1930-40, when interest was extended to include other types of materials, their characteristic properties, and the influence of manipulative technics on their performance in service.³⁰⁻³² It was during this period that interest in all restorative dental materials was initiated and the change from dental metallurgy to a broader coverage of the dental materials science was recognized.

Books on dental materials now,³³⁻³⁵ thirty years later, recognize the period from 1930-40 as a decade when several new materials and modified technics were introduced into restorative practice. These include, among others, the reversible agar hydrocolloid impression material, chromium cobalt casting alloys for removable partial dentures, acrylic type plastics for complete dentures and other types of restorations, as well as the copper electroforming process. In addition, there were, for the first time, specifications and accepted standards being formulated for amalgam alloys, casting investments, waxes, impression compounds, gold casting alloys and wires, and dental cements, as a result of the joint efforts of the American Dental Association Research Fellowship and the National Bureau of Standards. During these years, therefore, the interest in dental materials increased, and persons interested in production, teaching, and application of materials to dental practice developed, with increased interest in research, quality control, and the proper manipulation of all types of restorative materials.

By 1935 there were thirty-five to forty persons involved in teaching, research, production, or the practice of dentistry, who were primarily concerned with the nature of restorative materials. These persons were both dentists and nondentists with training in chemistry, physics, metallurgy, engineering, or other sciences and were associated with a variety of institutions, such as dental schools, private or government laboratories, and private practice.

It was recognized by these persons with a common interest in the improvement of materials for dental practice that little opportunity existed at that time for exchange of information in the field, except on an individual basis. Some useful studies were not being reported in the scientific literature because the investigators either were not dentists or were not eligible because of scientific background to be members of recognized and established dental societies. Existing organizations often were not entirely appropriate to receive such technical materials discussions. Mixed dental audiences were not always too interested in the technical discussions, and the technical societies outside dentistry were too far removed from the subject to appreciate its significance. This group of people felt, therefore, that a technical materials research group within the dental field was desirable for the scientific exchange of the specialized information being accumulated, which would



be beneficial to the dental profession, avoid duplication of effort, and lead to a uniform development of the dental materials science.

DENTAL MATERIALS GROUP ORGANIZATIONAL MEETING

During the first days of March 1938, preceding the Sixteenth General Meeting of the International Association for Dental Research in Minneapolis, Eugene W. Skinner wrote a letter to Floyd A. Peyton expressing concern that many able research people in dental materials were not being given the opportunity to present the results of their studies because of the training or professional affiliation of the investigator. Unwittingly, as it developed later, this letter was the spark that lighted the torch which developed into the Dental Materials Group.

In this first letter Skinner pointed to a ruling then in effect that at the annual IADR meeting, research studies might not be reported "unless the research was supported by a nonprofit institution". This did not affect presentations either by Skinner or Peyton, but it discouraged those whose studies were supported by profit-making agencies. In his initial letter Skinner continued, "I think something should be done about this. What is your idea?"³⁶

In his reply of 5 March 1938, Peyton stated that he opposed the ruling and had discussed the matter with U. G. Rickert of the Ann Arbor Section, Past-President of IADR, who was sympathetic and agreed to raise the question at the IADR Council Meeting in Minneapolis on 12-13 March. Gene Skinner again wrote to Floyd Peyton on 23 March 1938, saying that Ura Rickert had presented the question at the Minneapolis meeting and William Gies, the President-Elect, announced that "there was no intention of shutting out the men in the industries from the presentation of papers". This encouraging thought from Professor Gies was indeed helpful. It is stated in the Reports of Officers and Committees of the Executive Proceedings of the Sixteenth General Meeting in Minneapolis that "Discussion of desirability of including, on the oral program, papers on industrial research resulted in further allusions to need for restrictions to prevent overcrowding and in reaffirmation of standing rule to exclude such papers unless in the judgment of Program Committee, special conditions warrant exceptions in individual instances".³⁷ While this did not exclude anyone from submitting a paper to be read, and placed the responsibility for acceptance entirely on the program committee, it was somewhat less than enthusiastic in its encouragement to investigators outside nonprofit institutions.

The private encouragement given Rickert and Skinner by Gies in Minneapolis, although minimal, permitted Peyton to pursue the matter further. In reply to the letter of 23 March 1938, F. A. Peyton again wrote to E. W. Skinner on 25 March, expressing some doubt about the existing dental organizations being entirely suited to the needs of dental materials investigators. In part he wrote as follows:

For several weeks I have planned to write to you regarding your opinion on the advisability of establishing an organization whose primary purpose is research on dental materials. I believe we can get



twenty-five men or more who are interested in presenting discussions of their problems before this group, and I am sure that everyone would benefit from the contacts and discussions. As you know, at present there is nothing to do but report such research before a mixed dental audience. Many in the profession are not especially interested and those who are interested hesitate to discuss the subject since they feel it is slightly out of place to get technical at such a meeting.

If a group could be established with research on dental materials as its main object, in which a program of discussion included several subjects like golds, amalgams, cements, porcelains and all the others where research is really being done, I believe the meeting would be well attended.

I believe that such a group should be open to those who are doing research in the industries, as well as those of us who are in Dental Schools and in the profession. . . . If you are interested in seeing such a group get started, let me hear from you soon, and any suggestions you may have will be much in order.

Peyton pointed out that this action was stimulated by the encouragement received from discussions with several people in the materials research field.

In his reply of 6 April 1938, Skinner quite properly expressed cautious enthusiasm for such a plan and described some of the potential hazards and problems. He had discussed the project with several persons and "met with considerable enthusiasm in all cases". He concluded by saying, "I am heartily in favor of your plan. . . . Both our shoulders are pretty broad and I shall be very glad to join with you if any kicks are forthcoming."

When it became apparent that a real interest existed in organizing a group oriented primarily to research on dental materials, correspondence was initiated with William Gies, General Secretary of IADR. First it was sent through Ura Rickert of the Ann Arbor Section and by Gene Skinner through the Chicago Section, then later directly to William Gies. The first letter from Professor Gies on 19 July 1938 is reproduced on the next page.

With this encouragement from Gies and others who were contacted, Skinner and Peyton continued to develop the plans for an initial meeting of interested people. This resulted in a list of twenty persons, whose names and affiliations are given below, getting together at the Mayfair Hotel in St. Louis, Missouri, on 24 October 1938.

The photographs of these persons were assembled at the time of the twenty-fifth anniversary of the Dental Materials Group in 1963. Some were IADR members, but several were not. Twelve of the twenty were still living in 1969 and continue to maintain interest in dental materials. These, along with the list of all officers and a Statement of Purposes, were neatly compiled into a folio that was printed as a memento of the occasion.



International Association for Dental Research

FOUNDED IN NEW YORK CITY, DECEMBER 10, 1900

Divisions and Sections

Austria: Vienna, 1929. *Canada:* Halifax, 1928; Toronto, 1921; Winnipeg, 1930. *China:* Chengtu, 1934. *Czechoslovakia:* Prague, 1932. *England:* London, 1931. *Hungary:* Budapest, 1934. *South Africa:* Johannesburg, 1934.

United States: Ann Arbor, 1923; Baltimore, 1933; Boston, 1920; Chicago, 1920; Cleveland, 1930; Columbus, 1932; Detroit, 1937; Iowa City, 1936; Louisville, 1932; Minnesota, 1928; New Haven, 1930; New Orleans, 1937; New York, 1920; Philadelphia, 1928; Pittsburgh, 1928; Richmond, 1933; Rochester, 1933; San Francisco, 1924; St. Louis, 1928; Washington (D.C.), 1931.

General Officers of the Association: 1937-38

*HONORARY: Vice-Presidents—*Otto Hofer, Vienna. A. W. Lindsay, Chengtu. J. L. Payne, London. J. C. M. Shaw, Johannesburg. József Szabó, Budapest. Karel Wachsmann, Sr., Prague.

*ACTIVE: President—*Paul C. Kitchin, Ohio State University. *President-elect—*Thomas J. Hill, Western Reserve University. *Vice-President—*Rudolf Kronfeld, Chicago College of Dental Surgery (Loyola). *Treasurer—*Russell R. Palmer, New York Polyclinic Medical School and Hospital. *Secretary—*William J. Gies, Columbia University. *Trustees of the Endowment Fund:* The Treasurer; also Russell W. Bunting, University of Michigan, and Arthur D. Black, Northwestern University.

OFFICE OF THE GENERAL SECRETARY
632 WEST 168TH STREET, NEW YORK

July 19, 1938

Dr. Floyd A. Peyton,
Dental School,
University of Michigan,
Ann Arbor, Michigan

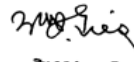
Dear Dr. Peyton:

Your letter dated July 15 is appreciated. I am glad you found my comment in the letter to Dr. Rickert helpful.

You are wise to proceed carefully and to endeavor to obtain practically unanimous agreement in your group before taking decisive action. The plan you indicate should be very effective to this end. I should be happy to cooperate in the way proposed, if I could be of any service to the group.

Unless you encounter unexpected difficulties, the suggestions I offered to Dr. Rickert cover the situation. Agreement among you as to the type of organization you desire is Objective No. 1. If a section in the I.A.D.R.--an application to that effect is Forward Step No. 1. If, at St. Louis, you wish to consider a form of I.A.D.R. application, I could there help you with its phraseology. "Keep going" and you'll surely "get there."

Yours cordially,


William J. Gies

WJG:H

Sixteenth General Meeting: Hotel Nicolet, Minneapolis, Minn., March 12-13, 1938; coordinated with annual meetings of the American Association of Dental Schools, March 14-16, and Omicron Kappa Upsilon, March 15.

PERSONS ATTENDING THE FIRST MEETING OF THE DMG

J. R. BEALL, ADA, Research Section, Washington

R. C. BRUMFIELD, Cooper Union, Mechanics Department, New York

H. J. CAUL, American Dental Association, Research Section, Washington

P. S. COLLINS, Columbus Dental Co., Columbus, Ohio

W. H. CRAWFORD, Columbia University Dental School, New York

W. S. CROWELL, S. S. White Co., Philadelphia, Pa.

L. W. DUNHAM, Dentists Supply Co., New York

W. B. HOLMES, W. V-B. Ames Co., Fremont, Ohio



E. G. KUTZELMAN, J. F. Jelenko Co., New York

T. E. MOORE, Ransom & Randolph Co., Toledo, Ohio

G. C. PAFFENBARGER, American Dental Association, Research Section, Washington

F. A. PEYTON, University of Michigan, Ann Arbor, Mich.

K. W. RAY, General Refineries Inc., Minneapolis, Minn.

J. S. SHELL, Thomas J. Dee Co., Chicago

E. W. SKINNER, Northwestern University, Chicago

K. H. STRADER, Lee S. Smith Co., Pittsburgh

W. T. SWEENEY, ADA Research Section, Washington

N. O. TAYLOR, Spyco Smelting & Refining Co., Minneapolis

S. D. TYLMAN, University of Illinois, Chicago

W. C. WHITTEMORE, Dentists Supply Co., New York

ACTION TAKEN AT FIRST DENTAL MATERIALS GROUP MEETING

Minutes of the first meeting are complete and available in the records of the Dental Materials Group. These have been well summarized for the twenty-fifth anniversary of the Group and are included here in that form to show the actions taken at the first meeting.

"Following the dinner hour the group discussed the desirability of an organization being formed, and finding it so, it was then decided to first elect officers and then to set up an Executive Committee for the new organization.

"Dr. F. A. Peyton was elected Chairman and Dr. E. W. Skinner was elected as the first Secretary of the organization.

"An Executive Committee was established with the Chairman as an ex-officio member."The following were elected as members of the committee:

From Dental Schools — Dr. Stanley D. Tylman
Dr. Eugene W. Skinner

From Industrial organizations — T. E. Moore
N. O. Taylor

From the American Dental Research Commission Staff — George C. Paffenbarger
W. T. Sweeney

"Dr. Marcus A. Ward and Dr. Daniel A. Lynch joined the group for a brief time.



"Dr. Ward was then President-elect of the American Dental Association and spoke briefly on the need for an organization of research men in dental materials and of its possible future in relation to the dental schools and profession.

"Dr. Lynch (Secretary, A.D.A. Research Commission) discussed the relationship of the group with the American Dental Association Research Commission and pledged the support of the Research Commission in the light of the proposed aims of the new organization.

"It was moved, seconded and carried that the new organization go on record as whole-heartedly approving the work of the American Dental Association Research Commission.

"A petition for affiliation with the I.A.D.R. as a section of the Dental Materials Group was presented by Dr. Skinner.

"The Chairman then called for a discussion of the criteria for the selection of members and a tentative list of prospective members was presented.

"It may be noted here that the ultimate answer to this last problem was to set up two types of memberships, Associate Members and Active Members. An Active Membership was based upon membership in the International Association for Dental Research and Associate Membership was to be open to any individual interested in the dental materials field, whether he was connected with a dental school, a government, a manufacturer, or was an individual dental practitioner.

"It might also be noted here that each member present at the initial meeting contributed \$1.00 for the expenses of the Secretary so that when the meeting was adjourned at 10:15 P.M. the new organization was on its way with a total capital of \$20.00."

ACTION FOLLOWING ORGANIZATIONAL MEETING

Following the IADR annual meeting in St. Louis, various actions taken by the newly elected officers gave assurance of the further development of this Group. The petition to be presented to the IADR was put into final form by E. Skinner. A statement of the purposes of the Dental Materials Group, included as a part of the petition, indicated the objectives to be:

1. To provide a clearinghouse for the exchange of technical information and studies in order to avoid duplication of effort.
2. To provide recognition for an encouragement of worthy research in dental materials.
3. To discuss and evaluate methods for the testing of dental materials, both new and old, together with specifications for testing.
4. To raise the standards of research in the dental industry in general and as a result to create a mutual feeling of trustfulness and understanding between the industry and the profession, as should exist.



At the first Executive Committee meeting of the Group, held in St. Louis on the morning following the organizational meeting, it was agreed to circulate the petition for signatures among the dental materials men who were already IADR members. This represented approximately twenty persons, but not all had attended the meeting in St. Louis. This procedure had been recommended in a letter dated 18 May 1938 from William Gies to Ura Rickert of the Ann Arbor Section, in which he said a direct way to proceed would be:

- a. Present to Secretary Hatton, for submission to the Council, a petition for the creation of a Section on Dental Materials, to consist of members of the IADR who elect to be accredited as such.
- b. With the petition send endorsement by several members for the information of the members of the Council, before the matter goes to a vote.

Gies was advised on 4 November that such a petition was being circulated by Skinner to be presented subsequently to Ed Hatton as he had suggested. On 11 November Gies wrote as follows to Peyton: "I am glad to learn that you had your intended group conference at St. Louis and that you decided to present the indicated petition. I feel confident that a vote of the Council will be favorable."

In this same letter of 11 November 1938, Gies recognized a potential difficulty with the IADR organizational structure regarding the naming of a technical branch as proposed. This was described in his statement, "Perhaps the only difficulty will be associated with the word 'section'. This difficulty occurred to me shortly after I sent you my last letter, and I intended to discuss it with you in St. Louis. The IADR is now divided into *geographical* 'divisions' and 'sections'. I believe we can devise a good way to avoid conflict of terminology. This difficulty should not interfere with approval of the objective of the petition."

This difficulty of terminology was resolved by recognizing a "group" of persons interested in a specific area of dental science, regardless of their "division" and "section" affiliation. This Group designation was initiated with the Dental Materials Group but has been applied later to other special interests. A revised form of the IADR Constitution¹ in 1940 described Groups for the first time: ". . . (A) Members in any branch of dental science, with the approval of the Association may organize a group for the group advancement of the objects of the Association. (B) The affairs of the Group shall be managed by its members in harmony with the requirements of the Constitution and By-laws of the Association."

At the same time the revised Constitution stated in the By-Laws, Section A: Membership, "4 Sections and Groups. (C) Each Section or Group shall be free to elect any person to be an 'associate' member of the Section or Group. 'Associate' members of a Section or Group are neither members nor 'associate' members of the Association, and may not be enrolled as such."³⁸ This statement by the IADR recognizing "associate" group members is interesting because, as noted earlier, it was the mechanism proposed by the Dental Materials Group to accommodate those persons who were interested and active in materials research but not qualified to be active IADR members.



Immediately following the organizational meeting in St. Louis in October 1938, the officers of the Dental Materials Group drafted a Group Constitution and By-Laws. The stated purpose was the same as that contained in the petition to the IADR for group recognition and has continued the same throughout the years. In addition the Constitution provided for both active and associate members in the Group, and an Executive Committee made up from representatives of the schools, the profession, the dental trade, and national government or state research agencies. Provision was made in the Constitution for officers including a Treasurer, Councilor, and Editor, in addition to the Chairman and Secretary initially named in St. Louis. Numerous working committees also were included in the first Constitution, as well as subsequent revisions.

By the time of the IADR General Meeting in Cleveland, Ohio, 18-19 March 1939, the petition for a Dental Materials Group had been properly presented for Council consideration, the Group organization had been established with election of officers, and the preparation of a Constitution and By-Laws was completed. Four papers related to dental materials were included in the 1939 IADR program.

The Council and membership present in Cleveland passed a resolution to the effect that there should be a Dental Materials Group established within the IADR with basically the rights and privileges of a geographic section. This resolution required the vote of all the Sections, and since some were not represented in Cleveland, it was not until 28 July 1939 that Dr. Edward H. Hatton, General Secretary of the IADR, was able to write as follows to Dr. Skinner, then Group Secretary:

"It gives me a great deal of pleasure to welcome your group officially into the Association. The next issue of the *Journal of Dental Research* will carry the names of the officers selected by you as group Councilor, Secretary and Editor.

"It is my hope that this new relationship will have a long and very useful existence. I believe it will add materially to the activities and usefulness of the Association and hope sincerely that your group will gain significantly by your affiliation."

This cordial and hopeful expression of mutual respect and cooperation from Hatton set the pattern for future relations between the Materials Group and the parent IADR organization. During the thirty years from 1939 to 1969 the Dental Materials Group continued to benefit from the contacts and relations with the IADR, as the Group membership and number of scientific papers increased annually, with the active Group members participating regularly in IADR affairs.

MEMBERSHIP

It was evident before the organization meeting was held that more than twenty persons were interested in being affiliated with the Group if it was formed. Thereafter, word spread of its purpose and of meetings being held to exchange information on materials. With the adoption of the Group Constitution and By-Laws, it was established that membership dues for either active or associative members would be \$2 per year, and W. T.



Sweeney was named Treasurer.

The first Treasurer's report, dated 20 August 1940, just eighteen months following the IADR meeting in Cleveland, where the Group was approved by the Council, showed that forty-one persons had joined the Group. Thus the Group had doubled in size during the first two years, and records indicate a steady increase in membership throughout the years that followed.

From a Roster of DMG members prepared at the end of 1969, and distributed in early 1970, there were a total of 360 persons listed in the United States and Canada. Of this total number, 249 were active members having IADR membership, while the remaining 111 were associate members of the Materials Group only. This represents an average of eleven to twelve new members per year over the thirty-year period. A casual survey reveals that the members represent all interested segments of the dental field, such as teaching, clinic practice, institutional research, and manufacturing or production. Throughout the years members from each area have contributed to the welfare of the Group and participated in all phases of its activities.

In addition to the North American Division members, there were in 1969 a total of 145 active and associate international members located in twenty-two countries elsewhere around the world. This number of international members combined with the North American members made a total of 505 members of the Dental Materials Group. Of the international members, fifty-five were in eight countries of Latin America, fifty-one were in Australia, and sixteen in Europe, with twenty-two countries of Middle Eastern or Far Eastern areas of the world. (Chapter on "History of the Divisions".) Beginning in 1968 the practice of naming international correspondents or representatives was initiated. Those named for the year 1969-70 include: J. A. Chong, Australia; B. Hedegard, Sweden; L. W. Suffert, Brazil; H. P. Maddalena, Argentina; D. C. Smith, England; and M. Ohashi, Japan. For the year 1970-71 the names were the same, except that R. Storer represented England.

TECHNICAL PAPERS

The number of papers presented at the annual scientific meeting is some measure of the interest in dental materials. During the years preceding DMG, there were only a few papers included in the IADR general program. For example, at the Third General Meeting in Chicago in 1925, there were two reports dealing with materials; three were presented in 1928; and by the time of the Fifteenth General Meeting in Baltimore in 1937, there were five papers that described dental materials. At the Cleveland Meeting, March 1939, when Group affiliation with IADR was approved, there were four papers related to materials while in Philadelphia, March 1940, only three papers were included in the program; but by 1941, following completion of the Group organization, there were nine papers on the annual IADR program. In Chicago in 1943, because of wartime, there were only six papers read, but ever since, there has been a gradual increase in the number of technical reports presented. At the Forty-seventh General Meeting in Houston, 20-23 March 1969, a total of eighty-five selected papers on materials were presented, in eight scientific sessions.



THE SOUDER AWARD

To give recognition for outstanding achievement in the field of Dental Materials, the Wilmer Souder Award was established and first presented in 1955. (See chapter on "Awards".) The award is given annually during the IADR General Meeting to a person who is recognized for the contributions made to this field of dental science. The DMG has chosen this method to stimulate interest in materials research and to encourage high quality in the type of materials research undertaken.

For this Award the Group chose to use the name of Wilmer Souder, physicist, scientist, and first Director of the dental research program at the National Bureau of Standards. Wilmer Souder is a Past-President of the IADR, not a dentist but a friend of dentistry. (See chapter on "Pages of Presidents".) The reports of his investigations and the projects undertaken in his laboratories are recognized everywhere for their true scientific character. The DMG and the IADR are fortunate to have received his advice and assistance, which are highly respected everywhere. The Wilmer Souder Award in Dental Materials is likewise highly respected by all dental research investigators.

SUMMARY

To a considerable degree it seems that the initial objectives of the Dental Materials Group are being accomplished. With a continually changing society making increased demands on the dental profession for increased service to patients, there are continually new challenges for those in the field of dental materials. This condition appears likely to continue for some time in the years ahead.

The outstanding accomplishments of the DMG can be found in the following statement contained in a letter of 21 May 1969 from George C. Paffenbarger to Floyd A. Peyton.

"The highlights of the growth and development of the Dental Materials Group of the IADR, as I see them, are:

1. The Group provided a forum where diverse opinions in the science of dental materials could be presented by any technical person from dental education, dentistry or the dental trade.
2. It created within the IADR a specialized group with a common interest. This type of organization is now being utilized for other specialized areas in the IADR.
3. The Dental Materials Group provided a special opportunity for associate membership, and this attracted a large group of interested persons who had no other outlet except if they were welcomed by a local section.
4. The fact that there are members in the United Kingdom and Europe, in the Near and Far East, Australia, New Zealand, Japan and from South and Central America attests to the Group's influence in lands other than the United States.



5. The growth in membership from twenty in 1938 to 505 in 1969 reflects the interest in and success of the Group.
6. The opening of an avenue of publication, either in periodicals or by microfilming, has preserved in a permanent record the thirty years of activity in the field of dental materials."

OFFICERS OF THE DMG

<i>Term</i>	<i>Chairman</i>	1944-48	E. W. Skinner
		1948-53	F. A. Peyton
1938-41	F. A. Peyton (U Mich)	1953-54	D. A. Keys (Neb CD)
1941-42	N. O. Taylor (SS	1954-60	H. D. Coy (I Stern &
White)		Co,	
1942-43	P. B. Taylor (Julius		Nihon U)
Aderer		1960-63	G. C. Paffenbarger
	Co)	1963-68	F. A. Peyton
1943-44	W. H. Crawford (Ind U)	1968-70	G. M. Brauer (NBS)
1944-46	T. E. Moore (Ransom &	1970-71	D. H. Anthony
	Randolph)		
1946-47	G. C. Paffenbarger	<i>Term</i>	<i>Editor</i>
(ADA-			
	NBS)	1940-41	I. C. Schoonover (NBS)
1947-48	R. L. Coleman	1941-44	R. L. Coleman
1948-49	W. S. Crowell	(Weinstein	
1949-50	E. W. Skinner		Res Lab)
1950-51	I. C. Schoonover	1944-46	K. W. Ray
1951-52	C. A. Nelson	1946-68	N. O. Taylor
1952-53	W. T. Sweeney	1968-71	K. H. Strader (Surgident
1953-54	H. D. Coy (Med Coll		Ltd)
Va)			
1954-55	R. W. Phillips	<i>Term</i>	<i>Secretary</i>
1956-57	K. H. Strader (Amer		
	Cyana-	1938-44	E. W. Skinner (NWU)
mid)		1944-48	F. A. Peyton
1957-58	D. L. Smith (JM Ney	1948-53	R. W. Phillips (Ind U)
Co)		1953-59	D. B. Mahler (U Mich,
1958-59	G. Ryge (Marquette U)	U	
			Ore)
<i>Term</i>	<i>President (formerly</i>	1959-63	M. L. Swartz (Ind U)
<i>termed</i>		1963-67	K. Asgar (U Mich)
	<i>Chairman)</i>	1967-70	D. H. Anthony (JM Ney
			Co)
1959-60	D. S. Hudson	1970-71	W. J. O'Brien
(USAF[DC])		(Marquette U)	
1960-61	D. B. Mahler		
1961-62	D. F. Taylor (NBS &	<i>Term</i>	<i>Treasurer</i>
CMP			
	Ind)	1938-40	E. W. Skinner
1962-63	G. Dickson (NBS)	1940-46	W. T. Sweeney (ADA-



1963-64	J. F. Glenn (LD Caulk Co)	NBS)	
1964-65	M. L. Swartz	1946-47	W. S. Crowell
1965-66	T. E. Fischer (U Ala)	1947-50	C. A. Nelson (LD Caulk Co)
1966-67	J. W. Stanford (ADA)	1950-55	T. E. Moore
1967-68	J. S. Shell	1955-59	R. W. Phillips
1968-69	K. Asgar	1959-63	C. W. Fairhurst
1969-70	J. E. Overberger		(Marquette
1970-71	C. W. Fairhurst (SS White)	U)	
<i>Term</i>	<i>Councilor</i>	1963-68	J. E. Overberger (W Va
		U	& UNC)
1939-43	W. S. Crowell (White Dental Mfg Co)	1968-71	R. L. Myerson
1943-44	H. D. Coy (I Stern & Co)	(Myerson Corp)	Tooth

These highlights and summary from George C. Paffenbarger, a charter member of the Group, a Past-President of IADR, a dentist, and an able research investigator, serve as an appropriate conclusion to a historical statement describing the Dental Materials Group of the International Association for Dental Research.

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THE PERIODONTAL RESEARCH GROUP

Periodontal research has been intimately associated with the *Journal of Dental Research* and the International Association for Dental Research since their inception. For example, many periodontists³⁹ appear in the first list of contributors to the Endowment Fund of the *Journal of Dental Research*. Also the first volume of the *Journal* contains a paper on periodontology.⁴⁰

In 1919 W. J. Gies conceived the idea of publishing in the *Journal* "a series of reviews of the results of the developments in research in all phases of dentistry" entitled "Progressive Dentistry and Stomatology".⁴¹ The first contribution to this series came from a periodontist, Arthur H. Merritt, and was entitled "Periodontology".⁴² The American Academy of Periodontology utilized the *JDR* as the medium for the official publication of its scientific proceedings⁴³ from 1921 until 1930. When the Academy started its own journal in 1930, Grace R.



Spalding, its Editor, explained to the readers of the *JDR* that the new journal would not be competing with it, since its object was "to stimulate interest in, and to record the development of periodontics."⁴⁴

Based upon the close relationship between periodontology and the *Journal of Dental Research*, it was not surprising to find periodontists also present at the founding meeting of the International Association for Dental Research on 10 December 1920. Moreover, periodontal research has played a prominent role at the annual meetings of the IADR. The first paper presented at the Second General Meeting in 1924 was by Edward H. Hatton and William D. Skillen from Northwestern University Dental School entitled "Epithelial Changes in So-called Pyorrhea".⁴⁵ The first published abstracts were those from the scientific program of the Chicago Section of 17 November 1927, and three of the four presentations were concerned with periodontal research.⁴⁶ At the Tenth Annual Meeting of the IADR in Columbus, Ohio, March 1932, of the 111 papers listed on the program, including those read by title, eight were concerned with periodontal research demonstrating the continuing interest between the IADR and periodontal research.

Over the years periodontal research has grown with the Association. By 1969 a total of 691 papers were presented at the IADR meeting in Houston, Texas, with three whole sessions devoted to periodontology. With growth, there were certain growing pains apparent. Research workers in periodontology were often disappointed by the inability to meet and discuss their research at large meetings. Recognizing these and other difficulties, the International Association for Dental Research unanimously voted to establish a Periodontal Research Group at the Forty-seventh General Meeting in Houston, 20-23 March 1969. This was in keeping with the policy of the Association to decentralize and give voice to various identifiable groups within the IADR. The object of the Periodontal Research Group as stated in their Constitution is:

1. To advance the study and knowledge of periodontology.
2. To facilitate the presentation, discussion, and publication of scientific papers on periodontal research.
3. To provide a forum and organization where all scientists whose interests are related to periodontal research may participate on an equal basis.

These objectives are accepted in addition to those of the parent body, the IADR. Officers elected at this time in 1969 were Helmut A. Zander of Eastman Dental Center as President and Stanley P. Hazen of Temple University as Secretary.

The first major activity of the Periodontal Research Group as an entity was to convene an International Conference on Periodontal Research which was held 1-3 August 1969 in Rochester, New York. Thirty-two papers were presented at this successful Conference attended by 151 charter members and guests. Thus, periodontal research has reaffirmed its vitality and intimate relationship with the International Association for Dental Research.

Officers at the end of 1970 were Harald A. Löe of the Royal Dental College of Århus, Denmark,



President; Stanley P. Hazen, Secretary; and Helmut A. Zander, Councilor.

HELMUT A. ZANDER, M.S., D.D.S.
Head, Department of Periodontology
Eastman Dental Center
Rochester, New York

REFERENCES

1. *J Dent Res* **19**: 340, 1940.
2. [EDITOR'S NOTE.—The Constitution and By-Laws of 1957 were approved by the general membership of the Association as stated in *J Dent Res* **36**: 800, 1957. This was "the proposed Constitution of 1956" which was circulated individually for membership perusal. Unfortunately, it was never printed in the *Journal* or elsewhere for ready reference.]
3. *Amer J Orthodont* **47**: 462-464, 1961.
4. Programs and Abstracts of Papers of this Forty-third General Meeting of IADR, p 21, July 1965; see also *J Dent Res* **44**: 1123, 1965.
5. Programs and Abstracts of Papers of the Forty-eighth General Meeting of IADR, pp 8-9, 17-18, 24-25, 31, March 1970.
6. Ward, M. L., and McCormick: The First Report of a Study of the Composition and Properties of the Cements Now in Use in Dentistry, *J Nat Dent Assoc* **2**: 354-370, 1915.
7. Ward, M. L., and Scott, E. O.: Effects of Variations in Manipulation on Dimensional Change, Crushing Strength and Flow of Amalgams, *JADA* **19**: 1683-1705, 1932.
8. Peyton, F. A., and Moore, G. R.: Flexibility Studies on Gold Alloy Wires and Orthodontic Appliances, *Int J Orthodont & Dent Child* **19**: 799, 1933.
9. Skinner, E. W.: The Role of Investment Setting Expansion in Gold Compensation Casting Techniques, *Dent Cosmos* **75**: 1009, 1933.
10. ———: Research on the Flow of Dental Amalgam, *JADA & Dent Cosmos* **25**: 1651, 1938.
11. Shell, J. S.: Metallography of Precious Metals, *JADA* **12**: 794, 1925.
12. Myers, R. E.: Observations of the Behavior of Molten Metal during Casting, *J Dent Res* **13**: 275, 1933.
13. Ray, K. W., and Easton, G. S.: Changes in Composition of Amalgam Alloys during Amalgamation and Condensation, *JADA* **18**: 1076, 1931.
14. Easton, G. S., and Ray, K. W.: Technic Alloys for Inlay Casting, *Dent Cosmos* **74**: 972, 1932.
15. Poetschke, P.: Physical Properties of Dental Cements, *J Indust & Engin Chem* **8**: 302, 1916.
16. Gray, A. W.: Volume Changes Accompanying Solution, Chemical Combination, and Crystalization in Amalgam, *Inst Metals J* **29**: 139, 1923.
17. Crowell, W. S.: Physical Chemistry of Dental Cements, *JADA* **14**: 1030, 1927.
18. Wise, E. M.; Crowell, W. S.; and Eash, J. T.: The Role of the Platinum Metals in Dental Alloys, *Tr Amer Inst Met Engin, Inst Met Div* **99**: 363, 1932.
19. Taggart, W. H.: A New and Accurate Method of Making Gold Inlays, *Dent Cosmos* **49**: 1117, 1907.
20. Maves, T. W.: Recent Experiments Demonstrating Wax Distortion on All Wax Patterns when Heat Is Applied, *JADA* **19**: 606, 1932.
21. Scheu, C. H.: A New Precision Casting Technic, *JADA* **19**: 630, 1932.
22. Coleman, R. L.: Physical Properties of Dental Materials, *J Res Nat Bur Stand* **1**: 868, 1928.
23. Taylor, N. O.: Progress Report: Research on Dental Materials, *JADA* **18**: 294, 1931.
24. Souder, W.: Time Required to Cast Dental Restorations from Molten Alloy, *JADA* **20**: 1010, 1933.
25. Paffenbarger, G. C.; Sweeney, W. T.; and Isaacs, A.: Physical Properties and a Specification, *JADA* **21**: 1907, 1934.
26. Essig, C. J., and Koenig, A.: *Dental Metallurgy*, 6th ed, Philadelphia: Lea and Febiger, 1909.



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27. Hogden, J. D., and Millberry, G. J.: *Practical Dental Metallurgy*, 6th ed, St. Louis: C. V. Mosby Company, 1924.
 28. Harder, O. E.: *Modern Dental Metallurgy*, Minneapolis: Burgess-Rosebury Company, 1930.
 29. Ray, K. W.: *Metallurgy for Dental Students*, Philadelphia: P. Blakiston's Son and Company, 1931.
 30. Skinner, E. W.: *Science of Dental Materials*, 1st ed, Philadelphia: W. B. Saunders Company, 1936.
 31. Shell, J. S.: *Hodgen-Shell Dental Materials*, St. Louis: C. V. Mosby Company, 1938.
 32. Souder, W., and Paffenbarger, G. C.: *Physical Properties of Dental Materials*, National Bureau of Standards, Circular No. C433, Washington: U.S. Government Printing Office, 1942.
 33. Peyton, F. A. *et al.*: *Restorative Dental Materials*, 3rd ed, St. Louis: C. V. Mosby Company, 1968.
 34. Skinner, E. W., and Phillips, R. W.: *The Science of Dental Materials*, 6th ed, Philadelphia: W. B. Saunders Company, 1967.
 35. American Dental Association Guide to Dental Materials, 4th ed, Chicago: ADA, 1968.
 36. Copies of original correspondence are in Dental Materials Group files and records.
 37. *J Dent Res* **17**: 339-340, 1938.
 38. *J Dent Res* **19**: 342-343, 1940.
 39. Gies, W. J.: The Endowment Fund of the Journal of Dental Research, *J Dent Res* **1**: 33-34, 1919.
 40. McDonagh, A. J.: Periodontology, with Special Reference to Recession of the Gums, *J Dent Res* **1**: 423-439, 1919.
 41. Gies, W. J.: Progressive Dentistry and Stomatology. 1. A Plan to Present to the Readers of this Journal Effective and Reliable Reviews of Advances in Dental Practice and in Stomatological Science, *J Dent Res* **1**: 525, 1919.
 42. Merritt, A. H.: Progressive Dentistry and Stomatology. 2. Periodontology with Special Reference to Periodontoclasia, *J Dent Res* **2**: 77-87, 1920.
 43. *J Dent Res* **3**: 398, 1921; The Proceedings of the Eighth Annual Meeting of the American Academy of Periodontology can be found on pages lxxi-lxxix of the same issue.
 44. Spalding, G. R.: The Journal of Periodontology, *J. Dent Res* **12**: 237-238, 1932.
 45. Hatton, E. H., and Skillen, W. G.: Epithelial Changes in So-called Pyorrhea, *J Dent Res* **8**: 211-212, 1928.
 46. Scientific Proceedings of the Chicago Section, *J Dent Res* **8**: 7-9, 1928.



CHAPTER SIXTEEN: HISTORY OF THE JOURNAL OF DENTAL RESEARCH

Since one of the prime functions of the IADR is communication of research findings, it is important to emphasize that the *Journal* is the only avenue for publication of research papers and of proceedings of the annual meetings—the meetings *per se* constituting the other, more direct avenue of communication.

A résumé of *Journal* accomplishments in "The Fifty Year History of the *Journal of Dental Research*" was published earlier.¹ Hence in this chapter it is only necessary to update *Journal* activities, but there is also provided more background, especially in the context of journalism in general.

EARLY EFFORTS

Almost exactly eighty years before the *JDR* appeared, the very first dental publication in the world began in New York City as a forty-eight-page monthly in 1839. Credit for its launching and support goes to Chapin A. Harris. At first it was entitled *The American Journal of Dental Science*, but a year later it was transferred to the newly organized American Society of Dental Surgeons and changed in name to the *American Journal and Library of Dental Science*.²

Early dental journalism is reviewed elsewhere,³ but it should be mentioned that in the years following 1839 there appeared eleven dental publications in various parts of the United States. Many had a fleeting existence, but a few persisted and existed for varying periods of time. These were *The Dental Register of the West*, the *Southern Dental Journal*, *The Dental Summary*, *The Dental Review*, *The Dental Items of Interest*, and, best known of all, *The Dental Cosmos*, which for three-quarters of a century remained the most influential, though proprietary, dental publication in the world.

There gradually developed a desire on the part of many progressive dentists to free dental journalism from the influence of supply houses and other commercial interests. Thus, the *International Dental Journal* was organized in Baltimore. It was fostered and financially supported by an association of New York dentists.⁴ The first copy was dated January 1880. (This journal had no connection whatsoever with the present publication of the same name which was founded in May 1949 at the Milan meeting of the Fédération Dentaire Internationale, whose official publication it has been ever since its first issue appeared in September 1950.) When other dental journals belonging to dental supply houses reduced their subscription price, the *International Dental Journal* unfortunately was unable to continue and closed its twenty-sixth volume in December 1905.

The gap thus created in ethical journalism was immediately filled by the *Journal of the Allied Dental Societies*. This was a quarterly journal published by the Institute of Stomatology of New York and three Massachusetts dental societies. The editorial staff was gradually enlarged to include a dozen able men, and other societies were added from time to time. All these constituted the Association of Allied Dental Societies, Inc., which functioned as owner and publisher of this unique journal.



William Gies certainly became acquainted with this journal when it published some of his own early dental research (listed in the bibliography of the William J. Gies biography now in preparation). By 1917 Gies conceived the idea that a new and larger publication was needed for the growing segment of the dental profession truly interested in research. He thus planned a journal that would be published solely by, of, and for the dental profession, accepting no advertising and not influenced by commercial interest in any way. It was intended to give free expression to the views of the various editors without fear or favor, and was devoted solely to the moral, ethical, and scientific upbuilding of the dental profession. Professor Gies further explained his views along these lines in the last issue of the *Journal of the Allied Dental Societies*.⁵

By full agreement, the editorial staff of this journal of thirteen-year standing became members of the new journal which was to be known the world over as the *Journal of Dental Research*. An initial editorial staff totaling sixty-seven members was chosen from among the leading investigators in all disciplines related to dentistry and stomatology. Accordingly, the *Journal of the Allied Dental Societies* was discontinued with its thirteenth volume in December 1918 and was immediately succeeded in March 1919 by the *Journal of Dental Research*, a quarterly publication of increased size and significance. The front cover of the first issue states that it is "a journal of stomatology; devoted to the advancement and dissemination of knowledge pertaining to the mouth and teeth, and to their relations to the body as a whole."



The old College of Physicians and Surgeons of Columbia University at 437 West 59th Street, New York City. Building at left with awnings was the Sloane Maternity Hospital. By contrast in appearance, the structure to the right was the "Main Building" and contained the front office of William J. Gies.

The original room in which he founded and edited the Journal of Dental Research was that with the last two windows on the first floor on the far right (see arrow). The shades are drawn and awnings down on most



windows because of the bright sun shining from the south. Professor Gies occupied this office in Biochemistry for many years, vacating it in 1928 for new quarters in the medical center up north in Manhattan.



After the College was moved in 1928 to the new Columbia-Presbyterian Medical Center at its present location, 632 West 168th Street, Professor Gies had this smaller office (entrance depicted on left), Room 5-428, in the Biochemistry Department. He still edited the *Journal* and conducted the affairs of the IADR from here until 1936 when he retired "because of age" as he used to say. But he used this office address for another decade. He undoubtedly entered this "new" building through the picturesque archway (on the right) bearing the historic inscription.

William Gies of Columbia University listed himself as the Executive Officer of the Board of Editors and remained as Editor until 1935. The other Editors were Theodor Rosebury, also of Columbia, the "Interim Editor" during the latter part of 1935; Hamilton B. G. Robinson, initially of the University of Rochester, then of Washington University, and finally of Ohio State University, was "the longest Editor" (1936-58); Frank J. Orland of the University of Chicago was the last Editor of the *Journal's* first fifty years (1958-69); and last, but certainly not least, David F. Mitchell of Indiana University is the current Editor, 1969-.

The first issue of the *JDR* is pictured, and the rest of the *Journal's* activity is accounted for to a considerable extent, in the pages of its "Fifty Year History." However, there are certain facets and additional information that can and should be elaborated upon here.

By the fiftieth year in Association history, the *Journal* and the Association seemed to be very closely related, but this was not the way it had always been. The *Journal* was founded some twenty-one months before the Association. Moreover, a unique observation can be made that the Association was barely mentioned in the *JDR* until a summary of its founding meetings was printed for the first time⁶ in 1926 and repeated in 1928 along with a summary of its general meetings to date.⁷ The first published reference to the IADR was very meager indeed; it was merely mentioned in a footnote to an appreciation of Robert R. Andres by George A. Bates⁸ in 1921.





The JDR Editorial team of 1968 in S-260 of the Zoller Memorial Dental Clinic at the University of Chicago: Susan Stucklen Larson, Editorial Assistant; Irene Malloy, Secretary; and Frank J. Orland, Editor. Beyond the window is the University of Chicago Press, publisher and printer of the Journal for the greater part of a decade.



A semicircle of Journal issues illustrating the variation in cover format. Clockwise: the very first issue of March 1919 is similar to the next one of 1940 with the Waverly Press as publisher, 1919-47. The third and fourth issues were printed while the C. V. Mosby Company was publisher, 1947-60.

When the University of Chicago Press was publisher, 1960-66, the top half of the cover was in white with the lower half changing in color annually. Next to last, the oblique design was developed when the American Dental Association became publisher in 1966; the left half color was also changed every year. The final issue pictured on the right has a horizontal bar motif also with color changes annually; it was started in 1970 with the ADA still as publisher.

It can be emphasized that the *Journal of Dental Research* portrayed itself as a very independent journal. It was incorporated in New York as the Journal of Dental Research, Inc., with William J. Gies as owner. In fact, on one page of the *JDR* in 1922 there are cited all its affiliated organizations⁹ that used the *Journal* pages as an outlet for their scientific proceedings, and the IADR was next to last in the list.



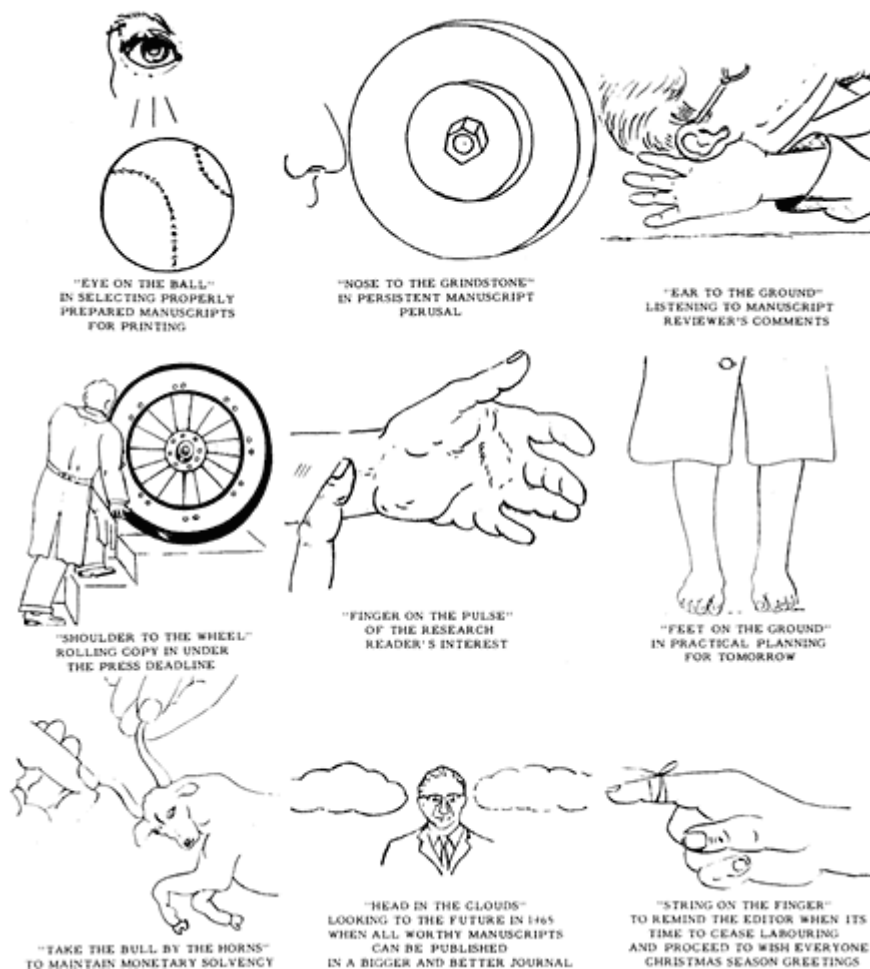
*A List of the Names of the Organizations That Have Voted to Make the
Journal of Dental Research the Medium for the Official
Publication of Their Scientific Proceedings
(December 1922)*

ASSOCIATION OF THE ALLIED DENTAL SOCIETIES, INC.
AMERICAN ACADEMY OF DENTAL SCIENCE
MASSACHUSETTS DENTAL SOCIETY
HARVARD ODONTOLOGICAL SOCIETY
BOSTON AND TUFTS DENTAL ALUMNI ASSOCIATION
FIRST DISTRICT DENTAL SOCIETY OF THE STATE OF NEW YORK
METROPOLITAN DISTRICT OF THE MASSACHUSETTS DENTAL SOCIETY
HARRIET NEWELL LOWELL SOCIETY FOR DENTAL RESEARCH OF THE
HARVARD UNIVERSITY DENTAL SCHOOL
SAN FRANCISCO SOCIETY FOR DENTAL RESEARCH
COLORADO SOCIETY OF PERIODONTISTS
AMERICAN ACADEMY OF PERIODONTOLOGY
NEW ENGLAND SOCIETY FOR THE PROMOTION OF DENTAL RESEARCH
WILLIAM JARVIE SOCIETY FOR DENTAL RESEARCH, OF THE SCHOOL OF
DENTISTRY OF COLUMBIA UNIVERSITY
NEW YORK ACADEMY OF DENTISTRY
INTERNATIONAL ASSOCIATION FOR DENTAL RESEARCH
COLUMBIA UNIVERSITY BIOCHEMICAL ASSOCIATION

As the year rolled on, the *Journal* played an increasingly important role in communicating and promoting dental research, especially after the IADR entered its life and accepted it as its own publication, with the Editor functioning as a major office-bearer in the Association. To display four decades of significant activity of the *Journal*, the Editor of that time prepared a small exhibit for the Chicago IADR meeting of 1960. (See photograph among Proceedings of the Thirty-eighth General Meeting.¹⁰) The same Editor was awarded a Gies Award (Honorable Mention) by the American Association of Dental Editors in 1968 for a *JDR* Editorial on the subject of the triple responsibility to communicate research.¹¹ Moreover, in 1961, the Commission on the Survey of Dentistry in the United States,¹² referring to dental research, emphatically stated that "the principal medium of communication in the United States is the *Journal of Dental Research*. . ."



THE EDITOR'S APHORISMS



The several Editors of the Journal have been "many things to many people". The Latin word *editus* refers to one who revises, corrects, arranges the context and/or style of literary works to make them conform to some predetermined standards. In a much broader sense, JDR Editors have had to be concerned with a variety of diverse yet interrelated efforts such as depicted above by catchword cartoons.

(Reprinted in part from *JDR* 43: 1209, Nov-Dec 1964.)

NUMBER OF ARTICLES AND PAGES PUBLISHED IN THE JOURNAL OF DENTAL RESEARCH, 1919-70

Vol/Year	Scientific		Comments, Replies, Discussions, and Short		Proceedings of		Other Articles	Pages Published
	Articles	Annotations	Articles	Memorials	Societies			
1/1919	24	0	23	1	8	4	761	
2/1920	23	0	10	2	6	6	877	
3/1921	32	0	11	1	5	3	657	
4/1922	16	0	8	0	4	1	705	
5/1923	16	0	7	0	0	1	486	



6/1924-26	21	0	7	0	1	0	501
7/1927	21	0	11	1	1	0	557
8/1928	26	0	9	4	6	4	722
9/1929	35	0	8	1	7	2	885
10/1930	38	0	7	0	10	3	813
11/1931	37	0	13	0	8	0	944
12/1932	44	0	11	1	7	1	1031
13/1933	32	0	8	1	11	1	560
14/1934	33	0	3	0	2	1	501
15/1935-36	29	0	1	4	2	2	586
16/1937	48	0	2	7	1	2	582
17/1938	47	0	0	4	1	2	537
18/1939	41	0	0	8	1	3	584
19/1940	45	0	1	3	3	3	610
20/1941	64	0	0	2	4	0	663
21/1942	63	0	0	4	3	4	592
22/1943	59	0	0	3	3	3	527
23/1944	47	0	0	3	2	3	537
24/1945	35	0	0	3	3	3	354
25/1946	54	0	6	0	3	4	553
26/1947	50	0	6	0	3	2	512
27/1948	80	0	11	0	9	1	811
28/1949	77	0	6	0	3	0	703
29/1950	108	0	6	0	5	0	865
30/1951	97	0	6	0	4	1	904
31/1952	96	0	6	0	4	1	996
32/1953	90	0	6	0	8	1	894
33/1954	84	0	6	0	3	0	896
34/1955	98	0	6	0	7	0	960
35/1956	127	0	6	0	3	0	990
36/1957	141	0	6	0	3	0	1026
37/1958	121	4	6	0	5	1	1196
38/1959	126	26	6	0	5	0	1274
39/1960	122	22	6	0	5	0	1301
40/1961	135	23	6	0	4	0	1328
41/1962	138	24	19	0	7	0	1544
42/1963	156	34	16	2	6	1	1572
43/1964	96	37	20	1	7	1	1322
44/1965	170	34	7	1	9	0	1464
45/1966	229	71	12	0	4	0	1878
46/1967	198	54	6	0	16	0	1556
47/1968	155	59	6	1	11	1	1266
48/1969	181	48	6	0	10	2	1642
49/1970	<u>180</u>	<u>65</u>	<u>22</u>	<u>0</u>	<u>4</u>	<u>2</u>	<u>1612</u>
Total	3985	501	355	58	247	70	44,637

While it is indicative of total size of a publication, the number of pages published does not provide a differentiation of the various kinds of elements in the *Journal of Dental Research*.



A comprehensive growth curve based on such total pages was provided in an earlier History of the *Journal*.¹ However, to update and upgrade the total contents of the *Journal of Dental Research* through 1970, the preceding table is presented which permits analysis of the several kinds of items published over the last half-century. Included in these extensive figures are the Supplements to the *Journal*, which began in 1962 and continued on through 1970 with a total of twenty-one such separately bound booklets. Among these were the IADR Directories of Membership and a variety of Symposia, including those of the AAAS Nd Section, the ICOB meetings, and some IADR annual meeting proceedings *per se*. Only the History of the *Journal* and the 1969 Biographical Directory (*Special Commemorative Supplement* to vol. 48) had pagination separate from that of the *Journal*.

In the early volumes of the *Journal* under W. J. G.'s Editorship, the nonscientific articles were numbered in italic roman numerals and hence, in many citations, were not counted in the final pagination of arabic numerals per volume. In such citations several kinds of published papers were often lumped together. Thus, certain references to the total *JDR* page counts, such as those in *The Survey of Dentistry*,¹³ differ from those in the preceding table.

MONETARY ASPECTS

Almost all journals, and especially those that carry no advertising, have difficulty in making monetary ends meet. The wise William Gies was well aware of these problems right from the beginning. Hence he established an endowment fund for the *Journal*, so that at its very birth it was born with a proverbial silver spoon in its mouth. With the first issue of *JDR* in 1919, there had been \$2026 subscribed for the Endowment Fund, although only \$676 had actually been paid. Gies stated forthrightly: "the Journal of Dental Research will be financed as a University is supported, with public spirited special gifts for this purpose and from a cumulative permanent endowment fund to be created; also from subscriptions for its successive volumes—not from advertisements of goods for sale."¹⁴

In many of the early issues, the *JDR* cited the growth of this fund, including the lengthy list of individual contributors. By March 1921 the fund, including the accrued interest, amounted to \$5356.13,¹⁵ and by 31 December 1922 the fund had grown to \$6633.39.¹⁶ In subsequent volumes of *JDR*, in 1927 and even in 1928, a short paragraph on the Endowment Fund simply stated that the current monetary status would be published in a later volume.¹⁷ However, after 1928 no further information was ever published on the Endowment Fund of the *Journal of Dental Research*, established so early and apparently securely by William J. Gies.

At the time of W. J. G.'s retirement from Columbia in 1937, a William J. Gies Endowment Committee for the Journal was appointed by ad interim action of the IADR Council. The Chairman was A. H. Merritt, and J. D. Eby, F. C. Kemple, F. S. McKay, and B. B. Palmer were the other members of the Committee, which was formed to raise funds for placing the *Journal* on a sound financial basis.¹⁸ The Committee was quite successful



over the next decade. Total receipts (assets) for the Fund¹⁹ as of 24 June 1949 were \$46,345.73.

THE WILLIAM J. GIES ENDOWMENT FUND, *Journal of Dental Research*

Even as late as 1950 the following note appeared in the *JDR*: "This Fund was created, on the initiative of the voluntary Committee on Endowment—organized in New York City in 1937—to insure the continuance of the *Journal of Dental Research* 'in full accord with the highest ideals of strictly professional journalism devoted to the advancement of research,' to which the Journal was dedicated at its establishment in 1919."

But in 1952, during a period of misunderstanding—one misconception being that the *Journal* no longer needed such monetary support—this Fund was renamed the William J. Gies Foundation for the Advancement of Dentistry.²⁰ An independent Board of Directors was appointed. These men in New York were the sole custodians of the Fund, which now amounted to over \$50,000, and they later made grants from the Fund's income for a variety of projects, including those requested by the *JDR*.

THE OTHER ENDOWMENT FUND

Apparently William Gies, while Editor and concurrently General Secretary, did not use all of the money received from IADR for operation of his office, and the unused amount, at the time he concluded his services as Editor and Secretary, amounted to approximately \$1000. Although there is no exact record of this frugality, there are several personal items of correspondence which cited Gies' gratuitousness in having accumulated this money for the later benefit of the *Journal*. Thus, the earliest note appeared in the *Journal* in 1946 when then Secretary-Treasurer Hatton (who held this previously inactive fund intact) designated it as the "Special William J. Gies Journal of Dental Research Fund." It amounted to \$1402.98 by 1 March 1946.²¹ On hand in bonds and savings account by 1 January 1947 was \$1435.98. Including all additions and all interest, by 31 December 1947 there was \$1469.76 in the fund. These figures were cited as part of the "Combined Report of the Secretary-Treasurer and Business Manager as Submitted to the Collector of Internal Revenue."²² In 1949 this fund had grown to \$1506.06 (as of 1 June).²³

With the separation of the large IADR fund ("the conversion" of over \$50,000) from its benefic relationship to the *Journal* in 1952, the IADR Council and the *JDR* Publication Committee sought other funds for support of the *Journal*. There were recruited from among commercial concerns several Supporting Associates who contributed "in multiple of one hundred dollars" each. This was for immediate use in meeting printing costs. On the other hand, whenever small amounts of money were left over, these were added to the smaller endowment fund previously cited, which now assumed greater importance, being the sole remaining endowment fund for the *Journal*.

There were intermittent reports in the *Journal* about this unique Fund, but by March 1956 it had grown to \$1802.34, with the statement that "there had been no expenditure from this fund." This was reported in *JDR* of 1957 while H. B. G. Robinson was Editor.



Recognizing that this small fund was growing, though very slowly, the 1957 revision of the IADR Constitution stipulated in Article IX, Section 5: "If and when endowments for the *Journal* exceed \$10,000 the Council shall appoint three endowment trustees to be custodians of the endowment assets. The terms of service of the endowment trustees shall be three years and the terms shall be so staggered that one new trustee is appointed each year. A trustee may not succeed himself."

As of November 1962, while F. J. Orland was Editor, this fund, sometimes labeled simply the Endowment Fund of the IADR, amounted to \$2511.85.²⁴ At the very end of 1964 it had been increased to \$2597.58 and its name upgraded to be thereafter the "Endowment Fund of the IADR for the *Journal of Dental Research*."²⁵ This was in conformity with the facts—that the fund was held by the IADR for the *Journal's* eventual benefit. During the F. J. O. Editorship and with his effort, the fund was doubled from various contributions by friends of the *Journal*. By the end of September 1970 it totaled \$5558.11, attaining more than half of its ostensible goal.

The intent of the fund, according to all who have been active in Council and Publication Committee deliberations over the years, is that it should be safeguarded and maintained intact until it grows to \$10,000, when it may be able to do the *Journal* some significant good.

This resumé of the facts about these funds (which previously had not been very clear) was compiled from facts gleaned from the *Journal of Dental Research*, from unpublished correspondence, and with the concurrence of several men with long memories, such as Hamilton B. G. Robinson, Dan Y. Burrill, J. Roy Blayney, George C. Paffenbarger, and J. Frank Hall.

REFERENCES

1. Orland, F. J.: The Fifty Year History of the *Journal* and the Biographical Directory of the IADR (Special Commemorative Supplement to the September 1969 issue of vol 48).
2. Bremner, M. D. K.: Professional Journalism, in *The Story of Dentistry: From the Dawn of Civilization to the Present*, 2d ed, Brooklyn: Dental Items of Interest Publishing Co., 1946, pp. 107-116.
3. Trueman, W. H.: Dental Journals of the United States, in Koch, C. R. E. (ed): *History of Dental Surgery*, vol 1, Chicago: National Art Publishing Co., 1909, pp. 321-357.
4. Taylor, J. A.: *History of Dentistry*, Philadelphia: Lea & Febiger, 1922, pp 72-173.
5. *J Allied Dent Societies* 13: 496, 1918.
6. *J Dent Res* 6: 101-111, 1924-26.
7. *J Dent Res* 8: 197-233, 1928.
8. *J Dent Res* 3: n5, 1921.
9. *J Dent Res* 4: 448, 1922.
10. *J Dent Res* 39: 775, 1960.
11. *J Dent Res* 46: 1323, 1967.
12. Hollinshead, B. S. (ed): *Survey of Dentistry: The Final Report of the Commission on the Survey of Dentistry in the United States*, Washington, D.C.: American Council on Education, 1961, p 437.
13. Hollinshead, B. S. (ed): *op. cit.*, pp 438, 576.
14. *J Dent Res* 1: 33-34, 1919.



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15. *J Dent Res* **3**: 229, 1921.
 16. *J Dent Res* **4**: 38, 1922.
 17. *J Dent Res* **7**: iii, 1927; **8**: iii, 1928.
 18. *J Dent Res* **16**: 360-361, 1937.
 19. *J Dent Res* **28**: 684, 1949.
 20. *J Dent Res* **31**: 517-520, 1952.
 21. *J Dent Res* **25**: 187, 1946.
 22. *J Dent Res* **27**: 774, 1948.
 23. Recorded on second page preceding p 1, *J Dent Res* **29**, 1950.
 24. *J Dent Res* **44**: 831, 1965.
 25. *J Dent Res* **44**: 1414, 1965.



CHAPTER SEVENTEEN: WHO IN IADR WAS WHO

A Biographic Reference to Deceased Members

Those among the living are well documented in the research world by the 1969 IADR Directory and its 1971 supplement. But those men and women who lived in earlier years, and gave full devotion to research in their time, should be remembered for what they achieved. Thus, a biographic listing of all deceased individuals in dental research as IADR members of the past must certainly not be overlooked, especially by the younger generation of researchers who should peruse this history of accomplishments.

Documentary reference to deceased colleagues is a fitting endeavor, as famous writers have pointed out in the past. Emphasis on biography is rendered by Carlyle, who declared, "Biography is the only true history." Emmons said, "Death stamps the character and conditions of men for eternity." This may be even more valid if the attributes of men and women in research are memorialized, as in this biographic compilation.

COMPILATION PROCEDURE

An exhaustive effort was made to gain biographic information for each of the 298 deceased members herein cited. The entire IADR History Ad Hoc Committee and the Association's living past Presidents contributed considerable information to this chapter, but the greatest single compilation effort was expended by the Chairman's able assistants, Miss Tesa Hayashi, Mrs. Harriet Blakley, and Mr. David P. James at the Zoller Clinic, University of Chicago, who searched out all known and accessible sources of biography, including IADR records, which were found to be very meager for the early years.

Despite this overall effort, results were not uniform for all those investigated. Very little information was available about some members of the past, while for others considerable background information indicated their greater contribution and prominence in the field of dental research in its broader aspects, as well as in dental education and administration.

It was necessary to use extensive abbreviations for the many activities of IADR past members. Standard forms are used as in past biographic directories. The most comprehensive appeared in a commemorative supplement to the *Journal of Dental Research*, volume 48 (September 1969), followed by an addendum (*J Dent Res*, vol. 50 [March 1971]). Earlier, IADR directories appeared in *J Dent Res* 31: 646-738, 1952, and in *J Dent Res* 41: 1111-1245 (suppl.), 1962.

MEMBERSHIP ANALYSIS

Aside from the problems cited, the biographic information gained has proved to be rather voluminous but revealing. This fifty-year period 1920-70 saw almost three hundred of the most prominent men and women interested in dental research pass away, but these individuals left behind a heritage of great importance to the



history of the healing arts. Their collective contributions can never be fully evaluated or perhaps appreciated, but certain extrapolations are possible. Almost all persons interested in or active in dental research were, at some time or other, IADR members. Any person who was once a member is included in this compilation, even though a few may have left membership rolls before their deaths.

Among this total figure of 298 persons, which included five women, 229, or 76.8 percent, held dental degrees. Of this number of dentists, seven had Ph.D. degrees while thirty-two possessed M.D. degrees. Among the total, twenty-six members held only the Ph.D. degree in some basic science, while twelve held only the M.D. degree, although included among these thirty-eight men were three who held both a Ph.D. and M.D. Thirty-two were deans of schools, and three had been presidents of a college or university, while several were presidents of other important professional organizations or editors of other journals.

Of the total number, only forty-two were born, resided, and died in countries outside the United States, including eleven in Canada, eight in Hungary, five in England, and five in Germany and Austria. However, twenty-eight men who were born in European countries and five who were born in Canada emigrated to become part of the large United States membership in the Association.

The members of this unique group of 298 were active in a variety of disciplines. What were their major fields of research interests? Pathology was listed most often (by 45), followed by microbiology (25) and oral surgery (24). Next listed were Orthodontics, Prosthetics, and Preventive Dentistry (23 each). These were followed by Histology (20), Anatomy (19), Dental Materials (18), and Biochemistry (17). Periodontology and Education (both 15) and Operative Dentistry (13) as well as Crown and Bridge (8) followed. Other fields were minimally cited: Physiology (6), Epidemiology (6), Anthropology (6), Oral Diagnosis (5), Pedodontics (4), Endodontics (4), Pharmacology (3), History (3), Biophysics (3), and Roentgenology (2). Psychology (1), Dental Therapeutics (1), and Socioeconomics (1) constituted the remainder of the fields listed by members of the past. However, a considerable number of persons listed more than one field, while a very few listed none.

A final note in the area of mortality is that the 298 members who died during the five decades ending with 1970, which marks the fiftieth anniversary of the IADR, collectively lived to a moderately old age, averaging 65.8 years, with a span of 28 to 92 years. Over this same period the average expectation of life in the United States was only 61.9 years. Thus our members in their productive professional lives enjoyed considerable longevity.

WHO WAS WHO

AMICI, Giovanni. HISTOCHEMISTRY OF ORAL TISSUES. b 1923; d Milan 3 Jan 1965. Prof odont U Pavia Italy. AAAS. Auth *La Dentinogenesi*; contrib *Arch Oral Biol & Atti del Convegno dell ARPA italiana*. A founder & councilor Continental European Div IADR. Partial removable prosthesis; neurophysiopathology of the subjective and objective sensibility of the oral cavity in relation to paraprothetic pathology and results of



recent experimental research; relationship of polymerization of the fundamental substance of connective tissue and salivary concentration of electrolytes; radiobiology of enzymatic systems in mineralization.

ANDREWS, Robert R(obbins). HISTOLOGY; EMBRYOLOGY OF ENAMEL. b Boston 7 Aug 1884; d Waban Mass 26 Jan 1921. DDS Boston DC '75. Prof histol Boston DC, trustee Tufts DM. AM (hon) Dartmouth '92. Jarvie med '11. AADSci (past pres), Mass DS (past pres), RMS. A founder of IADR.

APLIN, Arthur W. OPERATIVE DENTISTRY. b 25 Mar 1928 place not known; d 12 Dec 1969 Lexington Ky. BS '51, DMD '55, MSD '64 U Oregon. Instr op dent '57-61, asst prof op dent '61-63, assoc prof op dent '63-64 U Oregon; asst prof fixed prosthodont '64-66, asst prof dent '66-67, assoc prof rest dent '67-69 U Ky; clin asst dent U Ky Med Center Hosp '64-69. Prac '56-57. Serv USA '46-47, Capt USA DC '55-57. Co-auth sec on rest dent *Current Therapy Ed IV*. AAAS, ADA, Bluegrass DS, Kentucky DA, Oregon SDA, OKU. Mandibular recording methods and devices; thermal studies.

ARNOLD, Francis A. PATHOLOGY; EPIDEMIOLOGY; RESEARCH ADMINISTRATION. b Orrville O 30 Dec 1910; d 1 Dec 1967. BS '32, DDS '34, DSc '62 WRU. Intern US Marine Hosp Cleveland '34-36; comm off USPHS '36-67; assoc dir '48-53, dir '53-66 NIDR. Co-chmn hon ed adv bd *Arch Oral Biol*; bd ed *Public Health Repts* '58-61; mem ed counc *Dent Progress* '60-62. FACD, FAPHA, AAAS, ADA, AEPS, FDI (vp sci cmt '54-61), OKU. IADR (pres '53-54).

BAKER, Lawrence W(ills). ORTHODONTICS. b Woodstock Vt 18 Jan 1876; d W Roxbury Mass 28 Nov 1954. DMD Harvard '98, grad Angle Sch Orthod. Asst '99, instr '00, asst prof '09, prof orthod '22, fel dept res '12-54, mem adm bd & cmt on res in dent med Harvard SDM. Prac pt orthod. FAADSci (past pres), ASO, 1st Dist DS, NY, Mass DS, NDA. Growth of mandibles of rat embryos transplanted to the anterior chamber of the eye. Developed Baker intermaxillary technique.

BÁNHEGYI, István. BACTERIOLOGY. b 1894 place not known; d 1944. MD '20 U Budapest. Fac dent sch U Budapest. Studies on oral microbiology and problems of dental focal infection.

BARNFIELD, William F. PATHOLOGY. b Charleston Ill 11 Dec 1913; d Indianapolis 1 Jun 1946. DDS Wash U SD '39. Intern & resid Cincinn Gen Hosp '39-41. Instr '41-44 Wash U SD, instr U Ill CD '44-45, asst prof Ind U '45-46. ADA, Ind SDA, Indianapolis DS. Contributor to journals; recipient of grant by USPHS for research on the cause of periodontal disease.

BARTELS, Henry A(rthur) MICROBIOLOGY. b NYC 22 Jan 1895; d NYC 14 Aug 1969. BS RI State Coll '17; BS '25, DDS '27 Columbia U. Bacteriol USPHS '17-18; bacteriol div labs & res NY Dept Health '19-53; instr 27-35, asst prof '37-57 Columbia U CD; asst prof '57-62, assoc clin prof microbiol '62-69 NYU CD; 2nd Lt USPHS '17-18. Prac pt '27-62. Auth six chaps *Oral Microbiology* '68. NYAS, FAAAS, AADS, ASE, RESA (pres NYU dent br '67-68), ADA, ASM. Oral microbiology; infectious diseases; defensive mechanisms in the mouth; sterilization.

BATES, George A(ndrew). HISTOLOGY. b Boston 5 Aug 1847; d Auburndale Mass 5 Jan 1925. DDS Boston DC '89; DMD '03, MS '04 Tufts Coll. Prof histol Boston DC '91-99 & Tufts Coll '00-25. Trustee Harpswell (Me) Biol Lab. AAA. A founder of IADR.

BAUER, William H(ans). PATHOLOGY. b Prague 30 Oct 1889; d St Louis Mo 1956. MD U Prague, DDS St Louis. Intern U Prague; res fel histol, assoc dept path, asst prof to prof & dir dept stomat Innsbruck MS; prof & chmn dept path & res St Louis SD; lect bone path St Louis SM & Marquette SM. AAPB, Am Coll Oral Path,



Mo St Path Soc, St Louis MS, St Louis Path Soc. St Louis sec IADR (pres '48-49). General and oral pathology; cancer; salivary gland virus; tissue culture.

BEAR, Harry. DENTAL EDUCATION. b Richmond Va 1890; d 30 Jul 1950. DDS Med Coll Va '13. Inst metallurgy to prof exodont, dent jurisprudence, ethics & economics '14-29, dean SD '29-50 Med Coll Va. FACD, Pan Amer Odont Assoc, ADA (past vp, trustee & mem Hse Deleg), Richmond DS (past pres), Va SDA (past pres), ASOS (past pres; secy '33-50), OKU.

BEBB, William. COMPARATIVE ANATOMY. b Fountaindale Ill 15 Jun 1869; d Spencer Ind 7 Apr 1938. DDS CCDS '97. Secy USC CD '02-12; prof comp dent anat & museum curator '14-27, librarian '24-27 NWU DS; vis lect Am Dent Soc Europe. Traveled widely collecting volumes and specimens to build the most complete library and museum in his field—the William Bebb Library and Museum at Northwestern University Dental School.

BECKS, Herman. b Wesel am Rhein Germany 24 Aug 1897; d San Francisco 13 Jul 1962. DMD '22, MD '24 U Rostock Germany; DDS '33 U Calif. Instr U Freiburg '26-28; res assoc to prof '28-62, chmn div DM '40-62 U Calif. Prac pt oral diag & DM. Hon prof dent San Carlos U Guatemala. Callahan awd. Assoc ed *J Calif SDA*; ed oral med sec *J OS OM & OPath*. FACD, ADA (chmn res sec), Inst PH, Ann Seminar Stud & Prac DM (pres & bd dir), NRC (dent cmt), Pasteur Soc, AAPer, AAAS (fel), AAAN, AGA, AAOP, SRCD, FDI, Orthod Assoc Mexico, OKU. Oral pathology; bone anomalies; effect of hormones and growth factors on oral status and bone development; preventive dentistry.

BEEBE, Douglas M. b 1907 place not known; d 3 Jul 1954. DDS NWU. Lt Col USA DC, chief dent serv USA redistribution cent Miami Beach Fla, mem R&D bd Surg Gen off '49-54, res consult NBS '53-54, chief USA dent serv Alaskan Aleutian Command.

BELDING, Paul H(erbert). BACTERIOLOGY. b Waucoma Ia 11 Jun 1896; d Waucoma 3 Jun 1953. DDS State U Iowa '19, BS Upper Iowa U '43. Prac gen '19-53. Ed *Dental Items of Interest* '37. AAAS, ADA, Dubuque Dist Dent Soc, Fayette City Dent Soc (pres '32), Iowa SDS, Tricity Dent Soc. Dental caries.

BERGER, Adolph. ORAL SURGERY; PATHOLOGY. b Hungary 12 Dec 1882; d NYC Apr 1951. DDS NY CD '09. Asst prof oral surg '23, assoc prof '25, prof '27 emer '51 Columbia U. Prac gen to oral surg. William Carr Prof Oral Surg at Columbia. Cmdr USNR '38. FACD, FNYAM, ADA, OKU. Clinical research.

BERLINER, A(braham). PERIODONTICS. b Gloversville NY 5 Jan 1913; d NYC 30 Jun 1966. DMD Tufts Coll '36. Tchgr fel dept anat NYU DS '42-43, postgrad fac perio 1st 2nd & 10th Dist DS NY, '46-53, res assoc chem Newark Coll Rutgers '53-55, head dept perio Lenox Hill Hosp '51-53, Sydenham Hosp from '50, mem Eastern Grad Res Fdn from '49. Capt USA '43-45. AADM, ADA. Aqueous iodine solutions; clinical instrumentation, bone pathology and histopathology in periodontal disease.

BEST, Elmer. S. b 1881; d Jul 1954. Ed *Dental Survey*. ICD (secy '37-54; rgstr US sec '35-54), Minn Dist DS (pres), AAAS.

BEUST, Theodore Bernhard. ANATOMY; HISTOLOGY; EMBRYOLOGY. b New Albany Ind 14 Jan 1871; d 24 Nov 1937. DDS 89, MD '08 Louisville. Prof dent bact & biol '17, prof dent histol & comp dent anat '22-37 Louisville CD. Louisville faculty awd '34. ADA. IADR (pres '35-36). Microscopic anatomy of teeth; dental caries; comparative dental embryology.



BIEN, Saul M(arcus). BIOPHYSICS; CRANIOFACIAL BIOLOGY. b NYC 1908 Nov 13; d 19 May 1969. AB NYU '33, DDS Columbia '37, MSc NYU '61. Intern Guggenheim Dent Clin '37-38, sr res dent NY St '42-44, guest sci Brookhaven Nat Lab '57, spec fel USPHS '62, res assoc prof microbiol NYU '64. Prac pt orthod. 1st Lt USA DC '43. Hellman awd AAO '68, Lord-Chaim prize '64. FACD, NYAS, FAAAS, RMS (fel), AMWA (fel), NLAD, ISCB (secy treas '65), AAO, AADS, ADA, AChemS, EOS, AADEd, FDI, ASCB, RESA, AAUP. Pentoses; prosthetic appliances; lactoflavin; fluoride content of saliva; analysis of fluorides and forces exerted in the tooth alveolus; periodontal diseases; electrochemical phenomena; effect of high hydrostatic pressure on calcified tissues and microorganisms.

BLACK, Arthur D(avenport) PATHOLOGY; ORAL SURGERY. b Jacksonville Ill 15 Nov 1870; d Evanston Ill 7 Dec 1937. BS Ill Coll '92; DDS '00, MD '01 NWU. Demonstr to prof op dent, asst oral surg prof dent path & op dent & dean '18-37 NWU. Alumni med NWU '37. Pres Chicago Centennial Dent Cong '33, FACS, AADS, OKU. IADR (pres '29-30). Developed system of classification and indexing of dental literature.

BLACKWELL, Robert Edwin. OPERATIVE & PREVENTIVE DENTISTRY. b Marshall Co Ill 12 Jan 1884; d Evanston Ill 13 Dec 1970. DDS '14, MS '25 NWU. Instr op dent '14-17, asst prof & supt clin '17-20, prof '20-49, prof emer op dent NWU DS '49. Prac pt '14-49. Ed *Black's Operative Dentistry* 9th ed '55. FACD, FAAAS, ADA, FDI, OKU (pres '43). Etiology of caries; preventive dentistry.

BLUM, Theodor. ORAL SURGERY. b Vienna 25 Sep 1883; d NYC 25 Jul 1962. DDS '09, MD '11 U Pa; MD Vienna '12. Instr oral surg '14, asst prof '17, instr gen surg '18-19 NY PostGrad Hosp. Prac ft oral surg. Lt Cmdr USNR '35. Mem exec group adv cmt Guggenheim Dent Clin '29-43, commr Bd Oral Surg NY St '47, pres Dent Health Serv '47. ASOS (pres '39-40), ACS, ICD (fel), FDI, ADA (chmn sec oral surg, exodont & anesth '37), NY Inst Clin Oral Path (found & secy treas), East Dent Soc (pres '23), Met Med Soc (secy '23, pres '29), NYAM (fel), FAAAS, 1st Dist Dent Soc NY (chmn oral surg '21-22, pres '33-34), OKU. Clinical oral pathology and surgery; oral roentgenography; bone abnormalities; anesthesia.

BODECKER, Charles F(rancis). HISTOPATHOLOGY. b NYC 2 Sept 1880; d NYC 11 Feb 1965. DDS U Buffalo '00. Prof oral histol & embryol '23-46, exec off res lab '26-46, prof emer Columbia D&OS '46-65. Prac pt gen '00-44. Jarvie med '38, Disting Serv Med Columbia Presbyt Med Cent '53, U Buffalo awd '53, Callahan awd '54, dent res awd Columbia U '54, Spenadel med '58. Assoc ed *J Dent Educ* '36-45, ed *NY St Dent J* '48-65; auth *Fundamentals of Dental Histology & Embryology* '26, *Elementary Histology for Dental Hygienists* '33. FACD, FAADM, ADA, NYAM (assoc fel), NYAS (assoc fel), NYBDE '30-50, NY (chmn res cmt '28-42), OKU. A founder of IADR (pres '42-43). Dental caries; demonstration of organic enamel matrix (named enamel lamella and rod sheaths); histology and physiology of enamel and dentin; periodontoclasia; vital staining of enamel.

BOGUE, Edward A. b Vernon NY 1834; d NY 21 Nov 1921. DDS NYC DS '55, MD Coll Castleton Vt. Lect Harvard DS '70. Prac NYC '64-21. ADA charter mem & secy, Odont Soc Gt Brit, Odont Soc France, Am Dent Club (pres), NY Odont Soc (pres), 1st Dist DS NY (pres), NY Inst Stomat (pres), NY SDS, Am Acad DSci (Boston), Int Dent Fed, NY St Bd Dent Exam. Literary contributor and inventor of appliances for dental use.

BONYHÁRD, Béla. A. PROSTHETICS. b 1899; d 1944; MD Budapest '23. Res in prosth dent & removable appliances Dent Dept Apponyi Polyclinic Budapest. Co-auth *A Teljes protézis*; auth *Die Indikationsstellung für die partielle Prothese* '36. Designer of clasp for removable partial prosthesis, still used in central Europe, known as "Bonyhád clasp."

BOX, Harold K(eith). PERIODONTICS. b Carleton Place Ont 24 Apr 1890; d Toronto 1956. DDS '14, PhD '20 U Toronto; FDS RCS Eng. Prof oral & dent path '19, prof dent path & perio '20, res prof perio '27-56 U



Toronto. Prac pt perio. FAAPer (hon), CDA (res cmt), NRC Ottawa, Ontario DA (hon life), Toronto Acad Dent (hon life), AARD (hon). Periodontal pathology and therapeutics.

BRAND, Thurlow W(eed) ANATOMY. b Pittsburgh Pa 11 Jan 1891; d Carmel Colo 16 Sep 1965. BS '13, DDS '17 U Pittsburgh. Tchr to prof Pittsburgh SD '17-65. FACD, ADA.

BRASHEAR, Alton D(ean). GROSS ANATOMY; HISTOLOGY. b Ft Smith Ark 17 Mar 1906; d Richmond Va 30 Jun 1963. DDS Ohio SU '32; BA '34, MS '35 U Rochester. Intern Rochester Dent Disp '32-33, Rockefeller fel U Rochester '33-35, instr anat La SU Sch Med '35-38, prof anat Med Coll Va '38-63. Col USA DC '41-46. Van Woert prize 1st Dist Dent Soc '34. Auth *From Lee to Bari* '57. AAA, ADA, Assoc Mil Surg, OKU. Innervation of teeth; embryologic techniques; fascias of the neck and head.

BRAWLEY, Robert Eugene. b Greenville O 19 Mar 1904; d Dayton O Feb 1954. BS '28, DDS '32 OSU; MS '34 U Rochester. Intern Guggenheim Clin '31, intern Forsyth Dent Infirm '32, Rockefeller fel U Rochester '32-33. Prac pt pedod '38-54. ADA, Ohio SDS, OKU. Salivary analysis; bacteriostatic and physical properties of saliva; palatal measurements; gnathodynamics; dental caries; normal resting saliva.

BREKHUS, Peter J. CROWN & BRIDGEWORK. b Bergen Norway 3 Aug 1894; d 22 Jun 1951. BA Augsburg Coll Norway '02, DDS U Minn '10. Tchr Minn public schls '02-07; clin asst '10, instr '11-12, asst prof '12-15, assoc prof '15-23, prof '23-42, emer '42-51 U Minn; vis prof U Helsingfors & U Oslo '21. Gies awd '40, U Minn Outstanding Achiev awd '51. Auth *The Fundamentals of Crown & Bridge Work; Your Teeth—Their Past & Probable Future*.

BRONNER, Finn J. DENTAL INSTRUMENTS; OPERATIVE DENTISTRY. b Oslo 1888; d New Orleans 12 Apr 1954. Stud Univ Oslo, Paris, Berlin, DDS U Pa '18, stud Mayo Clin & US Navy Med Sch. Instr to prof emer NYU CD '27-53, prof Loyola SD (La) '53-54. Prac dent Norway to '15; prac gen '18-26. Mem 11 American & Norwegian prof assocs. Author of texts, scientific papers; extensive research on dental techniques, physiology of teeth and jaws; aptitude testing for dental profession.

BROUGHTON, Albert J(ames). b Toronto 1873; d 14 Mar 1958. DDS RCDS Ontario '06. Prac ft. Found '06, secy treas '07 Can OP Assoc. Secy Toronto sec IADR.

BROWN, Robert K. RELATIONSHIP OF PSYCHOLOGICAL TESTS TO STUDY & PRACTICE OF DENTISTRY. b Sharpsburg Pa 22 Sep 1893; d Detroit Apr 1944. DDS '19, MS '28 U Mich. Instr to prof '22-33 U Mich. Prac ft gen '19-22, '33-44. Assoc ed *Dental Survey*.

BRYANT, Carrie K(irk). BACTERIOLOGY. b Philadelphia 6 Jan 1883; d Philadelphia 19 Dec 1939. AB U Pa, studied Phila City Lab & U Pa Lab Hygiene. Instr '17, asst prof bact '26 Pa DS. AAAS, Soc Amer Bact.

BULLEID, Arthur. BACTERIOLOGY. b Torquay Devon England 5 Nov 1892; d London 19 Jul 1964. LRCP (London), MRCS Eng '17, LDS RCS (Eng) '20, FDS RCS (Eng) '48. Dent surg Guy's Hosp, exam bact & path BDS (London), lect spec bact Dent Sch Guy's Hosp, exam dent surg & path LDS RCS (Eng). Prac pt. Med off RAMC '17-20 (Maj). Hunterian prof RCS '35-36, Cartwright prize & John Tomes prize RCS. BDA, RSM (odont sec).

BUNTING, Russell W(elford). BACTERIOLOGY. b Ann Arbor Mich 21 Jun 1881; d 22 Nov 1962. DDS '02, DDS '08 U Mich. Instr '04, prof oral path '14-50, secy dent fac '12-23, dean dent fac '37-50 Mich SD; dent consult Fed Civil Defense Admin '51. DSc (hon) U Detroit '57. Callahan awd '29, Fauchard med '30. Prac gen.



Auth *Oral Pathology* 2nd ed '40, *Oral Hygiene & Treatment of Parodontal Diseases* '36, *Oral Hygiene & Preventive Dentistry* '50. AAAS, ADA, OKU. IADR (pres '32-33).

BURSTONE, Marvin S(tanley). EXPERIMENTAL PATHOLOGY; HISTOCHEMISTRY. b St Louis Mo 8 Dec 1922; d Atlanta Ga 19 Feb 1966. DDS '46, MA '50 Wash U. Instr path Wash U SD & SM '48-50, asst prof path Ill CD '50-52, spec NIH fel U Chicago '52-53, USPHS NIDR '53-60, head path sec diag res br Nat Cancer Inst '61-66. Capt USA DC '46-48. Essay prize CDS '54. Assoc ed *J Histochem & Cytochem* '62-66. FAAS, AACR, AAEP, ABOP (dipl), ADA, HistS (treas '59, counc '62-66). Enzymes and their historical identification.

BURWASSER, Philip. PEDODONTICS. b Montreal Canada 23 Mar 11; d Cleveland O 29 Oct 1966. BA '33, MA '35, DDS '40 WRU; PhD U Chicago '47. Intern Forsyth Dent Infirm '40-41; dent fel Zoller Dent Clin '41-45; instr '45-46, asst prof '46-50, assoc prof '50-58, prof pedod & dir grad courses WRU SD '58-66; dir dent serv WRU Hosps. Prac pt pedod. FACD, ASDC, OKU. Dental pulp; gingival tissues.

CADELL, P(eter) B(roughton). PREVENTIVE DENTISTRY. b Armidale NSW Australia 6 Dec 1921; d Brisbane 9 Dec 1964. BDSc U Queensland '50, MDS U New Zealand '58. Admin dent off Nauru '55-58, sr res off Med Res Counc New Zealand '59-64. Prac ft gen '50-55. Flight Lt Aust AF '42-45. Aust Assoc Soil Sci, Int Assoc Soil Sci, New Zealand Assoc Scis, New Zealand Soc Soil Sci. Environmental study associated with dental conditions on Nauru; soil trace elements and dental caries in New Zealand; geographic variations in caries prevalence in New Zealand.

CARBONELL, Virginia M(agsarili). DENTAL ANTHROPOLOGY. b Manila Philippines 14 Sep 1920; d Herkimer NY 24 Nov 1965. DMD U Manila '52, MA U Chicago '58. Intern '52-53, asst dent surg '53-58, instr '58-60, res asst '58-59, res assoc '59-60 Zoller Dent Clin; res assoc London Hosp Med Coll '60-62; asst prof & res assoc Zoller Dent Clin '62-65; asst prof SD SUNY at Buffalo '65. Mosby book awd '53. AAPA, Roy Anthro Inst Eng (fel). Dentition of people of Kish, Mesopotamia (3000 B.C.); dentition of early British skulls (700-1800 A.D.); dentition of Magdalenean female from Cap Blanc, France; variations in frequency of shovel-shaped incisors in different populations.

CARY, James Egerton. b Brisbane Australia 2 May 1905; d 24 Feb 1948. BDSc '41, BS '42, DDS '45 U Queensland (first to receive dental degree from this school). LDQ '26. Prac '26-48. Cary prize in his honor at Queensland DC by Commonwealth Dent Supply Co '45. Aust Dent Assoc. Development of alkali within saliva and its relation to dental disease.

CHAYES, Herman E. S. CROWN & BRIDGEWORK; PUBLIC HEALTH. b Ukraine 14 Jul 1878; d NY 2 Jul 1933. DDS NYCD '98. Prac ft '01-15. Auth *Cast Gold & Porcelain Inlays* '18, *Movable-Removable Bridgework*. ADA, AARD (life), 1st Dist DS NY (pres '27-28, mem bd dir), NDS, NY SDS. Developed Chayes system of movable-removable bridgework.

CHILLINGWORTH, Felix P. PHARMACOLOGY; LEPROSY. b New Haven Conn 17 Sep 1882; d Boston 29 Jun 1938. MD Yale U. Fac physiol Yale; med exam City of New Haven; assoc prof pharmacol Tulane; stf U Kan MS; prof physiol '20-29, prof exptl pharmacol '29-37, prof & head dept pharmacol '37-38 Tufts M&DS; chief leprosarian Ibersville La leprosarium. AMA, FACP, FASEB.

CHOTT, George A. DENTAL MATERIALS; PREVENTIVE DENTISTRY. b Chicago 15 May 1904; d Chicago 6 Mar 1969. BS NWU '26. Pres Crescent Dental Co Chicago.

CHRISTOPHER, Knud-Mogens. PALEOPATHOLOGY. b Copenhagen 20 Aug 1914; d Copenhagen 21 Apr 1942. Instr op dent Dent Inst Copenhagen.



CLAPP, George Wood. PROSTHETICS. b Boston Mass 24 Oct 1870; d 8 Aug 1958. DDS U Mich '98. Tchr denture prosthesis & practice NYU CD beginning '14. Prac ft prosth '00-06. Auth "Life & Work of J. Leon Williams," *Dental Digest* '25. ADA, 1st Dent Dist NY. The mechanics of anatomical articulation; restoration of facial expression with artificial teeth; professional denture service.

CLARK, Henry B(annister), Jr. ORAL SURGERY. b Oak Park Ill 29 Jan 1911; d 10 Dec 1966. BS '31, MB '33, MD '34, DDS '36 U Minn. Intern Ind U Hosp '33-34, prof & chmn div oral surg Minn SD '46-66. USA MC '40-46 (Capt to Maj). Prac ft oral surg '36-40, '46. ABOS (dipl), ADA, Minn Cancer Soc (bd dir), ASOS, OKU. Analysis of maxillofacial injuries, particularly fractures of upper jaw; healing of experimental fractures of bone and effects of implantation of bone substitutes.

CLARK, Stanley W. b Chicago 1887; d Chicago 1944. DDS '16, MDS '34 NWU. Prof materia med & therap NWU. Col USA DC.

CLAWSON, M. Don. OPERATIVE DENTISTRY; PEDODONTICS. b 1900; d Oak Ridge Tenn 17 Dec 1951. DDS Wash U SD '26. Prof op dent, act dir, demonstr, lect '30-41 American U Beirut; demonstr & lect U St Joseph, Beirut; dir dent serv Iraq Petroleum Co; prof op dent & pedod & dir dent educ '42-45, president '45-50, bd trustees '50-51 Meharry MC; dir dent serv Oak Ridge reservation Manhattan proj. Prac ft '26-28, '30-41, '50-51.

COHEN, Joseph T. PREVENTIVE DENTISTRY. b Minneapolis 6 Feb 1893; d Aug 1963. DDS U Minn '16. Res Inst Child Welfare (Minn) '26-39; clin assoc prof Minn SD & SM '39-60. Prac ft gen & pedod '16-56. FICD, ADA, ASDC, OKU. Growth and development of dental arches in children; statistical study of dental caries.

COLYER, James Frank. ORAL PATHOLOGY. b London 25 Sep 1866; d London 30 Mar 1954. FRCS, LRCP, FDS RCS. Dent surg for over 30 yrs Royal Dent Hosp London. Hon curator odont collection Museum RCS. Colyer prize '26, Colyer med RCS, gold med RCS, Tomes prize '15. FRSM (hon), BDA (hon), Kaiserlich Deutsche Akademie des Nationforsch (hon). Auth *Dental Conditions of the Teeth of Animals* '36; co-auth *Dental Surgery & Pathology* '10. IADR (chmn London sec to '39).

COOLIDGE, Edgar D(avid). HISTOPATHOLOGY. b Galesburg Ill 15 Jul 1881; d 12 Aug 1967. DDS Loyola '06, BS Lewis Inst '25, MS NWU '30. Instr oper tech '06-13, prof oral hygiene prev dent & therap '27-48, prof emer '48-67 Loyola CDS; prof materia med & therap Ill CD '13-23. Prac pt perio & endod '06-59. LLD (hon) '48, ScD (hon) '59 Loyola. Callahan awd '47, Disting Serv awd Interprofessional Counc '59, awd leadership perio Tufts U '61, Achievement awd Knox Coll '60, emer fel Inst Med Chicago. AAPath, AAAS, AADH, AAE (hon pres '59), AAPer (pres '47), ADA, ASPer (hon), FDI, Ill SDS (pres '32), Int Dent Cong Paris '31 & Vienna '36, Odontographic Soc Chicago (pres '41-42), OKU. Hon vp IADR '58.

COURTNEY, James Milton. RESTORATIVE & PROSTHETIC DENTISTRY. b Emsworth Pa 16 May 1902; d Cleveland 16 Jul 1970. DDS WRU SD '28. Dent intern Mt Sinai Hosp Cleveland '28-29, instr oral surg WRU SD '29-33, stf St Luke's Polyclin '42. Prac ft. Maj DC '42-45. FICD, FACD, ADS, ADA, AEqs, Am Acad HD (exec cmt, chmn audit comm), Acad Pl Res D (pres '56-57), FDI, NYAS, AAAS, CDS, AAGFO. Investigation of the relationship of pre-operative oral prophylaxis to post-operative pulmonary complications.

COWLING, Thomas. b York Twp Ont Canada 8 Jan 1888; d Toronto 17 Apr 1950. DDS RCDS Ont '12; BA '23, MA '25 McMaster U; B Pedagogy Ont Coll Educ '29. Prof dent technol & metallurgy; senate '37, asst dean '42 U Toronto. Ed *Oral Health*; assoc ed *J Dent Educ*. CDA, Ont DA.



COY, Herbert D(ale). DENTAL MATERIALS. b Farragut Ia 16 Jul 1892; d Richmond Va 23 Feb 1966. DDS Creighton U '14. Dent consult Baker & Co '34-42, mgr I Stern & Co '42-48, prof op dent & dir dent clin Med Coll Va '48-58, consult US VA '51-52 & Walter Reed Army Med Cent, vis prof Nihon U '58. Prac ft gen '14-34, '58-66. 1st Lt USA DC '17. MDS (hon) Nihon U '59. AAAS, ADA, Iowa SDS (pres '31-32), FACD, OKU.

CRAWFORD, Harry Mills. BACTERIOLOGY. b Arlington Tex 28 Oct 1901; d Dallas 30 May 1954. DDS Baylor '29. Instr dent res '43, assoc dent res '46-50 Baylor. Prac pt '29-54. Dallas Co Med Soc, Tex SDA, ADA, Dallas Acad Dent Res (pres '46), SW Soc Dent Med. Bacteriology of dental caries.

CRAWFORD, William H(opkins). PROSTHETICS; RESEARCH ADMINISTRATION. b Morristown Minn 12 Aug 1899; d Minneapolis 20 Feb 1964. DDS U Minn '23. Instr '23, asst prof C&B '25, assoc prof '27-28 U Tenn; assoc prof dent '28, prof & admin off prosth div '28-36 Columbia; prof dent & dean Ind U '39-45; dean Minn DS '45-64; dir res USPHS. USA '18-19. FAAS, ADA, Minn DA, APHA, NYAD, ICD, ACD, AADS (pres), Jarvie Soc, OKU.

CROSBY, Albert W(illiam). ORTHODONTICS. b Hartford Conn 13 Nov 1870; d New Haven 11 Nov 1938. DDS NY CD '92. Assoc clin prof dent surg Yale SM, attend orthod NYU. Prac ft gen '93-11, ft orthod '11-38. Conn SDA (pres), ABO (pres), NYAD, EOS, NY Soc Orthod, AAAS, ICD, ADA (trustee '31-34), OKU.

CROSS, Kent K(ane). PROSTHODONTICS; DENTAL ANTHROPOLOGY. b Campbell Hill Ill 14 Feb 1878; d 4 Aug 1964. DDS '07, BA '32, MA '33 U Denver. Lect Tenn SDS. Prac ft prosthod '07-58. 1st Lt Colo Nat Guard '17-18. FICD, SW Dent Soc (hon). Dental dictionary; development of jaws and teeth from Silurian fish to modern man.

CUSHMAN, Frank. DENTAL EDUCATION. b 1889; d 2 Feb 1946. DMD Harvard SDM. Prof & chmn dept dent Harvard SDM. Ret '44.

D'AMICO, Angelo. PREVENTIVE & RESTORATIVE DENTISTRY. b Palermo Italy 26 Feb 1900; d 11 Aug 1969. DDS U Calif '24. Instr U Calif '31-32, tchr postgrad courses USC beginning '59. Prac ft gen beginning '24. FACD. Normal function and functional relation of natural teeth in man; dental anthropology; functions of natural cuspids in human dentition.

DARLINGTON, Charles G(oodliffe). PATHOLOGY. b Brooklyn NY 28 Jan 1892; d 5 Nov 1960. MD Medico-Chirurgical Coll Phila '15. Intern Flushing Hosp '15-16, intern Metropolitan Hosp '16, path Muhlenberg Hosp (NJ) '24, oral path dent serv Montefiore Hosp '32, consult path Beekman Downtown Hosp NYC '47; asst prof path NYU Coll Med '19-34, prof path NYU CD '34-60. Lt Col USA & chief lab serv '43-46. ABOP (dipl), AMA, NY Path, Am Soc Clin Path, Harvey Soc, NYAM, Union Co Med Soc, found fel Coll Am Path. IADR (chmn NY sec '38-40).

DEAN, Henry Trendley. PUBLIC HEALTH. b Winstanley Park Ill 25 Aug 1893; d Evanston Ill 14 May 1962. DDS St Louis U '16, Off Sch USPHS '31. Act asst dent surg '21-22, '24-25, asst dent surg '25-26, dent surg '30-42, sr dent surg '42-45, dent dir '45-53 USPHS; div infect diseases, div physiol & exptl biol & med NIH '31-49; dir NIDR '48-53; lect Navy Dent Sch '43-53, lect Army Dent Sch '49-53. 1st Lt to Capt USA DC '17-19; Col USPHS. Gorgas awd '49. AAAS, ACD (chmn Wash sec '41), APHA, ADA, AAMS (pres '37), NRC (mem cmt div med sci '43-48, subcmt dent '47-53), FDI (US vp '47). IADR (pres '44-45). Epidemiology of fluorides and dental health; research administration.

DEAN, Marguerite T(aylor). PATHOLOGY. d Memphis Tenn 21 Apr 1952. Assoc prof dent & dir sch dent hygiene U Tenn. Widow of Richard D. Dean, former dean U Tenn DS.



DEAN, Richard D(oggett). BACTERIOLOGY; SEROLOGY; IMMUNOLOGY; PATHOLOGY; DENTAL EDUCATION. b Mississippi 1884; d 29 Sep 1950. BS Miss St Coll '08; DDS '22, MD '28 U Tenn. Prof oral path '22, prof oral med & surg '28, head div oral med & surg '33, dean '41-50 U Tenn CD. ADA.

DENTON, George B(ion). HISTORY OF DENTISTRY. b Detroit Mich 22 Mar 1884; d Evanston Ill 9 Mar 1963. BA '07, MA '09, PhD '16 U Mich. Instr English '12-17, instr tech composition DS '17-18, asst prof '18-19, prof '19-34, prof dent hist & lit '34-49 NWU; res consult ADA '49-63. Ed *Bull of the History of Dentistry* '53-63. AAHD, FDI. Hist of dentistry; dental nomenclature.

DEWEY, Kaethe Weller. PATHOLOGY. b 1868 place unknown; d 11 Nov 1934 Bad Nauheim Germany. MD Rush MC 12. Asst ob & gyn, path fel Rush MC; res asst histol & oral path, asst prof oral path U Ill CD; assoc prof clin path U Pittsburgh SD '28-34. Assoc ed *J Dent Res* '27-34; co-auth *Pathology of the Mouth* '25. Pathology of the mouth; reaction of oral tissues to implants.

DIAMOND, Moses. DENTAL ANATOMY. b Berlad Rumania 1894; d NYC 6 Oct 1949. DDS NYU '14. Prac '14-22; assoc prof dent, prof dent anat, chmn dept dent anat Columbia D&OS '22-49; lect Roy Soc Med London '21. Consult Am Museum Nat History. Embryol Inst Vienna awd '36. Co-auth. *The Enamel of Human Teeth* '40. AAAS, ADA. Formation of enamel; growth of human skull.

DIECK, Wilhelm. b Haensel Westphalia Germany 12 Jan 1867; d Berlin 28 Feb 1935. DDS U Berlin '87, MD Wurzburg '96. Asst prof '99, head op dent '07-24 Wurzburg; dean Berlin CD '24-35; vis lect Japan '30. ScD (hon) U Pa '15. Auth *Anatomy & Pathology of the Teeth & Jaws in X-ray Photography* '11. Soc Germ Tchrs Dent (pres). X-ray photography; rehabilitation of amalgams.

DOWN, C(harles) H(arold). PATHOLOGY. b Williamstown Australia Jan 1890; d Victoria Apr 1965. BDSc '12, DDSc '40 U Melbourne. Demonstr op tech '22-34, sr lect & head dept conserv dent surg '35-49, lect human dent anat '35-57, lect comp dent anat '45-57, prof conserv dent '49-58, prof '58-60, prof emer conserv dent surg '60 U Melbourne. Eng Capt Aust Army DC '15-19. FACD, FDS RCS, mem adv cmt Commonwealth Bur Dent Standards '46-58, Australian Dent Assoc (standards cmt '46-60). Dental materials; conservative dentistry.

DRAIN, Charles L(awrence). CARIES; PREVENTIVE DENTISTRY. b Missouri Valley Ia 7 Feb 1895; d Des Moines 5 Jun 1937. DDS Iowa CD '17. Lect & instr pedod '20, prof '36 SU Iowa CD; dir Iowa Bur Dent Hygiene. 1st Lt USA DC '17-19. ADA, Iowa SDS, ACD, OKU, Good Teeth Council for Children (bd dir), ASPDC (bd dir).

DRESSEL, Robert P(hillip). CROWN & BRIDGEWORK. b LeSueur Minn 4 Feb 1898; d 8 Nov 1968. DDS U Minn '23. Demonstr C&B & prosth dent '23, instr '24, asst prof '26, assoc prof '30, prof & chmn dept C&B beginning '38, secy fac beginning '51 WRU SD. Prac pt gen. 1st Lt USAR DC. FACD, AAAS, AACBP (pres '53), AADS (chmn C&B sec), AAHD, AAPRD, AAUP, ADA (secy; vice chmn & chmn partial dent sec), OKU. Effect of saliva on dental cements; TMJ relative to decreased facial vertical dimensions; partial denture prosthesis.

DRIAK, Fritz. DENTAL CARIES; ANESTHESIA; PERIODONTOLOGY. b Vienna 14 Feb 1900; d Vienna 27 Nov 1959. Dr med '24 U Vienna, clin dr Chvostek '24-25, clin dr Eiselsberg '25-27, asst dent inst U Vienna & Kieferstation 1st surg clin '27-45; after '45 dir Dent Inst U Vienna. Prac oral surg. Austrian DA (pres), hon mem Soc Stomat, Piedmont DA (Italy), Stomat Soc (Rome), ARPA (Austrian sec), FDI, Vienna MS. IADR (secy Vienna sec).



DUNNING, Henry S(age). ORAL SURGERY. b Scarsdale NY 7 Jul 1881; d New Canaan Conn 10 Feb 1957. DDS '04 NY CD, BS NYU, MD '11 Columbia P&S. A founder of Columbia D&OS '15. WW I serv abroad repairing maxillofacial injuries. Tchr to prof oral surg Columbia D&OS '18-48, chief dent serv Presbyterian Hosp. Disting serv awd Columbia Presbyterian Med Cent '53. FACS, dipl AB Otolaryngology & ABPS. A founder of IADR. Brother of William Bailey Dunning.

DUNNING, William Bailey. b NYC Apr 1874; d Englewood NJ 21 Jul 1959. DDS NYCD '95. A founder of Columbia D&OS '15. Prof op dent '19, prof theory & prac '24, prof dent '30, prof emer '45-59 Columbia D&OS. Prac ft gen '95-46. US Navy '98. Ed *J Allied Dent Societies* (precursor of *J Dent Res*) '12-18; co-auth *A Dictionary of Dent Sci & Art* '36. ADA (3rd vp '41), 1st Dist DS NY (pres '16), NYAD (pres '33-35), NY SDS, NY Tb & Health Assoc (chmn dent cmt), NYAM. 1st prof emer Columbia D&OS. A founder of IADR. Brother of Henry Sage Dunning; father of James M. Dunning, Harvard SDM; grandson of Edwin James Dunning, pioneer dentist of New York State.

ELLIS, Arthur W(illiam). PUBLIC HEALTH. b Ingersoll Ont Canada 1883; d 29 Jul 1949. DDS RCDS Ont '04. Prac ft '04-49. Coronation awd '35, BDA awd '46. Ont DA (chmn dent public health cmt; hon life mem, pres '29-30), Can Dent Hygiene Counc (chmn), Ont Govt Dent Health Cmt (chmn).

ESCHLER, Josef. ORAL SURGERY; ORTHODONTICS. b Germany 27 Sep 1908; d 26 Dec 1969. MD German U at Prague '33; DMD U Freiburg '55; Stud dent at dent coll Prague, Oslo, Stockholm & Copenhagen '34-38. Asst Histol Inst Germ U (Prague) '31-35; vis prof Tokyo med & dent depts '40-47; asst prof U Freiburg '48-59; vis prof U Cairo & U Alexandria '56-60 (3 mos each yr); prof & head dept oral surg, plastic surg & orthod U Freiburg '59-69; vis prof U Tokyo '61, U Bombay & U Calcutta '61 & '62; vis lect Greece & Yugoslavia '65. Author of two books on orthodontia, oral surgery book, and more than 200 other scientific works.

FAULKNER, Alden W(est). PROSTHETIC DENTISTRY. b Hants Co NS Canada 24 Jan 1885; d Halifax 1966. DDS Dalhousie U '12. Lect Dalhousie U '13-43, alumni governor Dalhousie U '46-49. Prac ft gen '12-56. FACD, CDA (pres '30-32), Nova Scotia Dent Soc (pres), ACD, Prov Dent Bd NS (secy). Heat expansion during setting time of plaster.

FICKES, William L. CERAMICS. b 1869; d Steubenville O 30 Mar 1951. DDS Temple SD '91. Prof ceramics U Pittsburgh '04-47. Pa SDS (pres '23-24), ADA cmt on nomenclature, AADS. Early specialist in porcelain work applied to dentistry; frequent contributor to journals on use of porcelain.

FINK, Emanuel B. PATHOLOGY; BACTERIOLOGY. b 1890; d Chicago 15 Jun 1936. MD Rush MC, PhD U Chicago. Prof path & bact CCDS.

FLEMING, Harold S(teadman). PATHOLOGY. b Brooklyn NY 9 Oct 1904; d 25 Dec 1963. PhB Brown U '26, DMD Harvard U '30, MS & DSc U Pa '52. Intern Forsyth Dent Infirm '30-31; asst resid oral surg Grace-New Haven Hosp '49-50; clin instr '50-52, res asst dept path '52-55, res assoc '55-58 Yale U SM; prof res Howard CD '58-63. Spanel fel '50-51, FICD, AAAS, ARPA, NYAS, ORCA. Transplantation of embryonic oral tissues under various conditions; transplantation of human neoplasms; induction of the cancer process in in vivo transplants and in situ salivary glands.

FLIEDER, Donald E. PATHOLOGY. b Waterloo Ia 18 Jul 1924; d 19 Jan 1970. BA Ia St Tchrs Coll '47; DDS '52, MS '54 SU Ia. Prof oral path St Louis SD '56-66, prof oral path Ky CD '66-70. Prac ft '56-70. USNAF '43-45. AChemS, AAAS, AAUP, AAOP. Salivary glands; periodontal disease.



FÖLDI, Alexis. EFFECTS OF TUBERCULOSIS ON ORAL TISSUES. b Kassa Hungary 4 Apr 1895; d Portland Ore 31 Aug 1940. DM U Budapest. Asst dent dept Policlin U Budapest, attend dent surg TB Hosp Budapest.

FOSDICK, L(eonard) S. BIOCHEMISTRY. b Chagrin Falls O 7 Nov 1903; d Tucson Ariz 31 Jan 1969. BS Fla SU '27; MS '29, PhD '31 NWU. Asst '27-29, instr '27-32, assoc prof '32-35, prof chem '36-69 NWU. AChemS, ASBC, ACDS. IADR (pres '51-52). Dental caries; periodontal disease; local anesthetics; vasopressors.

FREEMAN, Charles W(est). ORAL SURGERY; DENTAL EDUCATION. b Sharon Vt 18 Jan 1892; d Chicago 26 Jun 1960. DDS '12, MS '25 NWU. Instr to prof oral surg & dean NWU DS. Prac pt '13-45. Lt Col USA DC. FACD, ADA, ADSE, Chicago Inst Med, AADE, OKU.

FREY, B. J(ohn). HISTOLOGY; PATHOLOGY. b Chicago 31 May 1909; d 27 Dec 1969. BS '34, DDS '36 U Ill. Intern & stf Eastman Dent Disp '36-39, Carnegie fel U Rochester '37-39, dent extern dept pediatrics & orthopedics Ill Res & Educ Hosp '39-43. Prac pt '39-43, ft beginning '46. Lt to Maj USA DC '43-46. ADA, Southeast Dent Assoc. Vitamin B and experimental cretinisms; fluorine.

FRIEL, G(eoffrey). PATHOLOGY; BACTERIOLOGY. b Ireland 1880; d Johannesburg 1956. BA Trinity Coll Dublin '01, LDS RCS Ireland '01. Lect pt fac dent U Witwatersrand beginning '26. Prac ft '02-53. LLD (hon) U Witwatersrand '53. Johannesburg Dent Soc (pres, secy).

FRIESELL, F(rederick) C(harles). HISTOLOGY; BACTERIOLOGY. b Murrys ville Pa 1867; d Pittsburgh 2 Sep 1955. DDS U Pittsburgh '98. Prof histol & bact '04-46, emer '46-55 U Pittsburgh. FACD, FAAAS. Brother of H. Edmund Friesell.

FRIESELL, H. Edmund. PATHOLOGY. b Pittsburgh Pa 10 Nov 1873; d Murrys ville Pa 27 Oct 1946. DDS Pa CDS '95, BS U Pittsburgh '11. Prof op dent & dean Pittsburgh SD beginning '03, prof op dent & dent path WRU '06-17. LLD (hon) Marquette '19, DSc (hon) U Pittsburgh '30. Asst ed *J Dent Res*. NBDE (mem Comm on Survey of Dent Curriculum), Nat Assoc Dent Fac (pres), Dent Counc Pa (pres), Am Inst Dent Tchrs (pres), Pa SDS (pres), Ohio SDS (hon), RI SDS (hon), NDA (pres '20-21), AADS (pres), 7th Int Dent Cong (1st vp), FACD (pres), FAADS, Ill SDS, CDS, Odont Soc W Pa, AMA, FDI, OKU. Brother of F. C. Friesell.

GAUNT, W(alter) A(lwyn). DENTAL EMBRYOLOGY; HISTOLOGY. b Dumfries Scotland 8 May 1918; d 1969. BSc London '50, MSc Manchester '54, PhD London '62. Mem external sci stf Med Br Counc London beginning '56; Lt RNVR Spec Br HM Submarine Serv '39-46; hon sr lect in spec anat Guy's Hosp Med Sch. Co-auth *Advances in Dental Histology* '67. RMS (fel). Embryology of mammalian dentitions; growth studies of teeth and jaws.

GIBBONS, Paul. PROSTHODONTICS. b Merced Calif; d Ann Arbor Mich 1965. BS, DDS U Mich; MS U Mich '49. Teaching fel U Mich '48; asst prof Med Coll Va '49-50; asst prof & chmn dept prosth dent St Louis U SD '50-52; asst prof '52, prof '60 U Mich; consult VA; adv Ferris Inst. USA '42-44. Mich SDS, vp & pres Washtenaw DS, Am Dent Soc, Am Cleft Palate Assoc, Am Prosthodont Soc, assoc fel Dent Prosth, OKU. Problems incident to cleft palate; resilient liners for dentures; dental needs of the indigent.

GIES, William J(ohn). b Reisterstown Md 21 Feb 1872; d Lancaster Pa 20 May '56. BS '93, MS '96, ScD '04, LLD (hon) '24 Gettysburg Coll; PhB '94, PhD '97 Yale. Asst zool & physiol '94-98 Yale; instr physiol chem '98-02, adj prof '02-05, prof '05-07, prof biochem '07-37, emer '37-56 Columbia P&S; physiol chem NY Coll Pharm '04-21, Teachers Coll '09-28; consult chem NY Botan Garden '02-21; chmn study dent educ Carnegie



Found '21-31; path chem Bellevue Hosp '10-21; Presbyterian Hosp '21-41; chmn dent adv bd NY Dept Health '26-35; mem exec cmt Guggenheim Dent Clin '29-43. LLD (hon) Baylor '24; ScD (hon) Temple '38, Maryland '40. Awd merit RI SDS '27; Callahan med '28; William J Gies Fellowship founded at Columbia by students & colleagues; Wm J Gies res awd & grants-in-aid established by ACD '37; disting serv awd Gettysburg '38. Founder & first editor, *J Dent Res*. FAAAS, SBC (sec & ed *Proceedings* '06-10), Soc Physiol Chem (pres '99-02), ACS, Physiol Soc, Soc Pharmacol, SEB (sec & ed *Proceedings* '03-09, vp '09-12, pres '19-21), FACD (asst sec '33-43, ed bd Journal '34-45); FAAPER; Philos Soc; Harvey Soc; NYAD (vp '21). A founder of IADR (hon pres '22-28, sec '28-39, pres '39-40). Influence of dietary conditions on physiological resistance; blood, lymph, and saliva in relation to caries; nutrition and dentition.

GILCHRIST, Raleigh. INORGANIC CHEMISTRY. b Windsor Vt 8 Jan 1893; d 25 Oct 1966. AB Montana '15, PhD Johns Hopkins '22. Asst chem Cornell '15-17; chem NBS beginning '19 (& until retirement); chief platinum metals & pure substances section NBS from '48. Lect Geo Washington U '27-28, '29-34; educ course NBS '28-29, '31-32. USA '17-19. Hillebrand prize Chem Soc Wash '38. US deleg Internat Cong Pure & Applied Chem and Conf Internat Union Chem Madrid '34. AChemS (secy '25-27 Wash sec, pres '29), AAAS, Philos Soc Wash. Inorganic and analytical chemistry of the platinum metals and gold; development of methods for analyzing dental gold alloys; assay of gold-filled materials; atomic weight of osmium.

GILLET, Henry W(ebster). b New Hampshire 16 Jun 1861; d Connecticut 12 Mar 1943. DMD Harvard DS '85. Instr op dent Harvard '91-96, an organizer & prof op dent Columbia D&OS. Prac ft gen '85-00. Jarvie med. NYAD (a founder & 1st pres), 1st Dist DS NY (pres).

GOODALE, W(illiam) G(eorge). PEDODONTICS; PREVENTIVE DENTISTRY. b Farley Ia 14 Nov 1919; d Iowa City 4 Jul 1964. DDS '51, MS '53 SU Ia Instr '52-55, asst prof '55-57, asst prof & act head '57, assoc prof '58-60, assoc prof & head '60-64 Iowa CD. Prac ft gen '52-53, pt later. ADA, APHA, ASDC, OKU. Caries, diet, ultrasonic cavitation; sterilization.

GORE, Jehu Thomas. PREVENTIVE DENTISTRY. b Philadelphia 8 Jan 1879; d Upper Darby Pa 9 Dec 1955. DDS U Pa '02. Instr '02-10, res assoc '43-55 U Pa. Prac ft gen '02-55. ADA, Pa SDS, Phila Co DS, OKU. Etiology and prevention of dental caries.

GOTTLICH, Samuel F. Place and date of birth not known; d 1947. DDS. Secy Assoc Dutch Dental Surgeons.

GOTTLIEB, Bernhard. PATHOLOGY. b Kutry Poland 14 Jul 1885; d Dallas Tex 16 Mar 1950. MD U Vienna '11. Asst prof & head dept histol res U Vienna '11-38, vis prof U Mich '40-41, prof & head dept oral path & dent res Baylor '41-50. LLD (hon) Loyola, DMD (hon) Bonn. Auth *Dental Caries* '47. FAAPath, FAAPER, FRCS, AAOP, ADA, BDA, AAEndod, ICD, RSM, Tex SDS.

GRAHAM, W(illiam) C. b 1875; d Davenport O 5 Jan 1946. DDS U Pa '96. Lect oral hygiene & spec subjects '13-14, instr dent med & oral hygiene '14-17, asst prof dent med '17-29, prof oral hygiene & prev dent '29-39, prof emer '39 Ohio CD.

GREEN, Gordon E. BACTERIOLOGY; IMMUNOLOGY. b Pullman Wash 22 Sep 1924; d Philadelphia 14 Mar 1967. BS U Md '49; MS '52, PhD '53 Ohio SU. Grad asst '52, res fel '52-53, instr '53-58, res assoc '53-58, fel '54-57, instr '56-60, asst prof bact '58-60, Ohio CD; res dir div dent & USPHS sr res fel Henry Ford Hosp '60-66; Temple U SD '66-67. AAAS, ASM, SEBM. Oral bacteriology; caries immunity; anticaries agents; clinical studies related to dental caries; biochemistry of saliva; bacteriology of dental calculus.



GRIEVES, Clarence J(ones). NUTRITION; FOCAL INFECTION; DENTAL MATERIALS. b Wilmington Del 23 Oct 1868; d Baltimore 4 Nov 1927. DDS U Md '88. Asst demonstr op dent '88, asst prof C&B '92 U Md; prof comp anat & histol Baltimore CDS '06-17; chief stf dent clin Johns Hopkins Hosp '13-25. Lt USNR '17-18. AM (hon) U Mich '21. Jenkins med '22, Callahan med, Jarvie med. Clarence Jones Grieves Library Fdn est Md SDS '25. FACD (charter mem), Md SDS, ASO (hon), NDS.

GROVE, Carl J. PERIODONTICS. b Milleville Minn 1873; d St Paul 4 Jul 1942. DDS CCDS '98. Ed *Nutrition & Dental Health*. IADR (a founder of Minn sec). Caries; ammonia content of saliva.

GRUBER, Rolf G(ordon). DENTAL MATERIALS. b Chicago 1 Apr 1930; d 17 Feb 1969. DDS Loyola CDS '54, MS NWU '64. Dir intern trng USPHS '60-62; asst prof '64-66, assoc prof dent mat beginning '66, asst dean beginning '67 Loyola CDS. Prac ft '56-60. Capt USAF DC '54-56. ADA, Odont Soc & Clin Soc of USPHS. Silver-tin amalgams; physical properties of tissue conditioners; fungus growth on tissue conditioners.

GRUEBBEL, Allen O. PREVENTIVE DENTISTRY. b Concordia Mo 21 May 1899; d Kansas City Mo 21 Jul 1963. DDS Kansas City West Dent Coll '23, MPH Johns Hopkins Sch Pub Health '38. Lect Kansas City U SD '40-44, lect Wash U SD '40-44, lect Loyola U beginning '47. Prac ft gen '23-37. Student Army Trng Corps '18. Dir dent div Mo State Health Dept '38-44, exec secy Counc Dent Health ADA beginning '44. ADA, OKU, ACD, American Public Health Assoc. Public health methods; control of dental caries.

HABERMAN, Sol. MICROBIOLOGY. b Chicago 15 Jan 1914; d Dallas 17 Apr 1968. BA '36, MA '37 U Tex; PhD Ohio SU '41. Instr Baylor Med Sch '41-43; dir microbiol Baylor Med Cent '41; prof & chmn dept microbiol '45, dir grad stud Baylor CD; assoc prof Southwest Med Sch '43-53; asst dir Wadley Res Inst '52-56. Merit awd Tex Soc Path '46. FACD, FAAAS, AAI, AAM, ASHG, ASM ISH (secy-gen '46-58, ed cong proc '48-52, pres immunol sec Paris cong '54), OKU. Bacillary dysentery; fungus infections in man; serological differentiation of *Drosophila*; effects of X-rays on bacteria; Rh and ABO blood groups; oral infections; chemistry of antibodies; antibiotics and sensitivity tests; periodontal infections by filamentous microorganisms.

HACKH, Ingo W. D. DENTAL LITERATURE; CHEMISTRY. b Stuttgart Germany 25 Mar 1890; d San Francisco 19 Oct 1938. PhC Braunschweig '08; AB '17, AM '33 U Calif. Prof chem San Francisco DS P&S '18-38. FAIC, FRS Art (London), FAAAS, AChemS, AADE, Med Lib Assoc. IADR (secy San Francisco sec).

HARRISON, R(oland) W(endell). MICROBIOLOGY. b Waxahatchie Tex 10 Sep 1897; d Foley Ala 8 Feb 1964. BA SMU '21; MS '25, PhD '30 U Chicago. Instr '21-25, asst prof '25-28 SMU; instr Wash U '30-37; asst prof '37-41, assoc prof '41-43, assoc dean biol sci '41-43, prof '43-63 U Chicago & Zoller Dent Clin; dean biol sci '43-47, vp & dean fac '47-63, act chancellor '60-61 U Chicago. Mem NIDR adv coun. DSc (hon) SMU '48. Assoc ed *J Infectious Diseases* '37. AAAS, AAI, ASM, SEBM. IADR (pres Chicago sec '42-43). Bacteriologic and virologic studies on trachoma; tissue culture of trachoma and St. Louis encephalitis viruses; bacterial variation; biochemical and immunological studies of lactobacilli; bacteriology of the mouth.

HARVEY, Oliver D. b West Mansfield O 1914; d Decatur Ga 15 Jan 1969. BS Bowling Green SU, DDS Ohio SU '49. Lt & sr asst dent surg USPHS, fac '53-69, prof & chmn dept op dent Emory U SD. ACD, ADA, GaDA, North Dist Dent Soc, OKU.

HATTON, Edward H(oward). ORAL PATHOLOGY. b LaRose Ill 2 Apr 1876; d 15 Aug 1959. BL U Chicago, MD Rush MC '12. Tchr public & private schools Minn '99-09; asst dir Dept Health La Salle-Peru Oglesby Ill '14-16; res oral path NWU DS '16-22; prof path & bact '22-42, emer '42-59 NWU; instr path Rush MC '17-22. Callahan med '41. Inst Med Chicago, Chicago Path Soc (pres '33). IADR (pres '33-34, secy treas '38-58). Oral focal infection; pulpless teeth and dental caries.



HELLMAN, Milo. DENTAL ANATOMY; ORTHODONTICS; OCCLUSION. b Jassy Rumania 26 Mar 1872; d Far Rockaway NY 11 May 1947. DDS U Pa '05. Lect orthod U Pa SD '24-26; prof comp dent anat '27-28, prof orthod '28-29 NYU CD; prof dent Columbia D&OS '32-47; res assoc phys anthro NY Museum Nat Hist '17-47. ScD (hon) U Pa '33, U Witwatersrand '38. Albert H. Ketchum Memorial awd WRU '39. FNYAS (vp '32, '33), FAAAS, FACD, FNYAD, ADA (life), NYAM (assoc fel), AAO (vp '41). IADR (pres NY sec '33).

HEMLEY, Samuel. ORTHODONTICS. b NYC 8 Feb 1898; d 30 Aug 1970. DDS Columbia D&OS '18. Asst oral surg Vanderbilt Clin Columbia U '19-25, Long Island Coll Hosp '24-26; instr orthod '29-33, asst prof to chmn orthod '34-37, prof & chmn orthod '47-66, prof emer '66-70 NYU, Prac orthod '19-67. Auth *Orthodontics; Fundamentals of Occlusion* '44, *Orthodontic Theory & Practice* '53. Clinic of orthod named after Dr. Hemley in '67. FACD, FAAAS, OKU (pres '41-45), all orthod and dent societies.

HERMEL, Joseph. ROENTGENOLOGY. b Risce Hungary 1910; d Jerusalem 17 Jul 1970. Stud med German U at Prague '34-39; émigré to Palestine during war. MD '50, spec in dent '50-52 Prague. Returned to Israel, est priv prac & joined stf Jerusalem SDM '54; head roentgenol in dept oral med, oral diag from '60, sr lect oral roentgenol '67, assoc prof '70. Adv to Ministry of Health on radiation hazards and protection in dental offices. Auth many publications on oral radiol & oral med.

HINIKER, J(erome) J. PERIODONTOLOGY. b Hastings Minn 12 Feb 1912; d 24 Aug 1969. DDS Minn SD '34. Intern USPHS '34-35, chief dent serv VA Reg Off Washington DC '46-48, chief prof serv VA Central Off Washington DC '48-52, chief dent serv VA Hosp Ann Arbor Mich '53-63, asst chief med dir for dent VA Central Off beginning '63. Prac ft '36-38. Col USA DC '38-46; Col USAF DC '46. ASOS (hon mem) '66. Assoc Mil Surg, FACD, FICD, AAPer, OKU, FDI. Effects of scaling; curettage and gingivectomy by ultrasonic instrumentation; effects of traumatic occlusion in rhesus monkeys.

HIRSCHFELD, Isador. PERIODONTOLOGY. b Riga Latvia 13 Jun 1881; d NYC 5 Feb 1965. DDS NYU '02. Instr dent '12-24, spec lect '24-27, assoc prof & head dept perio '28-48, clin prof & head dept perio '48-56 Columbia D&OS; found & chief perio clin NY Throat & Lung Hosp '15-25, Beth Israel Hosp '24-34, vis perio Bellevue Hosp '26-28, chief perio NY Hosp Joint Diseases '27-34, attend dent surg Presbyterian Hosp '29-37. Prac ft gen '02-25, ft perio beginning '25. Leadership awd perio Tufts U '56. FACD, FICD, AAPer (pres '41), ADA, FDI, NYAM (assoc fel), NYAS, Interdental (Hirschfeld) canals; retrocuspid and retroincisal papillae; food impaction; skulls in relation to periodontal disease; dental erosion and abrasion; eradication of gingival pigmentation.

HOFFMAN, Murray M(itchell). GROWTH AND DEVELOPMENT; PHARMACOLOGY. b NYC 20 Jan 1910; d Chicago 25 Apr 1966. BS NYU '32; DDS '37, MS '39 U Ill. Res asst '35-37, instr histopath '37-41 U Ill; resid maxillofac & plast surg Presbyterian Hosp '42-43; chief oral surg Northwest Hosp Chicago '55-66. Prac oral surg pt '37-41, ft beginning '46. Lt to Maj USA DC '41-46. Sigma Xi res awd '37, lect maxillofac surg Camp Callan Calif '43. ADA, AMWA, ASOS, FAS, Ill Acad Sci, NYAS, OKU. Rates and rhythm of growth of enamel, dentin, cementum, alveolar bone; vital staining; vitamin A deficiency; poliomyelitis; pharmacology of pain, edema trismus, physiology and biochemistry of calcification; aldehydes in allergy.

HOLST, Grethe (née Andersen). ORAL MEDICINE; ORAL SURGERY. b Odense Denmark 15 Jan 1909; d 25 Jun 1970. DDS Royal DC Copenhagen '35. Instr op dent Royal DC '36-39, house dent surg Queen Louise Hosp for Children '46-70. Prac ft. Danish Soc Oral Surg (vp, bd mem), Swedish DA, Danish Assoc Hospemployed Dent Surg (bd mem), Finnish Soc Odont, FDI (supp mem), Scandinavian Dent Assoc, Danish Ped Soc. IADR (Scandinavian Div coun). Oral medicine; general anesthesia; treatment of handicapped children. Wife of J. J. Holst.



HOOTON, Ernest Albert. ANTHROPOLOGY. b Clemansville Wis 20 Nov 1887; d Cambridge Mass 3 May 1954. AB Lawrence Coll '07; AM '08, PhD '11 U Wis; Rhodes schol '10-13, BLit '13 Oxford. Instr '13, asst prof '21, assoc prof '27, prof '30-54 Harvard; curator stomat Peabody Museum '13-54. ScD (hon) Lawrence Coll '33. Div anthro & psychol NRC '22-25, '35, Nat Acad Anthro, AAAS (secy H '20-22, vp '23), ASN, AAA, AAPA (pres '36).

HOWE, Percy R(ogers). NUTRITION. b Providence RI 30 Sep 1864; d Boston 28 Feb 1950. AB '87 Bates Coll, DDS Phila DC '90. Chief res lab '15, dir beginning '27 Forsyth Dent Infirm; asst prof dent res '16, instr path & Forsyth prof dent sci Harvard. ScD (hon) Bates Coll '27, LLD (hon) Harvard '41. ADA Awd of Merit & Achievement, Jarvie med '26, Callahan awd '26, Jenkins med '27, RI SDS med '29. ADA (pres '29-30), AAArtSci, OKU. Caries; originated silver reduction treatment for infected dentin and septic roots; showed odontoblasts to be the most sensitive cells in detecting vitamin C deficiency.

HRDLICKA, Aleš. ANTHROPOLOGY. b Humpolec Bohemia 29 Mar 1869; d 5 Sep 1943. MD NY Eclectic Coll '92, NY Homœ Coll '94. Asst curator div phys anthro '03-10, curator '10-43 US Nat Museum. Secy comm on anthro NRC '17-18. ScD (hon) U Prague '20, U Brno '29. Assoc ed *Am Naturalist* '01-08; ed & found *Am J Phys Anthro* '18-43. FAAArtSci, AAAS (life), AAA, AAnthroA (pres '25-26), NAS, AmPhilosS, Wash Acad Sci (pres '28-29), AAPA (pres '28-32, found, life mem).

HUTCHINSON, Robert G., Jr. PERIODONTICS. b 1866; d 1945. DDS NY CD '99. FACD, AAPerio, Brooklyn DS, NDA, NY Inst Stomat, NY SDS, Odont Soc NY.

HYATT, Thaddeus P. PUBLIC HEALTH. b 1865; d 1953. DDS NYU SD '89. Prof prev dent NYU SD, dent dir Metropolitan Life Insurance Co '15-36, asst dent div NYC Health Dept '28. NYU alumni med, Jarvie med '34. ADA, ASDC (a founder). Originator of the concept and practice of prophylactic odontotomy.

INSKIPP, E(rnest) Frank. ENDODONTICS. b Bromley England 22 Sep 1903; d San Francisco 15 Jul 1953. BS '30, DDS '31 San Francisco P&S. Clin instr op dent '31, asst clin prof '36, prof '51, dean '52 San Francisco P&S. Prac pt. AAAS, AADEd (pres '48), AAE, ACD, ADA, Calif SDA, FDI, SF DS (pres '38), OKU.

ISAACS, Aaron. DENTAL MATERIALS. b Sacramento Calif 1891; d Milford Del 1937. BS U Calif '13. Asst chem to assoc sci NBS '13-34; res chem L D Caulk Co '34-37.

JACKSON, Holmes C(ondict). DENTAL EDUCATION; CHEMISTRY. b NYC 18 Feb 1875; d NYC 25 Oct 1927. BS '96, PhD '99 Yale. Instr physiol chem '01, asst prof '03-05 NYU-Bellevue Hosp MC; prof exptl physiol & physiol chem Albany MC '05-09; prof physiol NYU '09-27. Auth *A Manual of Physiological Chemistry*. AAAS, APhysiolS, ASBC, ASPB, SEBM (found, pres '23-25), FNYAD, mem adv bd NY Dept Health.

JACKSON, Victor H. ORTHODONTIA. b Arcade NY 1850; d 26 Jan 1929. DDS MD U Mich. Lect Forsyth Dent Infirm, prof emer Buffalo U, clin prof NYU CD. Prac NYC beginning '79. Author of books on orthodontia and orthopedia of face; inventor of appliances including Jackson crib.

JARVIE, William. b Manchester England 14 Jul 1841; d Montclair NJ 16 Nov 1921. MDS NY Bd Regents '73. Prac ft gen '72-06. Mem NY St Bd Dent Exam, pres sec op dent Internat Dent Cong Chicago '93, trustee NY Coll D&OS. Organizer Brooklyn DS, 2nd Dist DS NY, Odont Soc NY (past pres); AAADSci (assoc fel), Odont Soc GB.



JOHNSON, Charles Nelson. DENTAL EDUCATION; JOURNALISM. b Brock Township Ont Canada 16 Mar 1860; d Chicago 17 Jul 1938. LDS RCDS Toronto '81, DDS CCDS '85. Tchr anat to prof & chmn dept op dent & dean stud CCDS (Loyola) '91-38. Presenter gold foil clin. Jarvie med '15 NY SDS; Jenkins med '26 Conn SDS; bronze bust of himself CCDS Alum '25, Okla SDS '29, Canadian friends '30; Callahan awd Ohio SDS '36. Hon off two Internat Dent Congs; hon mem Soc d'Odont de Paris, La Federación Odont Venezuela, Ontario DA. Ed *The Bur*, *Dent Review* ('93-94, '02-19). *Dent Cosmos & JADA* ('25-38); contrib ed *Oral Health*; auth *Filling Teeth* '00, *Success in Practice* '03, *Operative Dentistry* '08; also numerous essays, discussions, fiction, and verse. Alum Assoc CCDS (past pres), Chicago Odontolog Soc, Chicago Odontograph Soc, Chicago DS, Ill SDS, ADA, ACD, AADED, FACD, AADS, OKU. Dental profession's most prolific writer; eulogized as recipient of every honor awarded by organized dentistry and the "immortal patriarch of the profession."

JOHNSON, Norman P(reston). PREVENTIVE DENTISTRY. b Chicago 27 May 1907; d Dixon Ill 17 Dec 1965. DDS U Ill '32. Chief dent serv Dixon St Sch '47-65. ADA, IDA. Dental conditions found in the different classifications of mental retardation.

JOHNSON, Percy Leroy. DENTAL HISTOLOGY. b Bangor Me 15 Feb 1901; d White Plains NY 23 Oct 1958. BS U Maine '23, MS U Syracuse '25, PhD Johns Hopkins '29. Adam T Bruce fel '27-29, res asst Johns Hopkins '29-30; prof biol Mo Valley Coll '30-42, Mo State Food Sanitarian '42-43, assoc prof histol NYU '47-58, AAA, ASZ, NY Acad. Histochemistry of teeth.

KALETSKY, Theodore. b 1897; d NYC 21 May 1952. Mem NY Counc on Dent Therap, NY St Bd Dent Exam, ACD, NYAD, ICD, 1st Dist DS NY (atomic energy res prog), ADA (Counc Dent Res).

KANTHAK, Frank. PLASTIC SURGERY. b Chicago 9 Jan 1910; d Atlanta Ga 5 Dec 1969. DDS NWU '32, MD Yale '36. Intern & resid U Chicago '36-38, asst prof U Ill & Cook Co Hosp '38-41, consult plastic surg Atlanta VA hosp, lect plastic & maxillofacial surg Emory U. Lt Col USA MC '41-46. AAPS, ACS (fel), AMA, ASPRS.

KAZANJIAN, V(araztad) H(ovannes). PLASTIC AND RECONSTRUCTIVE SURGERY. b Yerzinga Turkish Armenia 18 Mar 1879; d Boston 1969. DMD '05, MD '21 Harvard. Prof mil oral surg '18-22, prof clin oral surg '22-41, prof plastic surg '41-47, emer '47 Harvard. Prac ft plastic & reconstructive surg. Spec surg Brit Expeditionary Forces '15-19. ScD (hon) Bowdoin Coll '52. Invested Companion St Michael & St George, King George V '19. Awd & scroll RI DS '32, Fones med Conn SDS '43, spec hon cit ASP&RS '51, ASOS awd '54, cit Emerson Coll '54, spec hon awd ASMS '56, Wood med Boston City Hosp '56, pres cit NYU '62. Auth *The Surgical Treatment of Facial Injuries* 2nd ed '59. FAAOO, FACD, AAPS, ABPS (dipl), ASMS, ASP&RS, Boston Surg Soc, Int Soc Plastic Surg. Plastic and reconstructive surgery with special reference to deformities of the face and jaws.

KEILTY, Robert A. PATHOLOGY. b 1886; d Washington DC Jul 1954. MD U Pa '07. Intern Phila Gen Hosp '08-09, instr path U Pa '11-18, consult path US VA '27-46. Prac pt. USA MC Maj '18-19. Phila Path Soc, Am Soc Clin Path, AMA. Bacteriology and pathology of gingivitis.

KELSEY, H(arry) E(stes). ORTHODONTICS. b 1873; d Baltimore 1 Mar 1946. DDS Baltimore CDS '96, grad Angle Sch Orthod '08. Tchr Baltimore CDS, stf Johns Hopkins Hosp beginning '13. ADA (mem res counc), ABO, FACD, Southern Soc Orthod (pres), NY Soc Orthod (pres), AAO (pres).

KEMPLE, Frederick C. ORTHODONTICS. b Ohio 31 Jan 1871; d 1938. DDS U Pa '95. Prac ft gen & orthod. IADR (an organizer & mem cmt on Wm J Gies Endowment Fund for *J Dent Res*).



KIRSCHBAUM, Arthur. ANATOMY. b NYC 15 Oct 1910; d Houston 28 May 1958. BS NYU '31; MA '33, PhD (anat) '36, MB & MD '43 U Minn. Tchg asst zool '31-34, tchg fel anat '34-37 U Minn; Coxe fel '37-38, instr '38-39 Finney-Howell Res Fdn fel '39-40, instr anat '40-41 Yale Sch Med; asst prof '42-45, assoc prof '45-51 Med Sch U Minn; prof & head dept Ill Coll Med '51-54; prof & chmn Baylor CD '54-58. Consult MD Anderson Hosp for Cancer Res; spec consult USPHS. AAA, Assoc Cancer Res (adv ed *Cancer Research* '49), SEBM, Soc Exptl Path. Experimental mouse leukemia; chicken leukemia; physiology of reproduction; experimental glomerulonephritis; alloxan diabetes; experimental neoplasms of the mammary gland, adrenal cortex, and ovary of inbred mice.

KLAFFENBACH, Arthur O(tto). CROWN AND BRIDGE; PREVENTION. b Muscatine Ia 7 Jan 1880; d Iowa City 9 Dec 1963. DDS Iowa SU CD '07, postgrad stud NWU '17 & U Toronto '25. Demonstr '22-23, prof crown & bridge prosth beginning '24 Iowa SU. Prac gen '07-25. Am Acad Rest Dent, Am Acad Plastic Res, ADA. IADR (sec secy '30-48). Gold alloys; dental porcelains; gold alloy casting; acrylic resins; close bite cases; gnathodynamics.

KLATSKY, Meyer. PREVENTIVE DENTISTRY. b Russia 7 Oct 1888; d 12 May 1969. DDS NY CD '15. Auth *The Human Masticatory Apparatus; An Introduction to Dental Anthropology* '53. ADA, AAPA, FAAS. Normal and pathological dental conditions; contributions of anthropology and genetics to dental science.

KÖMÜVES, Oszkár. ENDODONTICS. b 1896; d 1944; places of birth and death not known. MD Budapest '21. Auth monograph on path & therap of infected teeth (published in Hungarian). Engaged in studies of pulp gangrene and apical granulomas; devised first usable method for quantitative assessment of caries prevalence suitable for statistical evaluation.

KÖSZEG, Ferenc. b 1901; d 1944; places of birth and death not known. MD U Budapest. Res assoc dent dept Apponyi Polyclinic. Influence of diet on prevalence and incidence of caries; enamel dissolution in different acids.

KRAMER, Leon R. PUBLIC HEALTH. b Clay Center Kan 18 Sep 1894; d Topeka Kan 21 May 1950. DDS Kansas City Western DC '18, MS Columbia '40. Fac Kansas City Western DC & U Kansas Med Sch, head dent div Kansas St Bd of Health '36-50. Prac ft gen '19-36. ADA, Shawnee Co DS, 1st Dist DS Kans, Kans SDA.

KRAUS, Bertram S(hirley). PHYSICAL ANTHROPOLOGY. b Cleveland 3 May 1913; d 4 Feb 1970. AB WRU '34, MA '46, PhD U Chicago. Asst prof '47-53, assoc prof anthro '53-57 U Ariz; prof phys anthro U Wash '57-63; prof anat & dir cleft palate res SDM beginning '63 & prof phys anthro U Pittsburgh. Lt (sg) USNR '43-51. Milo Hellman res awd '58, Chicago Dent Soc essay awd '62. Disting schol Queens U (Belfast DS) '62, '66; 6th annual Margolis lect Tufts DM '64; lect Univ London '66. AACPR, AAnthropA (fel), AAPA, ASHG, FAAAS, NAS, ISCB (pres '63-65), TS, SSHB. IADR (pres Northwest sec '59-61). Auth *The Basis of Human Evolution* '64; *The Human Dentition before Birth* '65. Differential growth in fetal teeth and skeleton; dental genetics; craniofacial growth; race differences.

KROGH, Harold W(alter). ORAL SURGERY; ANESTHESIA. b Necedah Wis 28 Nov 1899; d Washington DC 27 Nov 1966. DDS U Minn '21. Fel dent sec Mayo Clin '21-23; assoc surg Geo Wash U Med Sch '28-35, '44-66; chmn dent sec Episcopal Hosp beginning '38, Geo Wash Hosp '43, Emergency Hosp '46; chief dept dent Wash Hosp Cent '58-66. Prac ft oral surg '26-66. Wash Hosp Cent & Doctors Hosp Res Fdn (trustee). St George med Am Cancer Soc '61, Ridder af Dannebrog '56. FAAAS, ADA, ACD, Am Cancer Soc (pres Wash sec, trustee, exec cmt, vp), ASOS (1st chmn cancer cmt), Danish DA, Wash Acad Med OKU. IADR (chmn & secy Wash sec). Dry sockets; extraction of teeth in presence of acute infection; intravenous anesthesia; causes of tooth mortality.



KRONFELD, Rudolf. HISTOLOGY; DENTAL ANATOMY. b Vienna Austria 10 Dec 1901; d Chicago 13 Feb 1940. MD U Vienna '26, DDS CCDS '33, BS Loyola '35. Asst Dent Inst U Vienna '26-29, dir res lab CCDS. Auth *Histopathology of the Teeth & Their Surrounding Structures* '33, *Dental Histology & Comparative Anatomy* '37. Chicago Med Soc, Ill Med Soc, AMA, Chicago Path Soc, AAAS, ADA, Ill SDS, Chicago DS, FDI, Odontograph Soc Chicago, FAAPER (pres '39-40). Charter mem Vienna sec IADR; IADR Chicago sec (secy '30-31, pres '31-32); IADR vp '37-38, '39; pres-elect '39-40.

KRONFELD, Sidney M. b 1913; d NYC 5 Sep 1964. DDS NYU '35.

LANDA, Joseph S. PROSTHETIC DENTISTRY; ORAL DIAGNOSIS. b Russia 2 Jan 1892; d NYC 3 Sept 1970. DDS Imperial U '14, DDS NYU CD '25. Prof & chmn dept prosthodont & cleft palate rehab NYU CD '25-29; Fulbright prof Tokyo M&DU '55-56; res sci Guggenheim Res Cent; attend prosthodont Beth Israel Hosp; found Hadassah SD; chmn res & educ, chmn library cmt Hebrew U. Prac pt prosthodont & oral diag. Lt Russian Army DC '14-17. DSc (hon) Trinity Coll Dublin '60. Lord-Chaim prize 1st Dist DS '53. Auth *Practical Full Denture Prosthesis, Dynamics of Psychosomatic Dentistry*, FACD, AADM, ABPros (dipl), ADA, ADS, AEQs (charter mem), APsychS, Greater NY Acad Prosthodont (found), Israeli DA (hon), Kyoto Res Soc (hon), NYAS, RESA, Tokyo Res Soc (hon), OKU. Temporomandibular joint in relation to hearing organ.

LANE, Charles. ORAL SURGERY; PROSTHETICS. b Goderich Ont Canada 28 Mar 1884; d Detroit 1938. DDS RCDS Toronto '06, CCDS '09. Head dept op dent '33, dean '34-38 U Detroit DS. FACD, AAAS, Mich SDS (past chancellor), ACDS (past regent), ADA (past vp), NSD Prosth (past pres).

LASBY, William F. PROSTHETICS; DENTAL EDUCATION. b Castle Rock Minn 25 Oct 1876; d 12 Apr 1953. BS Carleton Coll '00, DDS Minn SD '03. Asst oral anat '00-03, instr to prof & chmn prosthodont '08-27, supt clin '19-27, dir summer sessions '20-27, acting dean '27-29, dean '29-45, emer dean '45 Minn SD. Prac '03. Lt Col DRC '24-33. AADS (pres '33), AAAS, ADA, ACD fel (vp '35), Minn SDA, Minn Acad, OKU (pres '39).

LAZANSKY, Joseph Peter. BACTERIOLOGY; ORAL SURGERY. b Lechvice Czechoslovakia 1 Apr 1899; d Birmingham Ala 27 Jul 1956. MD Prague '23, DDS State Inst Dent Med Prague '25, DMD Tufts '43, postgrad trng orthopedic surg Prague and oral surg Vienna, stud Guy's Hosp '40, Carnegie fel Rochester SM&D. Tchr-prac oral surg U Prague. Asst prof to chmn dept oral surg Tufts '44-50; dir clin '50, assoc dean '54 Ala SD. Oral surg consult to VA. Serv abroad '46, '48, and '51 Unitarian Med & Dent tchg missions. ADA, AMA. Bacteremias following dental procedures; effectiveness of local anesthetics.

LEIST, Moriz. Birthplace, dates of birth & death not known. MD. Jaw dept. 1st Surg Clin U Vienna. Elected to mem Vienna Sec '29.

LISCHER, Benno E(dward). ORTHODONTICS. b Mascoutah Ill 27 Jun 1876; d St Louis 9 Oct 1959. DMD Wash U '00. Prof orthodont '02-24, dean '33-45, emer '45 Wash U; prof orthodont U Calif '30-33; lect U Mich '24-29. Pract pt orthodont '00-30. 1st Int Orthodont Cong (hon pres) '26. Trans *Simon's Diagnosis of Dental Anomalies* '26. ASO (pres '13), AADS (pres '43), AAEd (pres '44). Principles and methods of orthodontics.

LITTLE, Arthur P. PROSTHODONTICS. b Appleton Wis 27 Mar 1889; d Richmond Va 1 Feb 1950. DDS U Minn '10. Conducted res Phila '27-32, prof prosthodont Med Coll Va beginning '32. Prac ft '27-32. FACD, ADA, OKU.

LOGAN, William H(offman) G(ardiner). ORAL SURGERY. b Morrison Ill 14 Oct 1872; d Chicago 6 Apr 1943. DDS CCDS '96, MD Chicago Coll Med & Surg '05, MS U Mich '30. Prof plastic & oral surg & dean CCDS '20-43. Lt Col USA DC & chief dent div Surg Gen Off '17-19. LLD (hon) Loyola '26, LLD (hon) Nat



Univ Ireland '40. Chmn Fdn for Dent Res CCDS. Gorgas Memorial Inst Tropical & Prev Med (secy '29-33, bd gov), 7th Int Dent Cong (pres) '26, FACS (bd gov), Nat Dent Assoc (pres '17-18), Ill SDS (pres '13-14), Chicago DS (pres '09-10), AMA, Ill St Med Soc, Chicago Med Soc, Am Assoc Oral & Plastic Surg, ABPS, FDI (vp '26-36, pres '36, '39), AADS, ADSE (hon), OKU.

LOOS, Otto. ORAL PATHOLOGY. b Germany 16 Feb 1871; d Frankfurt Germany 1 Apr 1936. MD. Prof dent & dir Dent Inst U Frankfurt am Main '14-36. German DS (hon), FDI.

LUCKHARDT, Arno B(enedict). PHYSIOLOGY. b Chicago 26 Aug 1885; d Chicago 6 Nov 1957. BS '06, fel '07-08, MS '08, PhD '11 U Chicago; MD Rush MC '12. Asst bact '08-09. physiol '09-11, assoc '11-12, instr '12-14, asst prof '14-19, assoc prof '19-23, prof 23-47, Beaumont disting serv prof, emer '47, admin cmt (act chmn '17-19, chmn '42-47) U Chicago; tchg fel Rockefeller Fdn Europe '24-54; consult Roerig Co, Chas Pfizer Co. Alternate adv councl child res Mooseheart Lab. ScD (hon) NWU '33, LLD (hon) Conception Coll '33. Alpha Omega med '37, Callahan med. AA, Physiol Soc (secy '30-32, pres '32-34), FAMA, ADA, Endocrine Soc, Fed Soc Exptl Biol (pres '34), FACD, Kaiserliche Akad der Naturforscher, Int Coll Anesthetists (fel). Gastric and pancreatic secretion; gastrointestinal motility, visceral sensory nervous system; ethylene anesthesia; physiology of the parathyroid glands; history of physiology and medicine.

LYONS, Chalmers J. ORAL SURGERY. b Martinsburg O 30 Apr 1874; d Ann Arbor Mich 18 May 1935. DDS '98, DDS '11 U Mich. Instr clin dent '07, lect '10, instr oral surg '13, prof '15-35 U Mich. Prac '98-07. Chalmers J. Lyons Academy of Oral Surgery founded '27. Auth *Fractures & Dislocations of the Jaws* '19, rev '26. Am Assoc Oral & Plastic Surg (past pres), Mich SDS (past pres).

MacGREGOR, Alexander B(rittan). PATHOLOGY; PREVENTIVE DENTISTRY. b London 25 Jan 1909; d 9 Jan 1965. MD Cambridge U '44; LDS Royal Dent Hosp '36; MB, BChir St Mary's Hosp London '33; LRCP & MCRCS '33. Dent consult St Bartholomew's Hosp London '38-53, Royal Dent Plastics Cent '46, Royal Dent Hosp London '46-53, dent consult Royal Navy '52-65, prof dent surg & dir dent studies Birmingham Sch Dent Surg '53-65. Prac pt gen '36-39, '46-53. FDS RCS '48. Squadron leader RAF DC '39-45. Mummery prize BDA, Colyer prize RSM, Storer-Bennett res prize, Saunderson schol, Woodhouse schol, Tomes lect RCS '46, guest lect 14th Australian Cong '56. BDA, FDI, Genl Dent Counc, RCS (fac '52-65), RSM (vp, secy odont '59-65). Lymphatic flow; aspects of dental caries; antibiotics; maxillofacial surgery; periodontal disease.

MacKENZIE, John J. d Toronto Canada Aug 1922. Prof histol & comp dent anat Royal Coll Dent Surg '94-09, analyst Provinc Bd of Health '94-01, prof gen path & chmn dent res dept U Toronto '02-22.

MAIN, (Lee) Roy. ORAL ROENTGENOLOGY. b Webster Groves Mo 6 Jan 1885; d St Louis 22 Jan 1966. DDS St Louis U '07. Prof roentgenol '33-61, dean '45-57 St Louis SD. LLD (hon), Baylor U '58. Prac ft gen '07-18, oral roentgenol '19-61. ADA, ADSE, Dent Soc Mex. Reflex complications of dental origin.

MALLESON, Herbert C(ecil). STRUCTURE OF ENAMEL. b England 27 Feb 1881; d London 12 Nov 1935. LDS '03, Conjoint '06 Guy's Hosp London, LRCP MRCS. Obstetric resid to sr dent surg Guy's Hosp. Bd exam dent surg RCS. John Tomes prize RCS '27. Co-auth *Practical Dental Histology & Bacteriology*.

MANLEY, Edgar B(ooth). ORAL PATHOLOGY. b St Annes on Sea England 18 Jul 1897; d Birmingham England 4 Apr 1959. LDS '20, MSc '44 Manchester; BDS Birmingham '42. FDS RCS '50. Lect dent histol & anat '30-37 Manchester; hon dent surg Cheshire Co Mental Hosp, lect prosth & dir mechanical dept Edinburgh Dent Hosp & Sch '37-39; surg rgstr Birmingham Dent Hosp '39-45; hon asst lect spec anat teeth '40-45, lect dent anat, histol & path '46-48, reader in dent path '49-59, hon consult '51-59 United Birmingham Hosps. Prac ft



'20-37. Howard Mummary prize '40-43, John Tomes prize '48-51. RSM (gen secy), RCS (mem Bd Fac Dent Surg '50-59), Zool Soc London (fel), BDA, Birmingham Med Inst (odont sec). Dental histology.

MANSBACH, Erwin Elieser. b Karlsruhe Germany 30 Jun 1902; d Palestine 28 Mar 1948. DDS U Berlin '25. Clin asst in several German institutions '25-32; emigrated Palestine '33; chief dent clin Jewish Workers' Sick Fund '33-48. Israel DA. Author of many papers, lecturer. Caries, dental anatomy, physiology, conservative dentistry, prosthetics; social dentistry.

MARGETIS, Peter M(ichael). DENTAL MATERIALS. b Anderson Ind 5 Apr 1916; d 17 Jun 1969. BA U Wis '39, DDS Marquette U '43, MS Georgetown U '56. Chief hosp dent serv Ft Riley Kan '52-53, guest worker dent mat res sec NBS '53-56, asst chief dept dent res WRAIR '56-57, chief dent res br USA Med R&D Command '57, guest lect applied sci WRAIR '56, mem Army Mat Adv cmt '58, consult dent mat & Asst Surg Gen '60. Off USA DC beginning '43. ADA. Properties of dental materials; agar duplicating compounds; amalgam; silicate and zinc phosphate cements.

MARJERISON, Howard M(itchell). PROSTHODONTICS; DENTAL EDUCATION. b Lawrence Mass 19 Nov 1895; d 4 Sep 1955. DMD Tufts '16. Intern Forsyth Dent Infirm '16-17; lect prev dent Harvard SDM; instr prosth dent '17, asst prof '23, assoc prof & chmn dept partial prosthodont '29, act dean '33, dean '34-40, prof prosth dent '39-40 Tufts DS; prof dent & dean Ill CD '40-44; assoc dir Forsyth Dent Infirm '44-55. Prac pt gen '17-40. Chmn cmt dent NRC '48-55, trustee Forsyth Dent Infirm. ScD (hon) Tufts '42. AAAS, ADA, OKU.

MARKUS, Moe B. ORTHODONTICS. b 8 Sep 1900; d Philadelphia 27 Jun 1951. AB, DDS U Pa '23. Instr to assoc prof orthod Temple SD '25-46, demonstr to lect anat mouth & jaws Temple MS '31-51, prof orthod Pa SDM '47-51. Lt USA DC. Eastern DS (secy '25), Pa SDS (asst secy), Phila Co DS (treas '32-34, secy '34).

MARSHALL, John A(lbert). BIOCHEMISTRY; PATHOLOGY. b Chicago 30 Aug 1884; d San Francisco 7 May 1941. BS '07, MS '14, DDS '16, PhD '17 U Calif; postgrad study U Berlin & Tech U Charlottenburg Germany '09-10. Prof biochem & dent path U Calif. Capt USA '17-19. Assoc ed *J Dent Res*; auth *Diseases of the Teeth* '26; co-auth *Operative Dentistry* '23, *Anatomy of the Rhesus Monkey* '33. AMA, ADA, SEBM, ASO (hon).

McBRIDE, W(illiam) David. VIROLOGY. b El Centro Calif 10 Jun 1925; d Oakland Calif 27 Apr 1964. DDS U Minn '48, USPHS post doct fel U Minn '48-51. Naval DS '51-53, dent surg NIDR '53-57, res fel Caltech '57-60, asst prof Baylor U Coll Med '60-62, Calif Dept PH '62-64. Lt USN DC '51-53. AAAS, ASM. Viral immunology; host-virus relations.

McCANN, Harold G(ilman). CHEMISTRY. b Kittery Me 2 Sep 1916; d 1969. BS Bates Coll '37, MS Brooklyn Polytech '47. Analyt chem '37-43, res chem '43-50 Gen Chem Co NY; principal invest NIDR Bethesda '50-59; head analyt serv NIAMD Bethesda '59-63; stf mem Forsyth Dent Cent beginning '63. ACS, AAAS. Liquid SO₃; analytical methods; mechanism of action of fluoride, topical fluoride; synthesis and solubility of apatites.

McCOLLUM, Elmer Verner. b Redfield Kan 3 Mar 1879; d Baltimore 15 Nov 1967. AB '03, MA '04 U Kansas. Loomis fel '05-06, PhD '06 Yale. Asst chem '03 U Kansas, '06-07 Yale; instr agr chem '07-08 U Wisconsin; asst prof to prof Johns Hopkins '10-17; Biochem & head dept '17-44, res prof '44-46, prof emer '46 Sch Hygiene & PH Johns Hopkins. Mem Nat Adv Counc, Perm Nutrition Comm League of Nations '35-39, vitamin adv bd USP '36-49, deleg 10th Pan-Am Sanit Comm '38, NRC '42. ScD (hon) Cincinnati '20, LLD (hon) Manitoba '38. Howard Potts med '21, John Scott med Phila '24, Jenkins med Conn '27, gold med Am Inst NY '34, Callahan med '35, and Am Food Mfrs Assoc, Borden awd in nuar NAS. Am Philos Soc, Swedish Acad,



Royal Acad Med Belgium, Kaiserlich Deutsche Acad der Naturforscher zu Halle, Harvey Soc, ASBC (pres '27), AChemS, AIN (vp '37, pres '38), AAAS, PHA. Biochemistry of nutrition, especially vitamins and mineral elements; deficiency diseases; caries phosphate studies.

McDONAGH, Andrew J. CROWN, BRIDGEWORK; PERIODONTOLOGY. b Lanark Co Ont Canada 1867; d Toronto 1942. RCDS Toronto. Prof crown & bridge prosth & perio RCDS. AAPer (a founder & past pres; chmn cmt on res & nomenclature).

McDOWELL, Arthur R(oscoe). DENTAL EDUCATION. b Yuba Co Calif 8 Jan 1890; d San Francisco 19 May 1938. DDS San Francisco Coll P&S SD '17. Jr dean '21-23, dean '23-38 San Francisco SD. USA DC '17. AADS (pres '35-36), ACD, ADA, NBDE.

McFALL, Thomas A(lbert). HISTOLOGY; CYTOLOGY. b NYC 3 Jul 1906; d 1969. DDS Pa SD '30. Instr Pa DS '29-36, dir postgrad prog SD & Inst of Res Walter Reed Army MS & Chmn dept oral med '54-61, clin assoc prof to assoc prof oral med Pa SD '61-69. Col USA DC '42-61. Auth *Oral Medicine Syllabus* '65. Bd Exam ABOM '65, USA Legion of Merit '62, South Md Dent Soc (hon mem), ABOM (dipl) '57, OKU, AAMS (exec councl '61), Soc for Promotion Dent for Children (pres '35), Stomat Soc U Pa (pres '27), ADA, AAOM, AAOP, APHA, IAOP, Wash Dent Club, 1st Dist Dent Soc Pa. Systematic study and evaluation of the total patient and correlation of findings for diagnosis, prevention, and treatment of oral disease; histologic, cytologic, and cell culture investigations for the correlation of changes in cell morphology and metabolism that occur in lesions of oral tissues under the influence of local systemic diseases.

McKAY, Frederick Sumner. CRIES. b Lawrence Mass 13 Apr 1874; d Colorado Springs Colo 21 Aug 1959. DDS U Pa '00. Supt instr Angle Sch Orthod '05-07, prof orthod U Denver DS '10-11, consult child hygiene USPHS '28-29, consult dent fluorosis '38. Prac ft perio beginning '17. Jarvie med '45, Callahan med '49, Sabin awd Colo PHA, Spenadel med, Illuminated Scroll AAPHD, Lasker awd APHA. Chmn Lord-Chaim Prize cmt '32-34, ASO (sec '06), ADA, NYAD, FACD (hon), Colo SDS, OKU. Mottled enamel; mass control of caries by use of fluoridated domestic water supplies; etiology and control of caries.

MENKIN, V(aly). PATHOLOGY. b Moscow Russia 26 Feb 1901; d Kansas City Mo 2 Dec 1960. BS CCNY '22; MA Columbia '23; MD Harvard '28, U Berlin '32. Tchgr fel physiol Harvard SM '27-28; nat res fel med U Pa '28-30; instr path '30-40, asst prof '40-43 Harvard SM; Duke '44-46; assoc prof exptl path & head Agnes Barr Chase Fdn for Cancer Res Temple U '46-60. Medal in Exptl Zool '24. Cmt med res Office Sci Res & Devel '42-43. Guggenheim fel '44, Bernard vis prof Montreal '51; Int Cancer Fdn grant '37-39, Nat Exec Cancer Council grant '47-50. Auth *Dynamics of Inflammation* '50; ed sec path *Excerpta Med*, sec inflammation & infect dis *Biol Abstracts*. AAA, AACR, AMA, Physiol Soc, Soc Exptl Path, Assoc Path & Bact, Assoc Immunol, Endocrine Soc, Soc Exptl Biol, NY Acad, Int Soc Cellular Biol. Sympathetic system; splenic contraction and leukocyte level; leukocytes in hyperthyroidism; experimental tuberculosis; iron pigments; inflammation in relation to immunity; capillary permeability in injury; mechanisms of inflammation; leukotaxine and leukocytosis-promoting factor; necrosin; chemotherapy of cancer research; experimental leukemia; pyrexin—the leukopenic factor; leukopenin, thermostable factor in the mechanism of leukocytosis with inflammation.

MENSCHIK, Zygmunt. HISTOPATHOLOGY. b Krakow Poland 6 Mar 1914; d 22 Feb 1969. MD Krakow SM '38, DSc Edin Polish SM '44. Intern St Lazarus State Hosp Krakow '38-39; resid St Elizabeth Gen Hosp '39-40; lect anat & embryol '41-42, asst prof anat '42-46 Edin Polish SM; asst prof anat U Ottawa '47-55; asst prof to prof anat Georgetown Med Cent beginning '55. Prac pt '54-55. Med off Polish Army '40-41. Golden Apple awd Georgetown Med Stud '65. AAA, Anat Soc Gt Brit & Ireland, CPhysS, CAA, SEBM, APhysS, HistS, AADSch. Effects of Vitamin E deficiency in mice on the heart, adrenals, condylar cartilage of temporomandibular joint, squamomandibular joint; central nervous system studies on mice.



MERRITT, Arthur Hastings. b Williamsburg Mass 2 May 1870; d 9 Feb 1961. DDS NYU '95, MS U Mich '38. Vis lect Columbia D&OS. Prac ft perio. ScD (hon) Columbia '40, NYU '45. Fauchard med '32, Callahan med '40, Jarvie med '40, Fones med '41. 1st Dist DS NY (pres '18), AAPer (pres '25), ACD (pres '38), ADA (pres '39), Am Dent Fdn (pres '40), NYAD (pres '27), NY Hist Soc (trustee), AAAS. Periodontal disease; soft tissue lesions of oral cavity.

MERSHON, John V(alentine). ORTHODONTICS. b Penn's Manor Pa 7 Jul 1867; d Philadelphia 20 Feb 1953. DDS Pa Coll '89. Head dept orthod U Pa '16-24, vis lect Columbia '45. Prac ft orthod. ScD (hon) Pa Coll '33. FACD, AAO (pres), NY Soc Orthod (pres), AAAS. Clinical study of growth and development relating to orthodontics.

MESSNER, Clinton T(haddeus). b Oxford Ind 1885; d Washington DC 28 May 1936. DDS Ind U '08. Tchr Ore DS '11-13. USPHS St Louis '19-21, chief dent dept USPHS Washington DC '21-36. Lt Col USA. ADA (secy res cmt), Assoc Mil Dent Surg (past pres), NYAD, NBDE, ACD.

MIDGLEY, Albert L(eonard). ORAL SURGERY. b Worcester Mass 8 Apr 1878; d Providence RI 31 Oct 1967. DMD Harvard '01. Asst dent surg '01-08, dent surg '08-38, consult dent surg RI Hosp & St Joseph's Hosp (appt '39); dent surg St Vincent's Infant Asylum '02-11; clin instr '06-16, lect exod & anesth '17-19 Harvard DM; oral surg '15-18, lect '16-19 Forsyth Dent Infirm; consult dent surg Memorial Hosp Pawtucket RI (appt '38). Prac pt gen. Lt Cmdr USNR DC '32-40. DSc Marquette '22, Temple '34. Dent Educ Counc Am (pres '16-20, secy '21-35). Gies awd ACD '55, RI Dentist of the Century RI SDS '59. Assoc ed *Apollonian*; contrib ed *J Am Coll Dent*. FACD, AAAS, AADM (hon), AAADSci (hon fel), ACD (found mem, secy '22-35, pres '36, regent '37), ADA, Apollonia Guild, Nat Assoc Dent Exam (pres '11). Surgical treatment of maxillary fractures; dental education; somnoform anesthesia.

MILLBERRY, Guy S. DENTAL MATERIALS. b 1872; d 1952. Prof chem & metallurgy U Calif; supt infirm '06-14, dean U Calif SD '14-40. Auth *Practical Dental Metallurgy*. ADA.

MILLER, Edgar Grim, Jr. BIOCHEMISTRY. b Gettysburg Pa 22 Feb 1893; d NYC 28 Jun 1955. BS Gettysburg Coll '11, PhD Columbia '13. Asst to prof biochem Columbia '14-55. AAAS, NYAM, AChemS, ASBC, SEBM. Physiological and pathological chemistry.

MILLER, Henry A(lexander). ORAL SURGERY. Place and date of birth not known; d Philadelphia 14 Jul 1945. DDS U Pa '29, MD Yale '33. Stf graduate Presbyterian, Children's U Pa Hosps. Assoc ed *Dental Digest*. AMS, ADA, Pa SDS, Phila Co DS.

MILLER, Samuel Charles. PERIODONTICS; ORAL DIAGNOSIS. b NYC 15 Nov 1903; d NYC 8 Feb 1958. DDS NYU '25. Instr physiol & histol '22, instr perio '25, chief diag dept '28, asst prof '30, assoc prof '34, prof & chmn dept perio beginning '47 NYU CD. Prac pt perio & oral diag '25-47. Fauchard awd. FACD, 1st Dist DS NY, AADM (pres '46-47), ADA, NYSDS, AAPer, Pan-Am Odont Assoc, AAAS, NYAM (assoc fel), ABOM (chmn), OKU (pres.) IADR (ed NY sec). Reattachment and bone regeneration; etiology of periodontal disease; repositioning of the mandible; hydrogen peroxide and sodium perborate as oral irritants; classification of alveolar bone types; plasma phosphatase determinations; torus palatinus.

MINER, Leroy M(atthew) S(impson). PATHOLOGY; DENTAL EDUCATION. b Chicago 13 Apr 1882; d Boston 19 Apr 1964. DMD Harvard '04, MD Boston U '07. Assoc prof '18, prof stomat '35, emer '44 Boston U SM; clin oral surg & dean '22-44, emer '44 Harvard SDM. Prac pt oral surg. Trustee Forsyth Dent Infirm. Lowell lect Boston. ScD (hon) U Pa '33, DPH (hon) Temple '38. Alpha Omega med '36. Co-auth *Dental*



Education in the United States '41. FACD, FACS, AAAS, ADA (pres '36-37), AAArtSci. Pres IADR '27-29. Oral pathology, medicine, and surgery; preventive dentistry; dental research and education.

MOEN, Obed H. MICROBIOLOGY; PATHOLOGY. b Shell Lake Wis 7 Sep 1892; d 23 Nov 1969. DDS '18, MSD '27 NWU. Prac ft '18-69. LLD (hon) Nat U Ireland '60. Merit awd NWU Alum '60, Dentist of Year awd Wis SDA '60. Wis SDA, ADA, FDI (pres '59-61), FACD, FAAAS, AAOP, ADSA, OKU. Histological findings in teeth and filled root canals; tissue changes in treated teeth of known history; verification of results of root resection by photomicrographs.

MORSE, Arthur L(inwood). ORTHODONTICS. b Lynn Mass 25 Oct 1883; d 6 Oct 1969. DDS Tufts DM '08. Clin orthod Forsyth Dent Infirm '15-20; instr '08-15, asst prof '15-21, prof '21-45, prof emer orthod '45-69 Tufts DM. AADSci, AAO, ADA, OKU.

MYERS, Victor C(aryl). BIOCHEMISTRY. b Buskirk Bridge NY 13 Apr 1883; Wd 7 Oct 1948. BA '05, MA '07 Wesleyan U; PhD '09 Yale. Adj prof physiol chem & exptl physiol & dir labs Albany MC '09-11; prof path chem '12-22, act dir labs '17-19, prof & dir dept biochem '22-24 NY Postgrad MS & Hosp; prof & head dept biochem '24-27 SU Iowa; prof & dir biochem WRU SM '27-48. DSc (hon) Wesleyan '30. Auth *Essentials of Pathological Chemistry* '13, *Practical Chemical Analysis of Blood* '21, *Laboratory Directions in Biochemistry* '42; assoc ed *J Lab & Clin Med & Gastroenterol*. ADA (mem Counc Dent Therap), FAAAS, ASBC (sec '19-23, counc '24), FASEB (exec sec '22), SEBM (secy treas & mg ed '23-24, vp '27), APhysiolS, AIN, AChemS.

NIELSEN, Arne G(abriel). PREVENTIVE & OPERATIVE DENTISTRY. b San Francisco 3 Jun 12; d April 1965. BS & DDS U Calif '40. Stf dent Cowell Hosp '41; post-grad Naval DS '52; asst & head op dent '52-59, head dent br Med Res Labs New London Conn '59-65. Capt USN DC. FACD, ADA. Improved operative procedures in ultrasonics and increased rotary speeds; oral health problems of submariners; oral health problems in Antarctica; stannous fluoride in preventive dentistry.

NOYES, Frederick Bogue. DENTAL HISTOLOGY & EMBRYOLOGY. b Chicago 22 Aug 1872; d 25 Jul 1961. BA Johns Hopkins '93; DDS '95, ScD '22 NWU; LLD Temple U '95. Prof histol '97-13, prof histol & orthod '14-20 NWU DS; prof orthod '21-40, dean '28-40, prof emer '40-61 U Ill CD; prof histol & embryol Angle Sch Orthod. Prac pt gen '95-08, pt orthod beginning '08. Callahan med '23, Jarvie med '29. ADA, CDS, Ill SDS (pres '21-22), ADA, Odont Soc, Odontographic Soc of Chicago, Inst Med Chicago (pres '43), EdwH Angle Soc Orthod. IADR (pres Chicago sec '21-27). Lymphatic drainage of dental area.

NOYES, Harold J(udd). ORTHODONTICS. b Chicago 11 Aug 1898; d Portland Ore 25 Apr 1969. PhB '23, MD '33 U Chicago; BS & DDS '28 U Ill. Postgrad dept ped Rush MC '33-40; stf Presbyterian Hosp '36-40; prof & chmn dept orthod NWU DS '40-46; prof dent & dean Ore DS beginning '46; clin prof dent med '46, head div dent & oral med beginning '48 U Ore Med Sch. Prac pt orthod '33-46. 2nd Lt USA '18-19. Ed *Angle Orthodont*; auth *Dent Histology & Embryology* '38. FACD (pres), AAAS, AADS (pres), AAO, ADA, NIH (dent stud sec), Survey Dent in US (co-chmn dent ed cmt). Orthodontics; histology; embryology; health and disease in children. Son of Frederick B. Noyes.

NUCKOLLS, James. HISTOLOGY; PATHOLOGY. b Redwood Valley Calif 2 Oct 1902; d San Francisco 19 Apr 1952. DDS U Calif '27. Asst dent anat '29, prof & chmn op dent '41, prof oral histol & path & chmn div preclin sciences '47 U Calif. Nuckolls Lectureship est U Calif CD. Co-auth *Dental Anatomy* '49. FACD. Tooth bud studies; histopathology, biochemistry, and bacteriology of caries; the periodontal lesion.

NYLANDER, Victor T. OPERATIVE DENTISTRY. b 1889; d Jan 1962. DDS U Minn '17. Head dept op dent U Ill CD '20-37. Prac (ret '56). IADR Chicago sec (secy treas '32, pres '33).



OCHSENHIRT, Norman C. SURGERY. b 12 Feb 1892; d 25 Jul 1952. BS '16, MD '17 U Pittsburgh; MS U Minn '27. Demonstrator of path & gen maxillofacial surg U Pittsburgh SM '28-52 & Pittsburgh SD '30-52. ACS (fel), Allegheny County Med Soc (secy & pres), AMA, Int Coll Surg (fel), Pa Med Soc, Pittsburgh Surg Soc. Anatomy; pathology; maxillofacial surgery.

OKUBO, James K. ANATOMY. b 30 May 1920 place not known; d 29 Jan 1967. AB Wayne SU '49; DDS '54, MS '57 U Detroit. Instr gross anat & clin tchg '54, asst prof '59, chmn anat sec '63, assoc prof '65 U Detroit SD.

OLIVER, Oren A(ustin). ORTHODONTICS. b Sinking Creek Va 16 Aug 1887; d Nashville Tenn 6 Mar 1965. DDS Emory '09. Instr orthod '16-26, prof & vp '17-26 Dewey Sch Orthod; prof orthod & mem exec counc Vanderbilt SD '17-26; prof emer clin dent surg Vanderbilt SM '54; vis prof orthod U Kansas City SD; lect grad sch orthod Tufts DM; dir postgrad course labio-lingual technique Wash U SD. Prac ft gen '09-16, pt orthod beginning '17. 1st Lt USA DC '17; Lt Col USAR DC '17-53, 56. LLD (hon) Emory '49. Ketchum awd '57, hon key Tenn SBDE. Assoc ed *Am J Orthod*; counc *J Dent Res*; co-auth *Labiolingual Technic* '40. FACD, FICD (pres US sec '34-36, pres at large '52-54), FAAAS, AAO (pres '30), ABO (dipl, dir & secy '29-36, pres '36-37), Acad Int Med & Dent (fel), ADA (trustee '34-40, pres '41-42), Am Soc Advancement Gen Anesth in Dent (fel), APHA, ASDC, AAMS, EOS, Ewell Neil DS (fel), FDI (pres '52-55), PFA, RSH, SW Soc Orthod (hon), Tenn SDA (pres '23), OKU. Malocclusion as a factor in periodontal lesions; diastema between central incisors; occlusal guide plane; technique of the lingual and labial arches; designer of orthodontic pliers, instruments, wires, band materials.

OPPENHEIM, Albin J. ORTHODONTIA. b Europe 1875 city not known; d 1945 place not known. MD, DDS, Prof & head dept dent histol U Vienna; later fac dent USC. Studies on experimental tooth movement.

ORBAN, Balint. HISTOLOGY; PATHOLOGY. b Hungary 24 Mar 1899; d Chicago 1 Jun 1960. MD U Budapest '22, MD U Vienna '30, DDS NWU '38. Prof oral histol & path NWU '38-39, prof oral path & res Loyola SD '40-47, res fel U Ill CD '47-49, dir res Colo Dent Fdn '49-60. Prac perio. ADA, FAAAS, AAPer, OKU, FDI (pres sci comm '36-60). Histology of dental structures; histopathology of periodontal diseases.

O'ROURKE, John T(homas). b Saco Me 18 Aug 1888; d Boston 3 Jun 1948. DDS '17, BS '32 U Louisville. Asst prof '19, assoc '23, dean '26-44 Louisville SD; dir grad stud Tufts CD '44-48. ScD (hon) Louisville '44. Ed *J Dent Educ* 36-40; co-auth *Dental Education in the United States* '41. ADA, CDA, NYAD, Ky SDS, AADS (pres '36), OKU.

OSBORN, T(homas) W(illiam) B(ryant). BIOCHEMISTRY; NUTRITION. b Johannesburg S Africa 14 Sep 1905; d Johannesburg 26 Jun 1949. BS U Witwatersrand '27; MS U S Africa '28; PhD Oxford '31; DSc U Witwatersrand '38; LRCP, MRCS London '38. Act lect '28, lect '31, act head physiol '34 U Witwatersrand. Rhodes schol. Auth *Complement or Alexin* '37.

OWEN, Elbert B(rittain). PROSTHODONTICS. b 1880; d St Louis 6 Jun 1950. DDS St Louis U '09. ADA (chmn prosth sec '29), AADP (pres '33), ACD, Mo SDA (pres '49), St Louis DS (pres '20), OKU.

OXNER, Warren C. b Chester Bay NS Canada 1878; d Halifax NS Canada 7 Jun 1950. DDS Baltimore Coll '02. Clin demonstr & prof crown & bridge Dalhousie U. Prac ft. Ed for Nova Scotia sec of *J Can Dent Assoc* '44. Dominion Dent Counc (pres), Halifax Dent Soc (pres), Nova Scotia Dent Assoc (pres), Provinc Dent Bd of Nova Scotia '35.



PALMER, Bissel Barbour. DENTAL SOCIOECONOMICS. b NYC 4 Feb 1889; d NYC 23 Jan 1968. DDS NYU. Assoc prof oral Surg Columbia, attend oral surg at Hahnemann 5th Ave & NY Polyclin hosps, mem bd Doctors Hosp. Prac pt. FACD (pres), NYAD (treas), William J Gies Fdn Advancement Dent (pres), IADR (treas a trustee).

PAYNE, Joseph L(ewin). ORAL SURGERY. b London 25 Sept 1872; d London 31 Jan 1939. Attend Guy's Hosp DS. Lect, dent, consult surg Guy's Hosp DS. BDA (past pres Metro Branch), BSSO (past pres), RSM (pres odont sec). Classification of odontomes.

PESSO, Frederick Austin. CROWN & BRIDGE. b Rosebloom, Otsego Co NY 25 Jun 1858; d Mt Vernon NY 13 Mar 1928. DDS U Pa '89. Tchr C&B U Pa DS '89-01; found postgrad sch for C&B Philadelphia '01, merged it with U Pa DS '10; prof C&B Columbia D&OS '10-28. Auth text on C&B & numerous papers; mem many dent soc. First to develop removable bridgework; international authority on crown and bridge; inventor of many instruments and formulas. A founder of IADR.

PENDLETON, Elbert Crosby. DENTAL ANATOMY; PROSTHETICS. b 14 Mar 1882; d 15 Jul 1960. DDS '07, MDS '33 (Loyola). Instr to prof prosth dent '24-39, prof diag & res in full denture prosth '40-52 Loyola. Ill DS (pres '38), OKU. IADR (Chicago sec, pres '40-41).

POGUE, William L. CROWN & BRIDGE; OCCLUSION. b Birmingham Ala 19 Dec 1925; d Aug 1970. DDS '51, MSD St Louis SD. Asst prof crown & bridge St Louis U '63-64, asst prof rest dent Ky CD '66-70. Prac ft '53-63. 1st Lt DC '51-53, USAAF '43-46. ADA, Ky Dent Assoc. Adrenal absorption during tissue retraction; retention of plastic facings.

POTTS, Herbert A. PATHOLOGY; ANESTHESIOLOGY. b Green Co Ill 1873; d Evanston Ill 7 Oct 1942. DDS '95, MD '01 NWU. Fac path '08-20, oral surg '20-42 NWU DS. Maj USA. Consult oral surg France WWI.

POWERS, Catherine M. Place and date of birth not known; d Philadelphia 4 Jun 1970.

PRINZ, Hermann. PHARMACOLOGY; PATHOLOGY. b Germany 13 Jun 1868; d Lansdowne Pa 24 Nov 1957. DDS U Mich '96, MD Barnes MC '00. Prof materia medica & therap Wash U '99-13; prof materia medica & therap Evans Dent Inst '13-38, emer '38 U Pa. DSc (hon) U Pa '26, Wash U '41; DMD (hon) U Cologne '29. Jarvie med '23, Callahan med '33, Fones med '34, U Pa Alumni awd '39. AMA, AAAS, Kaiserlich Leopold-Carolin (fel) Akad der Naturforscher. Dental pharmacology and therapeutics; oral pathology.

RABKIN, Samuel. PATHOLOGY. b Russia 10 Apr 1888; d 22 Jul 1969. DDS Ohio CD '13. Clin Beckman Med-Dent Clin Ohio '15-28, stf Jewish Hosp Ohio '15-40. Prac ft. First awd Sci & Health Exhibit ADA '39. AIBS, AAPA, Gen Soc of America, FAAAS, fel Ohio Acad Sci. Tracing historical evidence and indicative source relative to dentition degeneration; jawbone-tooth morphologic pathology.

RADUSCH, Dorothea F(ranke). DIET IN PERIODONTICS. b Washington Co Minn 6 Sept 1901; d 27 Feb 1969. DDS Minn SD '24, BA U Minn '34, MS U Minn Grad Sch '38. Asst prof '24-53 Minn SD. Prac pt '24-53, ft beginning '53. Many publications in periodontics; contrib auth *Juvenile Dentistry* '52. FAAAS, FACD, AADE, ADA, OKU.

READE, Robert J(ohn). ULTRAVIOLET LIGHT & ITS APPLICATION TO DENTISTRY. b Toronto Ont Canada 17 Jun 1866; d Toronto 20 Feb 1936. DDS U Toronto '94, MD Trinity MC. Prof med RCDS Ontario '06-08. Ed *Dent Practice*. CDA (past chmn res cmt), Ontario DA (past chmn, pub dent health cmt).



REHAK, Rudolph. ORTHODONTICS. b 1899 place not known; d Budapest 1 Sep 1969. MD Budapest '23. Habilitation to lectureship Budapest '47, cand med sciences late 1950's. Chief orthod serv Central Inst Stomat Budapest. Orthod res & auth texts on orthod.

RICE, William. b Dublin NH 4 Sep 1867; d Boston 23 Nov 1932. DDS Boston DC '88, DMD Tufts DS '05. Instr '00, asst prof clin dent '11, prof '13, dean '16 Tufts DS. Mem dent adv bd Mass Dept Health. ScD (hon) Tufts '29. Gold med RI DA '27. FACD, AADSci (pres '18-19), Central Health Counc Mass (pres '24), New England DS (pres '24), Mass DS (pres '23), Dent Fac Assoc Am Universities (vp '21-23). A founder of IADR (treas '27-32).

RICKERT, U(ra) Garfield. BACTERIOLOGY. b Wadsworth O Oct 1879; d 22 Oct 1938. BS Buchtel Coll '07; AM '13, DDS '16 U Mich. Instr physiol chem '17, asst prof '19, prof '21-38 U Mich. FACD (vp '31, pres '32, mem counc dent therap), ADA, ASB, Mich DS (pres '37). IADR (pres '30-31). Dental therapeutics and medicines; focal infection in systemic disease.

RIDER, Theodore H. ORAL HYGIENE; DENTIFRICES. b Washington DC 14 Oct 03; d NYC Feb 1955. PhB '25, PhD '28 Yale. Instr pharmacol & toxicol Sch Med Yale '28-30; chief chem '30-33, res dir '33-37 Wm S Merrell Co; tech dir Pepsodent Co Chicago '37-47; assoc dir res Lever Bros '47-55; prof Cincinnati Coll Phar '32-37. AAAS, ACS, Pharmaceut Assoc. Synthesis and testing of local anesthetics; chemical detoxification of toxins; pharmaceutical products and synthetic drugs; dentifrices; cosmetics; antiseptics; soap products; edible fats.

ROGERS, Alfred P. ORTHODONTICS. b Amherst NS Canada 5 Jul 1873; d 6 Apr 1959. DDS Pa Coll '96, AM Acadia U '20, DSc Wash U '41, DSc Acadia U '44. Asst prof orthod res Harvard '18; dir Harvard-Forsyth Post Grad Sch Orthod '19-22; assoc orthod Harvard '27-40; clin prof orthod '41-43; prof emer '43-59 Harvard Sch Dent Med. Prac ft orthod. Lect Columbia U Sch Orthod. Am Bd Orthod '30. Albert Ketchum awd '38. AADS (pres '15-16), Am Soc Orthod (pres '11), Northeastern Soc Orthod (pres '38), OKU, European Orthod Soc. Dento-facial orthopedics; use of exercise in correction of malocclusions and facial abnormalities.

ROGERS, James B(oyles). ANATOMY. b Larned Kan 5 Mar 1896; d 19 Nov 1965. AB '16, AM '17 U Kansas; MD U Louisville '27. Asst zool U California '17; instr biol Tufts Coll '19-20; zool Kansas St Coll '20-22; asst anat '23-27, instr '27-28, asst prof '28-33, assoc prof '33-37, prof '37 U Louisville; neurol clin Louisville City Hosp '30-47; neurol Louisville Gen Hosp '42-47; lect Nichols VA Hosp; consult VA Hosp Lexington. USA MC '17-19. AAA, AMA. Effect of extirpation of the thyroid; histology and physiology of blood vessels; microsurgery of mammalian blood vessels; toxemia of pregnancy in guinea pigs; induced and spontaneous tumors of guinea pigs; longevity of guinea pigs.

ROSENZWEIG, Kurt A. DENTAL EPIDEMIOLOGY. b Cologne Germany 15 May 1909; d Jerusalem 15 Jan 1970. DMD Bonn U '32, MPH U Mich '56, stud dent anthro U Chicago '64. Stf dent Hadassah Dent Clin '42-46; dir dent serv Cyprus Immigrants Camps '46-48; chief dent Israel Ministry of Health '48-50; tchr dent mat Ort Vocational Sch; chief dent serv for Jerusalem children; tchr public health dent, head dept prev dent '60, sr lect '61, assoc prof '66 Hadassah SDM. Past ed *Israel Dent J*. Recipient of grants from NIH and USPHS; published results of his studies are widely quoted in international scientific literature. Epidemiology of caries, fluorosis, periodontal disease, malocclusion among ethnic groups; dental care service for employees and dependents, including time-and-motion studies of dental personnel. Oral epidemiology of ethnic groups.

ROWE, Arthur T(aylor). PROSTHETICS. b Castleton ND 12 May 1883; d NYC 12 Dec 1935. DDS U Minn '06. Instr to prof dent prosth U Minn '24-26; prof & head div prosth dent '26-32, assoc dean '32-35 Columbia D&OS. Minn SDS, NY SDS, Minn SDA (pres '26), 1st Dist DS NY, NYAD, OKU.



RUDOLPH, Charles E(ugene). PREVENTIVE DENTISTRY. b Punxsutawney Pa 26 Oct 1885; d Jun 1969. DDS Minn SD '11. Instr to asst prof prosth dent & assoc prof clin orthod '11-48, prof & chmn div orthod '35-48 Minn SD. Prac pt. Outstanding achiev awd U Minn '60. FACD, AAAS (cmt on med care costs '29-33), ACD (regent; pres '37-38), ADA (trustee '28-35), Am Dent Fdn (trustee), Minn SDA (chmn counc on dent health, pres '38), OKU. Socioeconomic aspects of dental service.

RUSHTON, Martin A(msler). PATHOLOGY. b London 29 Mar 1903; d London 16 Nov 1970. MA '28, MB '32, MD '46 Cambridge; LDS RCS '28; FDS RCS '48; FRCS '64. Chief dent surg Jaw & Plast Unit Basingstoke '39-46, dent surg Guy's & St. Thomas hosps '37-67, prof dent med U London '46-67, dean fac dent surg RCS '59-62. Prac ft '32-39. LLD (hon) U Toronto '59, U Belfast '63; D Odont (hon) Stockholm '58, Copenhagen '64. Colyer prize RSM, Mummery prize BDA, Tomes prize RCS Eng, Nuckolls lect U Calif '60, Weinmann lect U Ill '61, Fauchard Acad awd '67, Colyer med RCS '67. Co-auth *Oral Histopathology*. RSM, BDA (pres), BSSO (pres '47), BSPer (pres '57). IADR (pres '64-65). Oral pathology; dental medicine; effects of strontium 90.

RUYL, James P(eter). DENTURE RESTORATIONS. b Brooklyn NY 1873; d Brooklyn 29 Dec 1930. DDS NY CD '94. Prac ft gen. Lecturer and presenter of clinics; from observation of European practice, developed for American dental profession the operation now known as alveolectomy.

SAHS, E(rnest) A. DENTAL MATERIALS; OPERATIVE DENTISTRY. b Salem SD 21 Nov 1897; d 8 Aug 1968. DDS Iowa SU '23. Demonstr '27-35, asst prof to assoc prof op dent '55-68 Iowa CD. Prac ft gen '27-55. AAAS, ADA, Iowa Dent Alumni Assoc (pres '59), Iowa Dent Assoc (chmn dent health counc '47-49, house del '47-52), OKU. Trifacial neuralgia; dental inlay castings; pulp capping.

SALAMON Henrik. PROSTHETICS; ORTHODONTICS; DENTAL HISTORY. b 1865 place not known; d 1944 place not known. MD '99 U Budapest. Prof med fac U Budapest. Res in prosth dent, orthod & dent history. Auth 12 books & many papers. Ed *Stomatologiai Kozlony*; auth *Die Lehre der elementaren orthodontischen Bewegungen* '12, *Atlas der stomatologischen Brucken und Regulierungsarbeiten*, *History of Hungarian Dentistry: A magyar stomatologia (fogaszat) tortenete* '42. Deviser of bridge nomenclature.

SANDERS, Elkan. Place and date of birth not known; d 1946. Lived in Amsterdam. IADR mem '34-46.

SCHAMBERG, M(orris) I. ORAL SURGERY; PATHOLOGY. b 1875; d NYC 20 May 1953. DDS U Pa SD '96; MD Med Chirurgical Coll '98. Original fac mem, prof clin & oral surg Columbia D&OS '21-24.

SCHERER, Walter H. b Newport Ky 1880; d Houston 12 May 1951. DDS Ohio Coll DS '00. Estab prac Houston '00. Maj USA WWI. Armed Forces Med Adv Comm '48, Houston Dist DS (pres '13), St Bd Dent Exam, Tex SDS (pres '18), ADA (vp; pres '33-34). Instrumental in organization of Texas Dental College and its affiliation with the University of Texas; served as faculty member, trustee, and president.

SCHEU, Carl H(erman). DENTAL MATERIALS. b Cleveland 2 Jul 1892; d Lakewood O 1 Sep 1956. DDS WRU '18. Resid dent Cleveland City Hosp '18-19. Prac ft gen. FACD, ADA, Ohio SDA, Cleveland DS, AARD, Dent Forum Milwaukee. Dental castings and investments; hygroscopic expansion of the refractory.

SCHLOSSER, Rudolf O. PROSTHODONTICS. b Pleshen Germany 1882; d Chicago 3 Dec 1967. DDS Baltimore Coll DS '03, stud prosth Royal Coll DS Toronto '14. Mem res stf Dentists' Supply Co NYC '18-21; fac mem, prof pros dent '24, prof emer '47 NWU DS. Prac Hartford Conn '03-18. Est first oral hygiene clin & conducted trng of dent hygienists in Hartford. Lect tour Europ dent socs & univs '31; postwar trav in Europ giving refresher courses to displaced dentists; lect Germany, Norway, Sweden, Denmark, Holland. Auth *Complete Denture Prosthesis* '39 (rev '46, '53). FACD, Ill DS, Chicago DS, OKU.



SCHOUR, Isaac. HISTOLOGY; DENTAL EDUCATION. b Efinger Russia 11 Jan 1900; d Chicago 5 Jun 1964. BS '21, PhD '31 U Chicago; DDS '24, MS '28 U Ill. Lect dent med U Denver DS '26-27; instr materia medica & therap '24, asst prof '27, assoc prof '31, prof histol '35-64, head dept histol '37-64, assoc dean postgrad educ '46-55, dean '55-64 Ill CD. DSc (hon) Wash U '41. Cert merit exhibits AMA '35, 37, 39; Alpha Omega awd '47; res awd Columbia D&OS '56. AAA, AAAS (secy Nd sec '45-49), AADS, ABOM (dipl), ADA, All India DA (hon), Jerusalem DS (hon), OKU. IADR (pres '41-42). Experimental studies of tooth development; oral influences of endocrine, nutritional and metabolic factors; epidemiology of gingival disease; pulpal biology; student and teacher education in dentistry.

SEAMANS, Harry M(errick). DENTAL EDUCATION. b Delaware O 1 Oct 1867; d Colorado Springs Colo 29 Jul 1948. BA O Wesleyan U '90, DDS NY CD '97, MS O Wesleyan U '97. Instr '98-03, prof '03, dean dent dept '06-14 Ohio MS; dean '14-38 Ohio St DC '14-38. Prac '97-15. Curriculum Survey Comm AADS '30. AADS, Am Inst Dent Tchrs, Columbus DS, Ohio SDS, OKU. Raised standards of dental education.

SHAPIRO, Harry Herschel. ANATOMY. b NYC 27 Jul 1892; d Cornwall-on-Hudson NY 23 Dec 1958. DMD Tufts '18. Res assoc '28-30, instr anat '30-40, asst prof '40 Columbia; vis lect anat Tufts. Annual prize dent res Chicago Dent Soc '43. AAA, AAPA, NYAS. Anatomy of head and neck; temporomandibular joint; transplantation of developing tooth buds.

SIEGEL, Eli H(arold). BIOCHEMISTRY. b Plattsburg NY date not known; d 18 Jul 1969. BS NYU '32, DDS Columbia D&OS '36. Gies fel biochem '36-40, asst biochem '40-41 Columbia; chief Northeast Disp NYC '46-51; lect '47-56, instr dent hygiene prog beginning '57 NYC Community Coll; consult dent Off Indian Affairs '36-38. Prac pt. Lt Cmdr USNR DC '41-45. Ed *Columbia Dent Rev* '35-36. AAHD, Clin Soc of NY, Diabetes Assoc NY St, Assoc Jr Coll. Dental and oral disease in primitive peoples; diabetes and dental problems; dental disturbances associated with severe metabolic disturbances; genetics of dental anomalies; epidemiology of Vincent's disease; dental history.

SINCLAIR, James Alexander. PERIODONTICS. b Marion NC 8 Dec 1877; d Asheville NC 16 Mar 1952. DDS Baltimore CDS '00. Spec lect dent med Meharry MC SD. Prac ft perio & oral surg '02-52. FAAPER, NC SDS (pres '14), Am Assoc Advancement Oral Diag (pres '35), South Acad Perio, ICD (pres '44). Local use of sulfanilamide; implantation of gelatin in wounds; use of ascorbic acid in subluxation pain in temporomandibular area and other dental involvements; antigen-antibody reaction and hypersensitivity as factors in periodontal lesions.

SIPPY, Burne O(lin). ORTHODONTICS. b Ithaca Wis 16 Jun 1886; d Chicago 11 Jul 1936. BS U Akron '09, DDS Ill CD '15, MS U Ill '26. Fac U Ill '17, prof orthod & chg undergraduate tchg U Ill CD '30-36. ADA, CDS, Ill SDS, Chicago Assoc Orthod (secy treas '27-30, pres '32), Odontograph Soc Chicago (secy treas '28-30, pres '30).

SKILLEN, William G(raham). HISTOLOGY; HISTOPATHOLOGY. b Toronto 6 Nov 1884; d Chicago 27 Aug 1958. DDS NWU '11. Clin demonstr & instr '12, assoc prof histol '14, prof '36-58 NWU DS. Prac pt gen '11-14. ADA, CDS, OKU. IADR (pres '36-37, pres Chicago sec '32-33).

SKINNER, Eugene W(illiam). DENTAL MATERIALS. b Anamosa Ia 28 Feb 1896; d Chicago 3 Dec 1966. BA Grinnell Coll '19; MS '25, PhD '30 SU Iowa. Instr chem Doane Coll '19-20; tchr physics Boone HS '20-24; prof physics & math Olivet Coll '25-30; asst to assoc prof basic dent technol WRU SD '30-34; assoc prof to prof '34-66, dir dent grad & postgrad study '40-66 NWU DS. Hon lect U Edinburgh '54, Souder awd DMG '56, Bee awd AAPRD '60. FACD, FAAAS, AAUP, ADA (assoc), APhysS, OKU. IADR (chmn DMG '49-50; pres Chicago sec '56-57). Diffraction of X-rays in liquids; surface structure of enamel; dental materials.



SLOMAN, Ernest G. DENTAL ANATOMY. b San Francisco 1896; d San Francisco 30 Apr 1952. DDS San Francisco P&S '21. Prof anat & dean San Francisco P&S '38-52, lect dent surg Stanford MS. DSc (hon) USC '47. AADS (pres '50-51), ADA (vp & chmn judicial counc, spkr house of delegates), NBDE, ACD, AADE, AAAS.

SNYDER, Marshall L(ovejoy). MICROBIOLOGY. b N Conway NH 7 Jul 1907; d Portland Ore 3 Mar 1969. PhB Brown U '30; MS '32, PhD U Colo. Child res fel bact U Colo '31-36; res assoc '36-38, instr '38-41, asst prof bact '41-46 U Mich; prof bact Ore DS '46-69. Maj USA '42-45. Fulbright res prof Royal Dent Coll Copenhagen '57-58. AAAS, ASM, Soc Path & Bact Gt Britain & Ireland. Normal intestinal and oral flora of children; bacteriology of dental caries; selective cultural methods; continuous culture techniques for study of mixed cultures.

SOBEL, Albert E(dward). BIOLOGICAL CHEMISTRY. b Luko Hungary 24 Sep 1906; d NYC 15 Jun 1967. BS '30, ChE '35 Cooper Union; MA Columbia '36; PhD Polytech Inst Brooklyn '40. Lab asst dept biochem Rockefeller Inst '25-30; staff chem pediat res lab '31-33, chem-in-charge pediatric res lab '33-36, head dept biochem '36-63, mem med bd Jewish Hosp Brooklyn; dir biochem lab Presbyterian Univ Hosp & assoc prof biochem Pittsburgh U SM '63; molecular biol Beth Israel Hosp Res Lab '63-65; dir biochem Grad Hosp U Pa & assoc prof clin chem U Pa SM '65-67; adj prof chem Polytech Inst Brooklyn '46; lect adv chem Brooklyn Coll '42-46; lect blood chem Hunter Coll '43-47; lect biochem SUNY Coll Med. Van Slyke med & Ames awd AACC '60; Bernard med '61. AAAS, AACC (pres '52-53, chmn cmt on standards '49-51), AChemS, ASBC, B&TS, Harvey Soc, NYAS, SEBM. Micromethods; biochemical changes in disease; mechanism of calcification; absorption and transportation of fat-soluble vitamins.

SPEIDEL, Thomas D. ORTHODONTICS. b Iowa City Ia 19 Feb 1908; d Minneapolis 30 Nov 1957. DDS '30, MS '32 U Iowa. Asst orthod & child welfare '30-32, asst pediat & dent '33-34, asst prof orthod '36-39, assoc prof '39-41 U Iowa; asst prof U Tenn '34-36; prof U Ind '41-45; dean Loyola SD La '45-48; prof & chmn div orthod U Minn beginning '48. FACD, ADA, AAO, AADEd (pres '48), OKU (pres '44-45). Dental and facial development; dental and facial changes in orthodontic treatment.

SPRAWSON, Evelyn Charles. DENTAL PHYSIOLOGY & PATHOLOGY. b Wimbledon England 13 Feb 1881; d 1955. MC DSc London, FDS Eng, MRCS Eng, LRCP London '05. House surg Royal Dent Hosp '05; med supt Nat Dent Hosp '05; hon dent surg & histol lect '11, lect normal & path histol '11-46, lect dent surg '19-46, prof dent surg '40-46, consult dent surg London Hosp; exam dent surg RCS Eng '20-30, U London '24-38, dent bd UK '22-32, U Otago '27, U Witwatersrand '32, U Birmingham '24-27. Prac pt '05-14. Capt RAMC '14-18. Walker schol '00, Saunders schol '02, Hunterian prof RCS '37, Tomes prize '29, Tomes lect RCS '47. Co-auth *Dental Surgery and Pathology* 9th ed '53. RSM (pres odont sec '39, hon mem '51), BDA, BMA, Med Protection Soc (vp '26). IADR (vp for England '34).

STANTON, Frederick L. ORTHODONTICS. b NYC 1874; d 1945. DDS NY CD '91. Prof prev dent NYU. Grad & organizer alumni soc Angle Sch orthod.

STEIN, Georg. NUTRITION; PATHOLOGY. b Vienna 6 Oct 1891; d NYC 1962. MD U Vienna '18, DMD Harvard '41. Intern med Franz Josef Hosp '18-19; instr anat '13-14, resid surg '19-22, head dept dent preschool child '28-38, head dept stud focal infection '34-38 U Vienna; res assoc dent Columbia D&OS beginning '47. Privatdozent U Vienna '35. Prac pt gen. AAAS, AAOP, NYAS, OKU. Author of over 70 papers on oral pathology, focal infection, endodontics; nutrition; deficiency diseases of the tongue. Original observer of mesial drift of molar teeth.



STILLMAN, Paul R(oscoe). PERIODONTICS. b Greenwich Conn 4 Jun 1871; d 15 Dec 1945. DDS Baltimore Coll DS '99. Instr advanced dent Columbia '16-20, clin prof perio NYU CD '24-45, postgrad lect perio Harvard '28. Mem Med Exam Bd NY, mem adv bd NYC Dept Health. 7th Int Dent Cong (pres perio sec). Assoc ed *J Am Coll Dent*; co-auth *Textbook of Clinical Periodontia* '23. FACD, FNYAD, FAAPer (pres), ADA (pres perio sec '20), 1st Dist DS NY (vp), AAAS, OKU. IADR (interim pres '23-24).

STONES, H(ubert) H(orace). PATHOLOGY. b Shrewsbury England 29 Jun 1892; d Anglesey England 28 Sep 1965. LDS & BDS '14, MB & ChB '15, MD '31, MDS '33 U Manchester FDS RCS Eng '47. Prof dent surg & dir dent educ U Liverpool, dir & gen consult Liverpool Dent Hosp, consult maxillofacial cent Broadgreen Hosp Liverpool, hon dent consult Liverpool Regional Bd Hosps & Dent Hosp, prof emer U Liverpool. Prac ft gen '19-35. Capt RAMC '15-19. Mummery prize BDA '36, Tomes prize RCS Eng '45-47, Tomes lect RCS Eng '51, vice-dean bd Fac Dent Surg RCS Eng '53, Sprawson lect London Hosp DS. Ed *Internat J Dental Health* '56; co-auth *Oral and Dental Diseases* 4th ed '62. FDI (ed *IDJ* until '65), FACD, ADA (hon), BDA, Liverpool Regional Hosp (bd mem), Liverpool United Tchg Hosps (bd gov), MRC (dent cmt), RSM (odont sec). Cementum; gingivectomy and epithelial attachment; traumatic occlusion. Responsible for first fluoride study in Great Britain.

STOWE, Lewis Riddell. PEDODONTICS. b Rush City Minn 1893; d NYC 4 Nov 1957. DDS U Minn '16. Asst prof to prof '29-46, dir div stomat '46-57 Columbia D&OS; attend dent surg Columbia-Presbyterian Med Cent; consult VA hosp Bronx. 1st Lt USA DC. Hon awd achiev U Minn '51. Contrib auth chap on mouth diseases Holt & MacIntosh's *Pediatrics*. Wrote many papers on mouth disease, particularly in field of pedodontics.

STREAN, Lyon P(eter). BACTERIOLOGY; ENDOCRINOLOGY. b Montreal 19 Mar 1902; d Norristown Pa 27 Oct 1964. DDS '23, MS '40, PhD '42 McGill. Dir bact Ayerst Labs Montreal '37-46, dir res Novocol Chem Co '46-50, chief dent med Merck Sharp & Dohme Res Labs '50-64. Prac ft gen '23-27. FAAAS, FAPHA, FAMWA, AAID (pres '61-62), ADA, AIOB, AMA (affiliate), Am Acad Dermatology, ASM, NYAS, Soc Invest Dermatology. Dental caries; steroids; congenital defects; gamma globulin for herpetiform lesions; staphylococcus toxoid; active and passive immunity with *H. pertussis*; vitamin B₆ in the prevention of dental caries.

STROMBERG, William R(oss). DENTAL TECHNOLOGY. b 1914; d Lexington Ky 3 Mar 1966. Grad South Missionary Coll & U Miami, dent degrees Emory U & U Mich. Assoc U Ky '63-66, dir dent tech. Blue Grass Dent Soc, KDA.

SULLIVAN, Harold R. b Australia 1916; d 14 Sep 1960. MDS '38, DDS '53 U Sydney. Bact res U Sydney, lect op dent & biochem U Sydney, asst dir Inst Dent Res. Maj WW II. Carnegie fel, Nuffield Fdn, Dominion Trav Fel. Fairfax Reading Mem prize awd '58. Ed *Apollonia* '47; hon ed *Dental J Australia* '51, '54-55. Aust Dent Assoc, Dent Alum Assoc (pres '48-49). A charter member Australian sec IADR. Bacterial factors in the initiation of dental caries; observations on the formation of carious lesions in human dental enamel.

SWANSON, W(illiam) F(redin). MICROANATOMY; EMBRYOLOGY. b Arroye Pa 19 Dec 1892; d Pittsburgh 6 Jun 1970. BS Pa SU '15; DDS '20, MS '30 U Pittsburgh. Asst prof '24-35, assoc prof '35-44, prof & head dept histol & embryol '44-47, assoc dean '47-52, dean '52-61, dean emer '61 Pittsburgh SD. Outstanding Dentist of Year awd '60 Pa DA. Pa St Dent Counc & Exam Bd (secy), FACDM, Acad Gen Dent, ASM, FDI, OKU. Pulpless teeth as foci of infection; respiration of streptococci from pulpless teeth; bacterial toxins and vitamin C in relation to tooth structure.



SWEENEY, James T. DENTAL AMALGAMS. b Berkeley Calif 18 Sep 1893; d Lodi Calif 24 Jun 1951. DDS U Calif CD '26. Stf Stockton Calif St Hosp '26-44, tchg stf Calif CD. Prac '44-51. FACD, ADA, OKU. Essayist and presenter of table clinics at dental meetings. Research in dental amalgams and instrument design.

SZABÓ, József. ACTION OF SILVER NITRITE ON PULP & DENTIN. Place and date of birth not known; d Budapest 17 May 1937. Dir Dent Inst U Budapest '19-37. Auth texts on dent & oral surg.

TALBOT, Eugene S. COMPARATIVE ANATOMY. b 1847 place of birth not known; d Chicago 20 Dec 1924. DDS, MD.

TAYLOR, Norris O(slow). DENTAL MATERIALS; METALLURGY. b Touling Ill 7 Oct 1895; d 28 Jun 1967. BS '18, MS '20 U Ill; PhD SU Iowa '23. Instr to assoc prof SU Iowa '20-28; ADA res assoc NBS '28-31; vp Spyco Smelting & Refg Co '31-38; sales mgr '39-46, vp '46-67 S S White Dental Mfg Co; prof dent mat Mich SD '46-48.

TAYLOR, Philip B. DENTAL MATERIALS. b Detroit 16 Nov 1906; d 28 Feb 1969. AB Olivet Coll '30, AM WRU '32. Tchg fel '30, instr '34, asst prof '36-40 WRU SD; dir res Julius Aderer Inc '44-69; consult Cosmos Dent Prod Inc '45-61. Lt Col USA '40-45. Chmn DMG. IADR. Casting procedures and polymers.

THOMSON, George K(err). PREVENTIVE DENTISTRY. b Newcastle New Brunswick Canada 26 Mar 1870; d Halifax 2 May 1935. DDS Phila DC '92. Prof hygiene & clin & prev dent, prof crown & bridge & ceramics, dent fac Dalhousie U '25-35. CDA (pres; chmn Army Dent Serv); Dominion Dent Counc; Can rep Int Dent Cong '14, '26, '31; chmn Cmt Dent Ed 10th Conf Can Univs; AADS (chmn cmt on Est Preschool Dent Clins).

TIBLIER, Sidney L(ouis). PATHOLOGY; SURGERY. b New Orleans 15 Jul 1898; d 13 Jun 1969. BA '17, MS '19, DDS '23 Loyola (La). Instr to prof chem '19-26, prof oral path '26-45, dean '38-45, lect dent hist & ethics Loyola SD (La). Prac (pt). FACD, AADH, La SDS (pres '35-36), OKU. Ed *Louisiana State Dent J*. Experimental pathology and surgery.

TINOCO, Alfred A. Place and date of birth not known; d Aruba Venezuela 26 Mar 1970.

TISHLER, Benjamin. PERIODONTICS. b Boston 11 Oct 1872; d Boston 3 Jan 1951. DMD Harvard '04. Instr Harvard DS '06-25, vis lect perio NYU. Prac gen '04-24, perio '24-51. FACD, Am Acad Dent Sci, AAPer (pres '33), ADA, Harvard Odont Soc (pres '24), Mass DS. Noted contributor to literature of periodontia.

TODD, T(homas) Wingate. ANATOMY. b Sheffield England 15 Jan 1885; d Cleveland O 28 Dec 1938. MB, ChD U Manchester; London Hosp. Jr & sr demonstr anat U Manchester '07-08, house surg Royal Infirm '09, lect anat & clin anat U Manchester '10, prof & head dept anat WRU '12-38. Dir Hamman Museum, Brush Fdn. Auth *Mammalian Dentition*. FRCS, AAA, Soc Anat Gt Britain & Ireland, AAnthroA, Galton Soc (fel). Originated longitudinal growth studies.

TOVERUD, Guttorm. PREVENTIVE DENTISTRY. b Aurskog Norway 30 Apr 1896; d 25 May 1969. Cand Odont State Dent Inst Oslo '19, PhD Oslo U '26. Asst State Dent Inst Oslo '19-23; instr to docent Pedod Inst Oslo '23-31; prof & head of pedod '32-66, dean '33-39, prof emer '66 Oslo DS. Prac pt pedod '24-48. Lt DC '20-22. Odont D (hon) U Lund '65, LLD (hon) Queen's U Belfast '65, D Odont (hon) Roy DS Denmark '67. Miller prize FDI '67, Knight of St Olav Norway '61. Nor Dent Assoc, Oslo Dent Soc, Nordic Pedod Assoc, FDI, ORCA, FRCS. Dental caries—etiology and prophylaxis; pedodontics.



TRITHART, Albert H. PREVENTIVE DENTISTRY. b Sykesville Pa 13 Aug 1920; d Las Vegas Nev 10 Nov 1970. BS Muskingum Coll '42, DDS Pittsburgh SD '45, MPH U Mich '48. Reg dent off Tenn Dept PH '45-58, dir div dent health Montana State Bd of Health '58-61, dir div dent health Tenn Dept PH '61-67; assoc prof SUNY (Buffalo) '67-70, prof & chmn dept community dent U Mich '70. Maj USA DC '43-45, '52-54. ADA, AAPHD (pres '66), APHA, AADS. Comparison of interproximal carious lesions found by clinical roentgenographic examinations; caries experience and between-meal dietary histories.

TULLER, Charles Sheppard. PROSTHODONTICS. b Chicago 22 May 1880; d New Orleans 6 Nov 1944. DDS CCDS '01. Fac Tulane U DS; active in founding Loyola SD (La); prof dent path, materia medica & therap '14-15, prof oral path, materia medica & therap '15-16, secy fac & prof oral path & therap '16-19 Loyola SD (La). Prac pt. ADA, La DA (past pres), New Orleans DA (past pres), OKU. Collaborated with Dr. Sidney Fournet in development of technique to assure retention of full dentures; from '36 to '44 traveled extensively, giving courses in this technique. Presenter of many clinics and papers; contributor to professional journals.

TURKHEIM, Hans J. BACTERIOLOGY. b Hamburg Germany 23 Jul 1889; d 27 Apr 1955 London. DMD Munich '11. Privatdozent '23-30, extraord prof & dir prosth dept '30-33 U Hamburg; postwar vis lect & hon prof med Hamburg U. Est ft gen prac Gt Britain '33. BDA, BDA Photo Soc (past pres), ADA, FDI, Royal Soc Med (fel), Continental Dent Soc (pres Gt Britain). Bacteriology of dental material.

TURNER, Charles R(oot). DENTAL MATERIALS; PROSTHODONTICS. b 3 Nov 1875 place not known; d Philadelphia 11 Jun 1947. AB U NC '95, DDS U Pa '98, MD Med Coll Va '99. Prof prosth U Pa Med '00-02; prof prosth '02-42, dean '17-41 Pa SD. ScD (hon) U Pa '38, Med Coll Va '35. ADA, Pa SDA (pres '25-26). Auth *American Practice of Surgery* '04; co-auth & ed *American Textbook of Prosthetic Dentistry* 3rd, 4th, 5th & 6th eds. AAS, FDI, AADS (past pres), NC SDS (hon), Nippon DS (hon), ADSE (hon), OKU.

VAN KIRK, L(awrence) E(dward). HISTOLOGY; BACTERIOLOGY. b Freeport Pa 6 May 1895; d 26 Aug 1953. AB Washington & Jefferson '16; DDS '19, MS '31 U Pittsburgh. Instr '19-37, dean '47 Pittsburgh SD. Prac pt gen '19-47. FACD, Odont Soc W Pa (pres '46), Pitt Acad Dent, OKU. Structural variations in human enamel and dentin; effects in animals following injection of bacteria isolated from human pulpless teeth.

VAN WOERT, Frank T(horn). DENTAL EDUCATION. b Half Moon NY 16 Apr 1856; d NYC 1 Sep 1927. MDS '90 NY St Bd Exam. Prof dent surg & electrotherap U Buffalo; a founder, instr '18-24, prof prosth '16-19, chmn admin bd '19-22, prof clin dent & dir '22-27 Columbia D&OS. Brooklyn DS (pres), NY Odont Soc (pres), 2nd Dist Dent Soc NY (pres), NY SDS (pres), 1st Dist DS NY, Nat DS, NYAD, AYAM.

VEHE, William Dietrich. CERAMICS. b Bristol SD 11 Sep 1883; d 1959. DDS CCDS '07. Prof op dent & crown & bridgework '16-46, prof emer '46 U Minn. Prac pt. Minn Dist Dent Soc (pres '14), Minn SDA (pres '16), ADA, Monson Res & Clin Club, OKU. IADR (pres Minn sec). Ceramics pertaining to strength studies and color; the porcelain inlay; the porcelain veneer crown.

VOLLAND, Roscoe H. b 19 Sep 1878; d Iowa City Ia 6 Jan 1962. Grad Iowa St Tchrs Coll '99; DDS '02, MD '05 U Iowa. Fac mem Iowa CD 21 yrs, prof clin dent NWU 21 yrs; ret from tchg '44. ScD (hon) NWU '24. Iowa SDS (pres '11), ADA (pres '28, treas '28-48), chart mem ACD (pres '29); life mem Am Dent Soc Europe. Named outstanding figure in Iowa dentistry '00-'50 by Iowa State Dental Society.

VON MÁTHÉ, Denes. PROSTHETICS. b 1877 place of birth not known; d 1943. Kolozsvár Transylvania '03. Prof stomat med fac U Budapest '37-43. Spec prosth dent. Co-auth book on full prosthesis: *A teljes protézis*.



WACH, Edward C(harles). ENDODONTICS. b Chicago 5 Apr 1885; d Chicago 10 Aug 1966. PhB '07, DDS '23, MS '37 U Ill. Instr to assoc prof dept applied materia medica & therap Ill CD '23-25. Prac pt gen. FACD, FAAAS, AAE, ADA. Dental caries.

WACHSMANN, Karel, Sr. b Prague 11 Nov 1857; d Prague 6 Oct 1938. Ed stf *Czechoslovenska Stomatologie*. Czech DS (pres '05-14, '24-30). IADR hon vp.

WAITE, Frederick C(layton). DENTAL & MEDICAL EDUCATION. b Hudson O 24 May 1970; d 30 Mar 1956. LittB '92, AM '94 WRU; AM '96, PhD '98 Harvard. Instr NY high schools '98-00, NYU '99; asst anat U Chicago '00-01; asst prof '01, assoc '05, prof '06, emer prof histol & embryol '40-56 WRU. LLD (hon) WRU '43. AAAS, AAA, AAHM, AMA, AAMC (vp '06), AMicroS (vp '13), ASN, ASZ, Boston Soc Nat Hist, Cleveland Acad Med, Cleveland DS (hon), Ohio Acad Med (pres '30). Zoology; embryology; microscopic anatomy; medical and dental education; history of medical and dental education.

WALDO, Charles Merrell. ORTHODONTICS; ANATOMY. b Canisteo NY 24 Feb 1906; d Boston 29 Jan 1953. AB '28, DDS '30, MS '32 U Mich. Instr Mich SD '30-32; fel orthod Child Res Counc Denver '32-36; instr to asst prof orthod Mich SD '38-41; asst prof to assoc prof Harvard SDM '41-53; assoc orthod Children's Hosp Boston '44-53; tchg fel anat '42, res assoc '46-47 Harvard MS. ADA, AAAS, Gt Lakes Soc Orthod, AAO, OKU. Longitudinal growth studies; clinical orthodontics; early growth—cleavage stages; bone growth and factors affecting growth in deer antlers.

WARD, Marcus L(ewellyn). DENTAL MATERIALS; DENTAL HISTORY. b Howell Mich 5 Aug 1875; d 9 Jan 1967. DDS '02, DDSc '05 U Mich. Instr '03-05, lect '05-08, prof op tech & op dent '08-12, prof dent physics & chem '12-19, prof dent metallurgy & C&B '19-34, dean fac '16-34, Taft prof dent '34-45 Mich SD. Jenkins med '38, Jarvie med '41, Callahan awd '42, Crouse awd '43. Ed *Am Textbook Op Dent* '20-41. FACD, AAAS, AADS (pres '25), AAUP, ADA (pres '39), Am Assoc Adult Educ, Mich Acad Sci & Letters, Mich SDS (pres '12), OKU.

WASSERMANN, Friedrich. ANATOMY. b Munich Germany 13 Aug 1884; d 16 Jun 1969. MD U Munich '10. Prof anat U Munich '14-36; prof dept anat & Zoller Dent Clin '37-48, prof emer '48-69 U Chicago; sr biol Argonne Nat Lab '48-69. PhD (hon) U Frankfurt '58, MD (hon) U Giessen '59. Unitarian Serv Cmt med mission to Germany '48; vis prof WRU '42, U Heidelberg '52, U Frankfurt '54, Albert Einstein Coll Med '55, '57. Disting serv awd U Chicago Med Alum Assoc '60. AAA, FAAS, Anat Soc Germ (hon), ASCB, ASZ, ISCB, Leopoldina, Med Soc Munich (hon), SEBM, SSDG. Cytology, especially mitosis, connective tissue, dental tissues, adipose tissue; electron microscopy; isotopes; radioautography.

WEBSTER, Albert E(dward). ORAL SURGERY. b Canada 1866; d 5 Nov 1936. DDS CCDS '93, MD Rush MC '98. Demonstr '93, prof orthod '99, prof op dent '06-36, dean '15-23, hon dean '23-26 Fac Dent U Toronto. MDS (hon) RCDS Ontario '94, LLD (hon) Toronto '32. Jarvie med '32. Canadian rep Int Dent Cong St Louis '04. Ed *Dominion Dent J* '00-35; auth *A Manual for Dental Assistants*. FACD, CDA (pres), Am Inst Dent Tchrs (pres), BDA (hon), Ontario DA (hon). IADR (pres '24-25, '31-32).

WEIDMANN, Stephan Michael. COMPOSITION & BIOLOGICAL ACTIVITY OF HARD TISSUE. b Sacalaz Rumania 3 Jun 1904; d Leeds England 7 Jul 1969. Dipl Ing Technische Hochschule Stuttgart '26, Dr Ing Technische Hochschule Darmstadt '30, PhD U Leeds '51. Head chem Dermata Leather & Shoe Factories (Cluj) '33-34, dept head Electrochem Works Halle '45-48, sr res fel to prof oral biol Leeds DS '48. Biochem Soc, ORCA, B&TS. Bone biology; calcification; organic matrix of bones and teeth; fluoridation.



WEINMANN, Joseph Peter. HISTOLOGY; PATHOLOGY. b New Bistritz Czechoslovakia 13 May 1896; d 17 May 1960. MD U Vienna '23. Res assoc U Ill '38-39, res fel Columbia '39-40, asst prof Loyola '40-46, assoc prof U Ill '46-60. Lord-Chaim prize '41. Co-auth *The Enamel of Human Teeth* '40, *Bone & Bones* 2nd ed '55. FAAAS, FAAOP, ABOP (dipl).

WEISBERGER, David. ORAL BIOLOGY. b Dunmore Pa 15 Feb 1904; d Boston 8 Nov 1966. BS St Thomas Coll '26, DMD Harvard '30, MD Yale '35. Stf oral surg & chief dent serv Mass Gen Hosp '48-66, instr to prof dent med Harvard SDM '36-66, consult Boston hosps '40-66. Mem NIH nat adv counc dent res '60-66. AAAS, ACS (bd dir Mass div), New Eng Cancer Soc, New Eng Soc Oral Surg. Tissue enzymology; influence of surgical removal of salivary glands and subsequent development of dental caries in experimental animals; effect of liver disease on occurrence of leukoplakia.

WELKER, William H(enry). BIOLOGICAL CHEMISTRY. b Red Hill Pa 20 Aug 1879; d Spooner Wis 7 Jul 1956. AB Lehigh U '04, PhD Columbia '08. Asst prof biol chem Columbia '11-12; asst prof '13-19, assoc '19-21, prof '21-31, prof & head dept biol chem '31-47 U Ill Coll Med. DSc (hon) Franklin & Marshall Coll '42. Gibbs prize NYAM '07. ASBC, SEBM, Harvey Soc, Coll Phys Metabolism. Immunological properties of proteins; cancer.

WHITE, Jesse D(uncan). PROSTHETICS. b Raymond Ill 1873; d St Louis 1941. DDS Wash U '01. Asst to prof prosth '04-36, act dean '32-33 Wash U. ACD (charter mem), Mo SDS (pres), St Louis DS (pres), OKU.

WILLIAMS, James Leon. HISTOLOGY; PROSTHETICS. b Embden Me 21 Apr 1852; d NYC 23 Feb 1932. DDS Baltimore DC, LDS RCS Ireland '89. Assoc ed *J Dent Res*. FACD, FAADSci, FNYAS, F Royal Anthro Inst England & Ireland, Nat Soc Dent Prosth (pres). IADR (pres '21-23). Invented Trubyte system; discovered typal forms of teeth.

WINTER, George B(en) W(ade). ORAL SURGERY; EXODONTIA; IMPACTED MANDIBULAR THIRD MOLAR. b Brooklyn NY 14 Apr 1878; d St Louis 28 Mar 1940. AB St Louis U '00. Prof St Louis U, tchr WW I in Officers Sch Neuro Plast & Oral Surg, tchr extension courses Columbia U, prof exodont Wash U SD. Coined word "exodontia" '13. Auth text on exodontia, text on impacted mandibular 3rd molar '26; movie *Fundamental Principles for the Technical Removal of the Mandibular 3rd Molar* '36. Jenkins med '33, gold med & scroll RI SDS '36, gold med Odont Soc Havana '38. FACD, ADA (pres '36, trustee), ADSE (hon), ASOS & Exodont (charter mem), Mo SDA (pres '27), St Louis DS (pres '21), OKU.

WINTER, Gordon R. b 1896; d 30 Jul 1951. DDS U Pa '19. Asst prof oral med & prof oral diag Temple SD & MS. AADM (pres '51).

WINTERNITZ, M(ilton) C(harles). PATHOLOGY. b Baltimore 19 Feb 1885; d Hanover NH 3 Oct 1959. AB '03, MD '07 Johns Hopkins. Fel '07-08, asst path '08-09, instr '09-10, assoc prof '10-17 Johns Hopkins; prof path & bact '17-25, Brady prof path '25-50, dean '20-35 Yale SM; assoc dir Inst Human Relations '31-35; act dir bd sci adv '47-48, dir '48 Jane Coffin Child Memorial Fund for Med Res; asst res path '10-13, assoc res path '13-17 Johns Hopkins Hosp; path Baltimore City Hosp '10-17, New Haven Hosp '17-32 (then appointed dir). Maj USA MC '18-19. Mem cmt growth NRC (act chmn div med scis '49-50, chmn '50-53). MA (hon) '17, LLD (hon) '52 Yale. Jenkins med '32, His Majesty's med of hon '48, Pres Cert of Merit '48. USN Off Sci Res & Dev, US VA, consult USPHS. AA, AMA (fel), Soc Exptl Path, Assoc Path & Bact, SEBM, Royal Soc Med (fel). Cardiovascular-renal diseases; nucleic acid ferments; catalase; peroxidase; lipase; melanotic sarcoma; tuberculosis of the stomach; tuberculosis cavities of the liver; the relation of duct changes to chronic pancreatitis; regeneration of the kidney; pathology of war gas; influenza.



WISAN, Jacob M(ordecai). DENTAL HYGIENE; PUBLIC HEALTH. b Stapleton NY 28 Feb 1896; d Philadelphia 4 Oct 1958. DDS NYU '18, MSPH Columbia '44. Sch dent Clark Twp NJ '27-33, Rutgers '30-31, NYU '31-39, state supvr child dent proj St Dept Educ NJ '33-35, chief div dent health St Dept of Health '39-47, dir div Dental Health Educ ADA '48-58, Joseph Samuels Dent Clin for Child RI Hosp '49-51, dir dent res & educ US VA '51-53, chief dent health sec Dept Public Health Philadelphia '53-58. Consult USPHS. Dipl Am Bd Dent Pub Health, ADA, Soc Dent for Children (pres), fel Pub Health Assoc, Sch Health Assoc, NJ Dent Soc. Administration of dental care programs for children; dental health habits of American people; cost analysis of dental care programs for children.

WOLFE, William R(udolph), Jr. DENTAL CARIES & GINGIVITIS. b Cleves O 6 Aug 1906; d 3 Dec 1969. DMD U Louisville '46. Instr '47-49, asst prof '49-52, assoc prof '52-56, prof & chmn dept oral med beginning '56 U Louisville. Capt DC '50-56. OKU, FAAAS, ACD, ADA, AADS.

WRIGHT, George H(enry). b Warwick England 28 Dec 1869; d Boston 1941. DMD Harvard '03. Instr histol '04, asst to instr laryngol '09, asst prof dent '19, clin prof oral med '28-37 Harvard DS; dent consult Eye & Ear Infirm Mass Gen Hosp. Organizer Boston sec IADR. Temporomandibular joint disturbances associated with "closed bite."

WRIGHT, Walter H(enry). DENTAL ANATOMY; PROSTHETICS; DENTAL EDUCATION. b Pa 18 Feb 1893; d NY 31 Dec 1951. DDS '17, BS '31, MS '32, PhD '34 U Pittsburgh. Lect anat '18, asst prof anat & clin prosth '19-20, assoc prof prosth dent '33-37, prof anat & prosth '38-46 Pittsburgh SD; prof prosth dent & dean NYU CD beginning '46. Dent consult to surg gen USA & VA, Adv Health Counc Greater NY. Prac pt '35-46. FACD (pres), ADA (chmn prosth sec), AAAS, AAA, AACPProsth (pres '46), AAUP, AADS (chmn plans & proj cmt), Nat Soc Dent Prosth (pres), NBDE, Odont Soc W Pa, NYAD, Pa SDS, OKU (pres).

WYLIE, William L(eroy). OPERATIVE DENTISTRY. b Drennen Pa 17 Mar 1886; d Cleveland 29 Jul 1960. BS Valparaiso U '09, DDS NWU '19. Asst prof op dent, supt dent clin, dean '37-56, dean emer '56-60 WRU. Mil consult USA. FACD, ACD, Ohio SDS, Cleveland DS (secy), OKU.

YARDENI, J(acob). DENTAL CARIES. b Kiev Russia 15 Apr 1894; d Jerusalem 13 Sep 1970. DDS Dent Sch Kiev U '16, cert proficiency oral anat Columbia D&OS '39-41. Intern Kiev Red Cross Hosp '15-16, head dent clin Israel Sick Fund '53-54, sr lect Israel Fac Dent Med '56-64. Prac '21-64. Cum laude Med Fac Dent Coll Kiev '16. Grabov prize Tel Aviv Dent Assoc '65, Alpha Omega awd '64. Israel Dent Assoc (pres '54). Orthodontics; dental morphology; dental caries. Auth first textbook on dental anatomy in Hebrew.

YOUNG, J. Lowe. ORTHODONTIA. Place and date of birth not known; d NYC 3 May 1941. Transplantation.

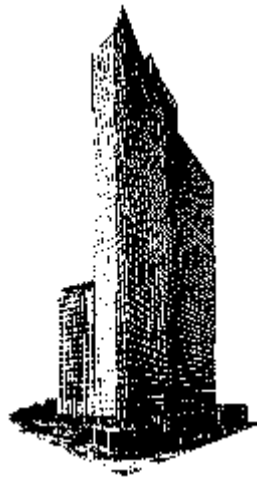
ZEMSKY, James L. ORAL SURGERY. b 1884; d NYC 9 Apr 1951. DDS NY CD '15. Auth text on oral surgery.

ZISKIN, Daniel E. PERIODONTICS. b Grand Forks ND 27 Apr 1895; d NY 21 Oct 1948. DDS '17 U Minn. Asst prof U Minn '18-30; chief stf dent clin Minneapolis Gen Hosp '20-30; asst prof '31, assoc prof '36, head clin res lab & head div grad stud beginning '45 Columbia D&OS; attend dent Presbyterian Hospital NYC. Dent consult NY Diabetes Assoc. FAAAS, Am Acad Dent, AAPer, OKU. Co-auth *Differential Diagnosis of Mouth Diseases* '43, *Handbook of Pulp Symptomatology & Diagnosis* '43.



CHAPTER EIGHTEEN: THE FIFTIETH ANNIVERSARY OBSERVANCE

It seems very fitting to conclude this document with a full account of the Fiftieth Anniversary Observance of the Association. It was for the Forty-eighth Annual Meeting of the International Association for Dental Research at the Americana Hotel in New York City, on Monday morning, 16 March 1970, that a special program was prepared for this occasion. There were featured several outstanding speakers, who cited some of our historical heritage but who primarily made projections into the future of dental education, research, and health care. One address in particular, made by the top representative of the United States Government in health and scientific affairs, portrayed the important future role and problems of health personnel and research. Greetings were extended from the presidents of all the divisions of the Association, who had been invited to attend this special annual meeting, representing their constituents from abroad. The exact program was as follows, in outline form:



The Americana Hotel was the site of the 50th General Session of the IADR.

- 8:45 General Meeting—Executive Session I (Georgian Rooms)
A.M. *Presiding officer:* PRESIDENT CLIFTON O. DUMMETT
 Opening Session of the Forty-eighth General Meeting and Fiftieth
 Anniversary Observance
 Greetings from the Presidents of the Divisions
 Keynote address: "The Future of Research in the Health Sciences"
 ROGER O. EGEBERG, M.D., Assistant Secretary for Health and Scientific Affairs,
 Department of Health, Education, and Welfare, Washington, D.C.
- 10:00 Symposium I—"Dental Research and Society" (Georgian Rooms)
A.M. *Presiding officer:* PRESIDENT CLIFTON O. DUMMETT
 Moderator: RALPH W. PHILLIPS, Assistant Dean for Research and Research
 Professor of Dental Materials, School of Dentistry, Indiana University, Indianapolis, Indiana
 "In Tribute to the Memory of William J. Gies: An Assessment of the Need for Changes in Dentistry"
 HERBERT J. BARTELSTONE, Associate Dean, Professor of Dentistry and Professor of
 Pharmacology, School of Dental and Oral Surgery, College of Physicians and Surgeons,



Columbia University, New York, New York
"The Interfacing Role of the University"
JOSEPH F. VOLKER, President, University of Alabama in Birmingham, Birmingham, Alabama
"Politics, Priorities, and Public Health"
JOHN B. MACDONALD, Committee of Presidents, Universities of Ontario, Toronto, Ontario

This half-century observance in the life of the IADR was planned and implemented by an Ad Hoc Advisory Committee on Programs for the IADR Fiftieth Anniversary, whose members were as follows:

R. W. PHILLIPS, <i>Chairman</i>	F. J. ORLAND
D. Y. BURRILL	G. C. PAFFENBARGER
M. K. HINE	E. V. ZEGARELLI
S. J. KRESHOVER	C. O. DUMMETT, <i>ex officio</i>
B. M. LEVY	A. R. FRECHETTE, <i>ex officio</i>
I. D. MANDEL	G. H. ROVELSTAD, <i>ex officio</i>



Divisional Presidents of the International Association for Dental Research (left to right): S. Matsumiya, Japanese; G. H. Rovelstad, North American (President-Elect); C. H. Tonge, British; J. F. Van Reenen, South African; K. F. Adkins, Australia-New Zealand; M. Skougaard, Scandinavian-NOF; G. Cimasoni, Continental European; C. O. Dummett, North American (President).

OPENING OF THE FORTY-EIGHTH GENERAL MEETING AND GREETINGS FROM THE DIVISIONAL PRESIDENTS

After calling the meeting to order at 9:00 A.M., President Dummett welcomed the members and guests. He introduced the president or representative of each of the other IADR divisions, who extended a message to the Association for his division, as follows:

PRESIDENT KEN FRANCIS ADKINS, AUSTRALIA AND NEW ZEALAND DIVISION

Mr. President, officers, members, and guests. On behalf of all of the members of the Australia and New Zealand Division of the International Association for Dental Research, I convey to you our best wishes on this your fiftieth anniversary.

I congratulate you on your impressive record of achievements in the past, but, more importantly, I wish you greater successes in the future both for your own deeper personal satisfaction and for the advancement of science.



PRESIDENT CECIL HOWARD TONGE, BRITISH DIVISION

Mr. President. It is a great honor for me to be here today and to be able to convey the congratulations and good wishes of the members of the British Division on this occasion of the Fiftieth Anniversary Observance of the International Association for Dental Research. The achievement and growth of the last fifty years have made possible a recognition and an identity which would not have been accorded to dental research workers but for the wisdom and efforts of the founders and their successors in organizing this Association.

The British Division, beginning as a small nucleus prior to 1939, has achieved a progressive growth in size and this year will have a program of some 139 papers in three sessions held simultaneously.

One of the really pleasant aspects of this meeting is the opportunity it gives me to greet again those many friends who have transferred from the British to the North American Division. It is good to see them here.

Should the IADR wish to hold its 1975 meeting in Britain, I can assure you of a warm welcome, and, with the close proximity of the Scandinavian and Continental European divisions, such a meeting could present a large forum for the exchange of ideas.

May the future bring a continuation of the success which has marked the history of the first fifty years of the IADR.

COUNCILOR GEORGIO CIMASONI, REPRESENTING PRESIDENT A. KRÿNCKE, CONTINENTAL EUROPEAN DIVISION

Mr. President, ladies and gentlemen. On behalf of our President, Professor Krÿncke of Germany, I have the great pleasure of bringing to you the greetings of the Continental European Division of the International Association for Dental Research. I must add that I personally welcome this opportunity, since it gives me the great pleasure of seeing the numerous friends that I have in this country. Those of us who are used to travel abroad can fully appreciate the value of the efforts of our present officers in trying to improve relationships among our members and in making the IADR a truly international association. In this connection, I heard at the council session that a meeting of the whole IADR is being planned for 1975 in London: I certainly am fully in favor of such a project and can assure you that proper support will be given on the "other" side of the Atlantic.

Finally, let me express my gratitude for this kind invitation.

PRESIDENT SEIICHI MATSUMIYA, JAPANESE DIVISION

Mr. President, dignitaries, ladies and gentlemen. On behalf of the ninety-five members of the Japanese Division, I would like to express our hearty congratulations on the fiftieth anniversary of the International Association for Dental Research.

For the past half-century the Association has made a valuable contribution to the progress of dental sciences; especially, their international interchange of programs furthering scientific knowledge has been highly appreciated.



Recently our division has become quite active. It is a great pleasure for me to inform you that the First Pan-Pacific Congress of Dental Research was held in Japan last year as one of our activities.

PRESIDENT MOGENS SKOUGAARD, SCANDINAVIAN-NOF DIVISION

President Dummett, ladies and gentlemen. On behalf of the eight hundred members of the NOF, the Scandinavian Division of the International Association for Dental Research, it is a great honor for me to extend warm congratulations on the occasion of the fiftieth anniversary of the IADR.

Although the IADR by definition is the mother organization, I cannot resist the temptation to mention that we celebrated the fiftieth anniversary of the NOF three years ago. Nevertheless, we are proud that the NOF has now joined the IADR as the Scandinavian Division of this distinguished research organization. We are convinced that dental research is indeed international, that we have the same goals regardless of which part of the world we originate in, and it is our belief that the best way to forward these goals is to join forces.

In spite of the numerical North American dominance, the IADR has over the years proved to be an international organization in the true sense of the word. This has been particularly the case during the last decade. May I take this opportunity to express the hope that this tendency will develop even further over the years to come.

PRESIDENT JOHANNES FREDERICK VAN REENEN, SOUTH AFRICAN DIVISION

Mr. President, officers, members, ladies and gentlemen. The South African Division has asked me to bring you greetings and good wishes; I bring the International Association for Dental Research our warmest congratulations on its fiftieth anniversary.

The first fifty years have truly been golden years! The IADR, through its activity, its meetings, and its journal, has done a great deal for dental science and humanity. It has established itself as the largest and most important dental research organization in the world. In fact, I doubt whether the progressive dental research worker can afford to isolate himself from the IADR. May it continue to serve the profession so well in the years to come!

I wish to pay tribute to the founders of the Association. It is significant that they formed an international body, and our division wishes to acknowledge the contribution they have made to the progress of dental science and international relations.

The invitation to presidents of divisions to attend the golden jubilee meeting is a gesture which, I assure you, Mr. President, is greatly appreciated by the South African Division. We attach significance and importance to the example they have set, and we hope that more and more opportunities will be created in future for members of the Association to attend meetings of other divisions. In this way there can be greater exchange of ideas, which, we believe, is necessary for the progress of dental science, dental education, the profession, and humanity as a whole.



INTRODUCTION OF MAYNARD K. HINE BY CLIFTON O. DUMMETT

In considering many of the illustrious members of our Association upon whom I might bestow the honor of introducing our speaker for the day, several excellent candidates of course came to mind. The person who was finally selected was Dr. Maynard K. Hine of Indianapolis, Indiana. I think that if I were to enumerate the accomplishments of this dedicated administrator, it would take all day. Suffice it to say that he was born in Waterloo, Indiana, receiving degrees from the University of Illinois and the University of Rochester in New York. He was appointed Dean and Chairman of the Department of Periodontics at the University of Indiana in 1944. In 1968 he was appointed Chancellor of the Indianapolis campus of the University of Indiana, a position which he holds at the present time. He is a former president of the International Association for Dental Research, a former president of the American Dental Association, a former president of the American Academy of Periodontology, a past president of the American Association of Dental Editors, a past president of the American Association of Endodontists, a past president of the American Association of Oral Pathology, a past president of the Indiana State Dental Association, and a past president of the American Association of Dental Schools. He is the possessor of several honorary degrees. I feel that our Association has done itself a distinct service in asking Dr. Hine to accomplish the pleasant task of introducing the Assistant Secretary of Health, Education, and Welfare.



*Clifton O. Dummett,
President,
introduced
Maynard K. Hine.*

In my years of association with the dental profession, I have found it highly unusual to find any one individual about whom it can be said that one has never heard an unfavorable word. This is the case with Dr. Hine, whose special ability is that of being able to bring us together. In this capacity, then, I feel that he would also serve well as a consultant to the current President of the United States.

Ladies and gentlemen, and members of the International Association for Dental Research, it is my pleasure to present to you at this time the Chancellor of the University of Indiana, Dr. Maynard Kiplinger Hine.

INTRODUCTION OF ROGER O. EGEBERG BY MAYNARD K. HINE

In introducing a well-known, influential individual, it is tempting to recite at some length the various achievements which have made him well known and influential. However, I have often questioned the desirability of this procedure, particularly if the individual is so well known that he really needs no introduction.



A comprehensive introduction of a celebrity is most time-consuming, and most of us are really more interested in what the individual is going to do than in what he has done.

Therefore, I shall not follow the usual pattern of reading the long list of activities of our morning speaker but rather shall single out those achievements which have made him unusually well qualified for his current assignment as the Department of Health, Education, and Welfare's Assistant Secretary for Health and Scientific Affairs.



*Maynard K. Hine, Chancellor,
Indiana and University—Purdue University
at Indianapolis, introduced Roger O.
Egeberg.*

Dr. Roger Olaf Egeberg was born in Chicago, Illinois. He studied at Cornell and at Northwestern Medical School, and had his residency at the University of Michigan. He engaged in the private practice of internal medicine for ten years, so he knows the advantages and the handicaps of private practice of medicine. He served for a time as General Douglas MacArthur's personal physician and then for a decade worked in the Veterans Administration Hospital in Los Angeles, where he was involved in another facet of the health care system. During this time he became attracted to medical education. He served as a clinical professor of medicine from 1948 until 1964, when he was appointed Dean of the University of Southern California Medical School. Dr. Egeberg assumed active leadership in the development of the Watts neighborhood health center in Los Angeles.

I note that he served as a member of the California State Board of Health for four years, but Governor Ronald Reagan refused to reappoint him—a fact which some consider not uncomplimentary. Members of the IADR will be interested to know that he has been carrying on research in ecology and in home care. Last fall he was named Assistant Secretary for Health and Scientific Affairs. The problems facing him are staggering, but, as *Medical World News* commented after his appointment, he is a "tough-minded persuader" with progressive views regarding the delivery of health care.

Here, then, is a physician who has had experience as a private practitioner, a hospital medical director, a public health administrator, a clinical professor, a research investigator, the dean of a medical school, and a gentleman farmer. In these times there is a need to make good health care available to all who need it and at the same time to attempt to preserve the best in the private practice of medicine. A big order—and to deliver it will require a man of Dr. Egeberg's background and talents.

We are honored to have Dr. Roger Olaf Egeberg on our program. His subject is "The Future of Research in the Health Sciences."



THE FUTURE OF RESEARCH IN THE HEALTH SCIENCES

ROGER O. EGEBERG

ASSISTANT SECRETARY FOR HEALTH AND SCIENTIFIC AFFAIRS, UNITED STATES DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, WASHINGTON, D.C., USA

It is a great pleasure to be with you on the occasion of your fiftieth anniversary. I would like to extend special greetings to the presidents of the Australia and New Zealand, British, Continental European, Japanese, North American, Scandinavian, and South African divisions who are here today. I understand that this distinguished Association uniquely serves to bring together scientists from all parts of the world. These scientists represent a wide range of disciplines and share a common dedication to research on oral disorders. The growth of your organization has been synonymous with the development of the dental sciences and the advancement of new knowledge. May you continue your impressive contributions to this important area of research.

When Cliff Dummett kindly asked me to speak at this meeting about the future of research in the health sciences, I decided to take the opportunity to tell you something about where I think we stand in dealing with problems of health, and where I think we are heading.

Actually, in neither of these areas can conclusions be expressed very easily. The debate about health problems in America has become intense in recent years. Yet I would have to say that we are still a long way from knowing exactly what the dimensions of those problems are. I know from personal experience that, if you try to cite figures to show that our health care system is in serious trouble, somebody will cite other figures—or even the same ones—to prove that things are more or less all right.

If you dare to suggest that health indicators such as infant mortality or the utilization of health services show that many people in this country are not getting the kind of care they need and deserve, someone will jump up and say that such figures are no good, that they reflect differences in genetics and cultural patterns and cannot be used to gauge the effectiveness of care.

Then, to go a step further—a leap further, really—it is even harder to try to draw some conclusions about where we might be heading in the whole sphere of health care delivery. Again, experience has demonstrated to me rather forcefully that, if one is so bold as to talk about the need for improvement in the way we make health care available to the people of the United States, he is likely to be accused of trying to ram compulsory health insurance down the throats of the public and the health industry. Or, if one happens to believe, as I do, that compulsory health insurance is not the way out of our problems, assuming that we have some problems, then there is a chorus of critics ready to say that he is a reactionary pawn of the health establishment without the vision or the will to see the inevitable logic of such a scheme.





Roger Egeberg delivered the keynote address at the 50th Commemorative meeting. Also on platform are IADR officers, many from abroad, and other dignitaries. The Georgian Rooms in the Americana Hotel were filled on that Monday morning of 16 March 1970.

MORE KNOWLEDGE NEEDED

The point is that there is more heat than light in much of what is being said about health care, about where we are today and where we ought to be heading tomorrow. But there is one thing that, thankfully, individuals on all sides of this debate generally agree on: We need a lot more knowledge than we have, knowledge in the fundamental biomedical disciplines, in the realm of health administration, in health economics, and in the social and behavioral aspects of health. Again, lest I expose my flank to the attack of those who say, "All Washington wants to do is look at the problem," let me emphasize my firm belief that there is a great deal that can be done right now both in research and in the delivery of essential health care. The field of dental health is a prime example.

THE GROWING POPULATION

As you know better than I, we have seen a tremendous rise in the demand for dental health care, as in all the health care fields. Consider the effect of rising population. In the 1920s the population of the world was



increasing by about 20 million people a year. Now it is up to about 1 1/4 million people *a week*, which means that the increase in the world population this year over last year will be about 70 million.

Although it is a major factor, population growth, of course, is not the only force responsible for this growing demand. Rising levels of income and education represent other powerful forces.

DENTAL DISEASES ARE HEALTH PROBLEMS

More and more, the public is perceiving dental diseases as health problems. These attitudes have been shaped in large part by the high quality of the work of dental scientists and the steady communication of research findings to the public. One measure of rising expectation and demand is the prediction that dental health insurance may cover as many as 30 million Americans in 1975, as compared with only about 6.5 million today.

As recognized health problems, the dental diseases are included in the new concept that fires the social consciousness of the country—of health as a right rather than a privilege. Needless to say, if everyone were to exercise this right, dentistry would be literally unable to meet the demand.

I believe that the growing climate of public expectancy, coupled with the practical need to exact the greatest benefit from limited professional, scientific, and fiscal resources, must eventually lead to the successful integration of dentistry into total health programs.

THE GOLDEN AGE OF DENTAL RESEARCH

The promising contributions of the dental sciences—what Cliff Dummett termed the "Golden Age of Dental Research"—have been stimulated by many physical and biological scientists who have joined dentistry's ranks. Much more may also be accomplished by aligning educational and care aspects more closely with the broader field of biomedicine.

One of the most important issues at present is how to team the scientific community with those who are primarily responsible for the health care—dental, medical, and other—of people. Although doing your own thing is the currency of the day, it is essential that you extend your creative thinking beyond traditional research interests and contribute ideas for the design and development of the educational and health delivery systems that will make it possible to bring services to those who need them, especially to children. Prevention and care in the early years will obviously reduce the need for service and the toll of disease and expense in maturity.

The harvest is indeed great and the laborers few. I need not remind you of the staggering dimensions of dental diseases and disorders. Tooth decay and periodontal disease are virtually universal. For example, the United States Army currently finds that every hundred inductees require 600 fillings, 112 extractions, forty bridges, twenty-one crowns, eighteen partial dentures, and one full denture. If we examine the problem of malocclusion, we find that not fewer than one-fifth, and perhaps as many as one-half, of school-age children



will require orthodontic treatment. Private citizens pay approximately \$4 billion a year for dental care, and an estimated 100 million man-hours are lost annually as a consequence of dental disease.

DENTAL MANPOWER

Of the many problems facing dentistry, none is greater or more urgent than the deficiency of manpower. A stabilizing factor has been the dental school construction program. The Health Professions Education Assistance program has been a major instrument in increasing student places in dental schools. First-year enrollment rose from 3,770 in the 1963-1964 school year, the year immediately before enactment of the HPEA legislation, to 4,203 in 1968-1969. We expect that it will reach 4,610 by the fall of 1970. That adds up to an increase of 22 percent over the seven-year period, almost four times the increase recorded in the seven preceding years. Even so, the ratio of dentists to population will continue its gradual decline.

As a result of various societal forces, dental demand is expected to increase 50-75 percent by 1975. Only one-fifth to one-third of this increased demand can be met by the projected increase in the number of dentists.

There is obviously no single, simple solution to this problem. But one conclusion is inescapable: we cannot continue doing business in the same old familiar way. Already, dentistry is exploring a path opened by its medical colleagues of giving the individual practitioner the responsibility of delegating duties to auxiliaries. For the past decade, federal agencies and dental schools have been studying the problem of what procedures can be delegated to dental assistants, hygienists, and laboratory technicians. Their findings are accelerating the transfer of selected professional duties from the dentist to his auxiliaries, a development that lies at the heart of the new patterns that must evolve to meet growing demands for health care.

THE NEED FOR DENTAL EDUCATORS

The times also call for other types of change. Because dentistry is steadily becoming more scientific and less empirical, it is increasingly important to assure practitioners of the future of an adequate orientation in scientific concepts. To do this, however, we must solve the problems of the scarcity of research-trained teachers. It is estimated that there are about 2,500 full-time equivalent faculty members to staff our fifty-three operating dental schools. This figure must be doubled by 1975 for adequate staffing of six new dental schools and others that are now in process of expansion. Although there is a shortage of all kinds of dental educators, the most critical lack is of well-trained clinical faculty.

I realize that the late start of dental research has greatly disadvantaged dental schools and slowed the progress of the dental sciences. Statistics recently cited show that there is one biomedical research worker for every seven active physicians, and there is one Ph.D. scientist in health research for every 9.5 physicians. In contrast, there is only one dental researcher for every forty-four active nonfederal dentists and only one Ph.D. researcher for every forty-three such dentists.



Future curriculum design not only must reflect advances in the dental sciences that will shape the practice of tomorrow; they also must reflect economic and psychological aspects of disease prevention. The establishment of departments of community dentistry is adding a new social dimension to the education of young dentists. However, attention to research in new techniques to improve learning is long overdue.

These are areas in which investigators should be involved. As Cliff Dummett has stressed, the behavioral scientist is indispensable to the research team concerned with the totality of today's health problems. Similarly, the organization and delivery of health care services must claim the attention of creative scientists. Let me be quick to point out, however, that these are areas that we must explore *in addition* to continuing research in the physical and biological sciences. This type of effort, directed toward the prevention of dental diseases, holds the ultimate hope.

ROLE OF RESEARCH

The role of research as a substrate for prevention has been well illustrated in dental caries. It is in this area, I understand, that we perhaps stand most squarely on the threshold between discovery and application.

You are probably aware that President Nixon's budget for the fiscal year 1971 requests a \$5 million increase for the National Institute of Dental Research for studies on caries. This amount represents one-tenth of the total increase over last year for all biomedical research at the National Institutes of Health.

TO MAKE CARIES PREVENTABLE

The NIDR has helped to demonstrate, in essence, that an adequate base of knowledge now exists on which to mount a concerted research effort to make caries almost entirely preventable by 1980. A ten-year program of intensified research and development will be conducted by the institute through intramural, collaborative, and extramural studies. Several promising leads will be pursued through a sequence of laboratory research, clinical studies, field trials, and field demonstrations until they reach the point of readiness for widespread application in personal oral health programs and community health services. I understand that many of these findings have come from members of your Association and have been reported at these annual meetings.

Relief of some of the manpower shortage is predictable in several of the preventive procedures being tested under this program. For example, a new method of topical fluoride application—using a gel in a mouthpiece—permits a single dental hygienist to supervise the treatment of several hundred schoolchildren in less than an hour, as contrasted with the twenty or so that could be treated daily with previous methods.

Another manpower lack—the shortage of trained clinical researchers—has seriously impeded the flow of knowledge from the laboratory to the practitioner's office. This problem, however, is now under intensive study by the NIDR in the hope of finding additional means to bring persons with this type of training into



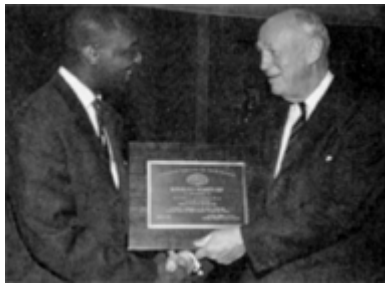
research and, as I mentioned earlier, into academic dentistry.

As one approach to this problem, the NIDR has been supporting a dual-degree program which enables talented students to obtain both D.D.S. and Ph.D. degrees within seven years after their baccalaureate. In addition, it qualifies them as board-eligible in a clinical specialty. This program at the Universities of Alabama and Minnesota has aroused considerable interest and has stimulated at least five other dental schools to submit applications for similar types of training.

THE COSTS TO SOCIETY

Obviously, we must find innovative solutions to the problem of providing care to all who need it at a cost that the national economy can tolerate. We achieve relatively little if the great potential for the control of dental and other health problems is subverted by rising costs that effectively bar large numbers of people from needed health care. On the other hand, we dare not be misled by a false sense of economy. Although it will certainly cost society a good deal more to make preventive health services as widely available as they might be, the saving in money and in human well-being will, I am sure, more than offset the investment.

The development of new, effective methods of prevention is vital because it will keep people healthy and out of hospitals and in that way will help to solve the crisis of health care delivery. We look to the continued contributions of dental research in these important areas. For in all branches of the health sciences, research offers the best hope for understanding and solution of the difficult problems we face.



*Clifton O. Dummett,
President of IADR,
presented honorary
membership plaque to Roger O.
Egeberg, M.D.,
Assistant Secretary for Health
and Scientific Affairs,
HEW.*

CITATION TO ROGER EGEBERG BY CLIFTON DUMMETT

It is becoming more and more of a rarity to find in high places men who have not lost the common touch. It is a liability of these times. One of the reasons why it is such a pleasure to be able to honor one who through sheer ability and hard work has reached the pinnacle of success in his profession is essentially the fact that he has not lost the common touch. Mr. Assistant Secretary, we, the members of the International Association for Dental Research, honor ourselves in honoring you today. The awesome burdens and considerable accountabilities of your high office are enough to affect adversely many a strong and dedicated man, yet you have maintained your cheerful demeanor, your tremendous sense of humor, and what I have



learned from experience to be your rich and colorful vocabulary. Approachable and committed to the task of improving the health of the citizens of our nation, you have been most effective in your support of all health professions. As you well know, research is the very foundation upon which the advancements of all health professions are based. The IADR has activated and encouraged many of the advances in dentistry. Your recognition of this truth, your support of dento-medical relations, and your implicit confidence in our ability to fulfill our educational, research, and service responsibilities to the American people—these comprise the reasons why our Association is happy and proud to make you one of us. Accordingly, sir, it is my pleasure on behalf of our organization to present you with this plaque attesting to your honorary membership in the International Association for Dental Research.

INTRODUCTION OF RALPH W. PHILLIPS BY CLIFTON DUMMETT

One of the first things I did last March was to appoint an Ad Hoc Committee on Programs for the IADR Fiftieth Anniversary. This committee, under the able direction of Ralph Phillips, has done a magnificent job in arranging the fiftieth anniversary program. The committee felt that the presentation of high-level scientific symposia would be a major service to the scientific program. The result of the committee's action is this first symposium, entitled "Dental Research and Society," and Ralph Phillips was chosen to be moderator. I think it would be indecent to spend any time introducing Ralph Phillips. We all know him; we all know of his high level of accomplishment; we know of his contributions as a former president of the IADR; we know that he has won many awards, gold medals, and significant honors; we know that he is a consultant to all the federal agencies and to all the reputable societies and associations in our land; we know that he is an author of outstanding textbooks; and we know that despite all these accomplishments he is a regular guy with a subtle and piercing sense of humor. At present he is Assistant Dean for Research and Research Professor of Dental Materials at the School of Dentistry of the University of Indiana. Ralph will be responsible for moderating this symposium, which will set the pace for what I believe will be a memorable conclave. Ladies and gentlemen, Dean Phillips.

REMARKS BY RALPH W. PHILLIPS

The International Association for Dental Research this year enjoys and celebrates its fiftieth anniversary. It is appropriate that the inaugural meeting at this session be marked by a symposium commensurate with the past achievements and the future goals of this association. The Ad Hoc Committee on Programs for the IADR Fiftieth Anniversary has selected as an appropriate title for this symposium "Dental Research and Society." It is my pleasure to serve as moderator of this symposium and to introduce the carefully selected participants.

Each of the three assigned subjects that will follow, although distinct in scope, fits into the general theme cited. It is to be hoped that the challenges to be presented to this audience will provide guidelines for the



future activities of this Association, will define the role of the university as it relates to research in the health sciences, and will identify the problems associated with the dental investigative effort as applied to the community and government. Before introducing the speakers, I would like to thank personally the other members of this committee for their enthusiastic cooperation on the organization of this symposium, as well as on other details associated with this meeting.



Ralph W. Phillips, Chairman, Ad Hoc Advisory Committee on Programs for the IADR Fiftieth Anniversary.



IN TRIBUTE TO THE MEMORY OF WILLIAM J. GIES: AN ASSESSMENT OF THE NEED FOR CHANGES IN DENTISTRY

HERBERT J. BARTLESTONE, D.D.S., PH.D.

ASSOCIATE DEAN, PROFESSOR OF PHARMACOLOGY, AND PROFESSOR OF DENTISTRY, SCHOOL OF DENTAL AND ORAL SURGERY, COLLEGE OF PHYSICIANS AND SURGEONS, COLUMBIA UNIVERSITY, NEW YORK, NEW YORK.



As a professor at Columbia University, I am very pleased to be able to express once again our appreciation of the efforts of Professor Gies of Columbia University in founding our society and its international journal. In the past, much has been said and written about this famous scientist. In 1957, on the occasion of the thirty-fifth general meeting of this Association, Dr. Theodor Rosebury presented an eloquent tribute to the memory of the then recently deceased Dr. Gies¹ Dr. Rosebury's presentation was neither an obituary nor a biography but rather a creative interpretation of Dr. Gies's work in dental education. Using the content of the famous Bulletin No. 19,² Dr. Rosebury assessed the changes in dental education since that 1926 report of Dr. Gies.

Today I would like to present an aspect of the professional efforts of Dr. Gies which points up his commitment to the need for collection and presentation of scientific information via appropriate media so that it may properly be used to advance science and, eventually, health care delivery.

We all are aware of the fact that Dr. Gies founded the *Journal of Dental Research* in 1919 and the IADR at Columbia University in 1920. By 1919, however, Dr. Gies was already an experienced motivator and organizer of scientists into coordinated groups. I feel certain that few of you realize that Dr. Gies was one of the founders of the Society for Experimental Biology and Medicine in 1903 and, further, that in 1904 he was the founder and first editor of the famous *Proceedings* of that society. Then, in 1906, Dr. Gies became one of the founders of the American Society of Biological Chemists and the founder and editor of its *Proceedings* in the next year. In 1923, after his work in founding the IADR, he initiated negotiations which brought four small



organizations concerned with dental education into one society: the American Association of Dental Schools. He served in an editorial capacity for a number of journals and special literature collections in basic science and clinical areas.

The IADR itself may be considered a living tribute to the efforts of scientist, teacher, humanist Dr. Gies. It is not necessary for me to go into the details of the Association's historic growth, since Frank J. Orland, your chairman of the Committee on IADR History, has prepared an illuminating exhibit of this information for this Fiftieth Anniversary Observance.³ These fifty years of growth, reflecting the expansion in numbers of member scientists, the increase in depth and breadth of their scientific interest and accomplishments, and the Association's impact on dentistry, have brought us to this critical period of assessment.

Our member scientists have increased the scope of dental science and, through their additional roles as teachers, have brought some of this body of information into the traffic in dental education, since the curriculum of a modern dental school is directly dependent for its scientific content upon the efforts of our members. We have had a significant role in the maturation of dentistry and can therefore be considered to have earned the credentials necessary for assuming another role in dentistry. We must now become activists in the search for ways and means to bring what we now know about the art and science of dentistry into direct contact with the problems of delivery of dental health care to our society, so that we may help to solve them.

This is a critical period for dentistry, paralleling the circumstances existing in all the health care professions. Society itself has matured to a degree which makes it possible to consider health maintenance to be a right of all men rather than a privilege of special segments of society. Limitations upon the implementation of this right to health must be related only to the level of our knowledge in prevention and treatment of disease at any given moment. The facts are that clinical efforts in prevention and treatment of oral diseases, based upon the present level of knowledge in dentistry, could result in the prevention or curtailment of most major dental disease in our population. What we now know, if applied, could effectively stop caries and prevent or significantly curtail all periodontal disease. In addition, disabilities related to problems of growth and development could be significantly reduced in numbers and severity.

But something is seriously out of order in our profession, since we know that we do not now prevent caries and most periodontal disease. If, in spite of the efforts of more than 100,000 dentists, there are an estimated 1 billion unfilled carious areas in the mouths of the people of the United States; if, in spite of our efforts, over 10 percent of our people have no teeth at all; if another 5 percent have no teeth in one dental arch; if untold millions of people are missing one or more teeth without adequate prosthetic repair, then, even with our knowledge, we have not slowed pathological processes to the point where over 100,000 dentists can possibly restore health in the face of existing disease. The present systems of dental manpower development and dental health care delivery must be considered obsolete in the light of society's current demand for progress.



Our present system of dental health care delivery treats less than 50 percent of our population, while 95 percent of the population suffers from dental disease. The dental profession, working closely with government and universities, has funded and constructed new schools, so that now we graduate 3,500 dentists per year. By the end of the 1970's we may have enough schools capable of graduating an additional 1,000 dentists. This rather heroic effort of all facets of society concerned with dental education becomes shockingly inadequate when viewed prospectively. The "numbers game" as a solution to dental health problems becomes obsolete if we consider the following: that dentists retire from practice or die; that the population is increasing at a remarkable rate; that dental health is a right of every member of a democratic society; and that about 110 million people are not now treated. I have indicated up to this point that our current clinical systems of delivery may be inadequate; our efforts to build new educational structures to increase the dentist population appear to be inadequate; and now I must also suggest that our educational system itself may be obsolete. Obviously, American dentistry can easily find examples of an individual dentist serving the dental needs of a patient completely. This reflects the potential of dental health care delivery systems originated during the first twenty years of the twentieth century to care for an individual patient. But our professional attainments of the past and present can be considered significant only if we recognize that the early operating objectives of a young profession may no longer be valid today.

Dental education is still structured to produce a dentist who can repair teeth with existing carious lesions and can replace missing teeth. Periodontal disease and its prevention and treatment are superficially taught through most undergraduate curricula. This means that dentists spend large amounts of chair time supplying prostheses necessary to restore functions lost through periodontal disease in patients with varying degrees of still-persisting periodontal involvement. Failure of the treatment is directly related to progressing periodontal disease, and much time is spent in remaking or enlarging the restorations which have failed. Because dental restorations are often designed in a manner conducive to a high iatrogenic disease potential, the resultant disease again requires large aliquots of dentists' total chair time.

Our system of education produces a mechanistically oriented dentist whose inadequacies become glaringly apparent when both the state of dental health needs and the right of man to be free of dental disease are joined conceptually. Under no conditions conceivable at present can we educate and train dentists, as we know them today, in numbers sufficient to fulfill our profession's mandate from society. We cannot afford to build the structures to house new schools or expand existing ones to a practical degree. Even if we could do this, we could not staff these schools.

I believe that a significant contribution to the solution of dental health care delivery problems should come from you individually and collectively. You in the audience represent a significant sample of the scientists who are concerned with dentistry and who make up the membership of the IADR. I believe that you should all



begin to consider taking an active role in the applied clinical science known as dentistry. You must recognize the fact that, while almost all the basic advances in dentistry since 1921 have come from your thought and experimentation, you are considered relatively uninfluential in matters of clinical education and dental health care delivery. I believe that you must accept more professional responsibility and lead your profession toward acceptance of necessary changes in education and practice if dentistry is to succeed in meeting the demands for health care in the future.

You have expanded our knowledge of caries and periodontal disease, the plaque diseases. In fact, you have already supplied the profession with the scientific basis for the prevention of caries and periodontal disease. You have, however, failed for the most part to accept the responsibility for guiding the clinicians to the realization that the application of this knowledge can enhance remarkably their ability to solve the problems of dental health care. You are aware of the magnitude of the problems facing the profession, but I fear that most of you feel no direct responsibility for bringing solutions directly to society. You tend to use the clinicians as a buffer between you and society, even though some of you may quietly question the success of their efforts. I believe that the time has come for each of you in your capacities as teachers and investigators to marshal the clinical information necessary for you to influence the curricula of your institutions and the health care delivery systems of this country and others.

At Columbia we are engaged in an educational effort designed to produce a dentist better able to cope with the solutions to problems confronting dentistry. We are convinced that most dental disease can be prevented or curtailed. Further, we are convinced that therapeutic and restorative efforts necessary to treat existing disease can be carried out with greater facility, with lower cost, and with lessened iatrogenic disease potential. We are convinced that students must receive exhaustive exposure to preventive dentistry and the psychosocial, motivational, and community/communications methodology basic to successful prevention of disease. Dentistry must recognize, reduce, or eliminate periodontal disease, and we are prepared to increase greatly our emphasis on periodontics throughout the curriculum. We must be able to teach caries-preventive and periodontal disease-preventive restorative dentistry. We can no longer accept the inevitability of tooth loss as a consequence of aging. We cannot any longer afford the man-hours usually spent in remakes of clinical failures when we do already possess information fundamental to clinical success.

The dentist of this decade must be prepared to use what we now know about dental science and art. You, the ones who advanced the science and art of dentistry, must now close the gap between the current practice of dentistry and what can and should be the practice of dentistry. We believe that through curriculum changes the new dentists will be prepared to prevent or curtail the dental diseases of children and relieve the need for the expensive and time-consuming treatment of these individuals when they become adults. The new dentists can



be taught to prevent and curtail periodontal disease in adults and reduce the failures and remakes inevitable when this disease is unrecognized and/or untreated.

Is it possible that the practitioners of clinical dentistry do not recognize the primary importance of the diagnosis and treatment of periodontal disease? The fact is that they seem to be almost totally unaware when viewed as a group. If periodontal disease goes unrecognized and thus, obviously, untreated, how can prevention, the optimal effort, be taught and practiced? You, understanding these disturbing facts, must rise up out of your laboratories and studies and engage in the educational, political, institutional, and community efforts to make the appropriate changes in the nature of clinical dentistry. We must become committed to the concept that it is realistically possible to teach and effect the prevention of most oral disease. We must greatly multiply the operative usefulness of each dentist, so that a slowly increasing dental manpower can deliver prevention and dental health care which is available to all people. It is simply unrealistic to continue to deliver care to an expanding population in which the individual patient requires the filling and the refilling of teeth and then undergoes tooth loss and its replacement and finally complete loss and dentures. Twenty million denture-wearing Americans are living examples of this time-consuming demonstration of the failure of dentistry as it is presently practiced.

To be functional you must learn what dentistry is in the field, evaluate what you observe in the light of society's needs, and then, motivated and informed, help create and implement the educational, social, and practice modes of our profession. I believe that many of the changes which may come, through government and organized dentistry, may not be workable if your influence is not felt. If the "increase dental manpower" approach to solving dental health care problems is an example of the efforts of others, then you had better engage now with dentistry's problems if you really care about the prevention or treatment of oral disease in our population.

Dr. Gies looked at dentistry prior to 1926 and prepared the way for the truly remarkable growth of dentistry as a profession. Now we must look again and with greatly accelerated effort, effect the implementation of advances in dental science for the benefit of the profession and the society it serves.

By example, we at Columbia who are members of the IADR have recognized our responsibility and have taken steps to engage in solving some of the problems which I have been speaking about. What follows is a summary of our approaches:

1. Develop and implement a new curriculum which stresses the correlation of scientific and clinical information to produce a strong conceptual basis for prevention, recognition, forestalling, and treatment of more disease in more patients per individual dentist. Because we believe that mere increase in numbers of standard dentists is not satisfactory, our predoctoral program is designed



to relieve the disproportion existing between the magnitude of the health needs of our population and the productivity of each individual dentist.

2. Teach the efficient use and management of existing dental paraprofessionals and develop programs for expanded-duty paraprofessionals. Then teach the undergraduates and postdoctoral students how best to use their services both administratively and clinically. This places the conceptually grounded student in a position to prevent and treat more disease or oversee the treatment of more patients over a longer, more productive period of practice than was previously possible.
3. Develop postdoctoral and predoctoral programs which result in generalists and specialist clinicians and scientists educated in depth in preventive concepts and community needs and with full awareness of changing patterns of health care delivery. These dentists will have been motivated to become involved in teaching, community and institutional programs, and government agencies' educational programs for the laity. These new dentists can become the creators and implementers of the systems of dental care of the future.
4. Engage in continuing development and alterations in curriculum based on concurrent evaluation of all preventive and correlative programs and health care delivery systems.
5. Present continuing educational programs of a conceptual rather than technical nature which do not compete with dental society programs. Our objectives are to stress, to the practicing dentist, prevention, periodontal concepts, reduction of iatrogenic disease factors, quality-control methodology and means of evaluating the nature of therapy, and an awareness of the changing nature of health care delivery in a changing society.

I ask you to consider becoming activists in all aspects of dental health care delivery, so that the profession and society can benefit more fully from you who have been almost solely responsible for the science of dentistry.

REFERENCES

1. *J Dent Res* **36**: 800, 1957; not printed in the *Journal*, but see Rosebury, T.: The Challenge to Dentistry: A Tribute to William J. Gies, *Science* **126**: 1056-1058, 1957.
2. Gies, W. J.: *Dental Education in the United States and Canada* (Bulletin No. 19; New York: Carnegie Foundation, 1926).
3. See chapter on "Meetings and Members", p. 202.



THE INTERFACING ROLE OF THE UNIVERSITY

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It is a privilege and pleasure to participate in the ceremonies that mark the fiftieth anniversary of the International Association for Dental Research. My affiliation with the Association spans approximately two-thirds of that period. Suddenly I am an old boy, but hopefully a few "young Turk" qualities have survived. On such occasions one is tempted to reminisce, but the problems of the present and the challenges of the future demand that I forgo that pleasure.

A cursory review of the programs of our annual meetings indicates that much of the recent progress in dental research in the United States can be attributed to the partnership of universities and the federal government, and there is every reason to believe that this alliance will continue. I do not underestimate the contributions of our colleagues from industry, the federal agencies, the armed services, and various private nonprofit organizations, but I would point out that most, if not all, of their personnel received academic preparation, including research training, at institutions of higher learning.

For almost the first three decades of the IADR's existence, until the creation of the National Institute of Dental Research in 1948, federal participation was minimal. Today the affairs and destinies of government and universities seem inseparable.

Traditionally, universities have been concerned with transmission, preservation, accumulation, and application of knowledge, the first being the most important. In the past the preservation of knowledge became of importance only in times of war and tyranny; the accumulation of knowledge proceeded at a digestible pace; and demands for service were limited. Although the number of matriculants increased, the growth rate was not alarming, and instructional responsibilities could be met by reasonable expansion of existing institutions and creation of a limited number of new ones.

But the good life was not to last. Our time was to know the full force of the information and population



explosions. In part, both could be credited to the universities, particularly the research activities. Recently, I noted a short-range projection indicating that as a result of many factors, including improved health, the number of students attending colleges and universities would increase by 50 percent during the seventies. At the same time, it is predictable that the body of scientific knowledge will more than double within the decade. Obviously, universities have their work cut out for them. With federal partnership they must undertake unprecedented programs of expansion of both physical facilities and academic programs. At the same time, they must combine to create more effective ways of instruction, so that the new knowledge can be made available to tomorrow's scholars. The magnitude of the latter undertaking almost defies one's imagination. In a recent address, I recalled:

In the late 1930s I was a candidate for the Ph.D. at the University of Rochester. At that time, the biochemistry department had a primary interest in the lipids, and graduate and professional students were expected to be rather knowledgeable in this area. Fortunately, this requirement could be met in part by mastering the information contained in 169 pages that comprised the small but excellent monograph, *The Biochemistry of the Lipids*, authored by Henry B. Bull. By 1943 this reference source had been replaced by *The Biochemistry of the Fatty Acids and their Compounds, the Lipids*, a 387-page summary by Walter R. Bloor. The latter publication in turn was replaced during the 1950s by a 2,966-page compendium, *The Lipids, their Chemistry and Biochemistry*, authored by Harry J. Deuel, Jr.

It was predictable that the accelerated rate of growth of our knowledge of lipids would result in the creation of specialty journals. In the closing months of the 1950s the *Journal of Lipid Research* appeared, and in the mid-60s a companion publication *Lipids* was inaugurated. Both have six issues annually containing as many as twenty-five articles each.¹

I am grateful that at the moment I am neither teacher nor student.

The information explosion has other implications for the university. These were succinctly stated by President Kennedy in a 1962 message to Congress:

The accumulation of knowledge is of little avail if it is not brought within reach of those who can use it. Faster and more complete communication from scientist to scientist is needed, so that their research efforts reinforce and complement each other; from researcher to practicing physician, so that new knowledge can save lives as swiftly as possible; and from the health professions to the public, so that people may act to protect their own health.²

These concerns led almost directly to a number of new major government-university undertakings. Regional medical programs, mental retardation centers, and National Library of Medicine networks are pertinent examples. Local, national, and international meetings devoted to population, pollution, and nutrition problems under the joint sponsorship of government agencies and universities have become a way of life, and university



centers supported by federal funds for studies in these areas are commonplace.

No one questions the need and desirability for a continuation and expansion of government-university cooperation in meeting the needs of education and research. At the moment, however, particularly in the health fields, these joint efforts are overshadowed by an even greater need for a joint attack on the overwhelming problems associated with the nation's number-one service dilemma, the health delivery crisis.

Virtually every important professional journal, prestigious magazine, and major public newspaper has had feature articles dealing with the problem, and many have made pertinent editorial comments. One of these has pointed out that in less than two decades the nation's outlay for health care has increased fivefold. It stood at \$63 billion in 1969, and, if it continues to grow at the current rate, it will reach \$200 billion in 1980. More important, at the moment 40 percent of the nation's health bill is paid by governments—federal, state, and local—through health programs for government employees, veterans, servicemen, and their dependents, as well as through state and city hospitals and Medicare and Medicaid.

Despite this enormous outlay of public and private funds, the health of the American people compares unfavorably with that of residents of many other Western countries. Moreover, despite our high level of dental education and substantial support of dental research, the oral health of our citizens is at best only fair. Whereas virtually all schoolchildren of New Zealand and Scandinavia receive extensive dental care, only a quarter of their American counterparts do. Under these circumstances, the federal government has been giving intense attention to the problems of the delivery of health care, including our dental deficiencies. Understandably, it is supporting research, very often in conjunction with universities, on the use of new technology, that is, computers, in diagnosis and treatment of patients and in the identification and training of new kinds of health workers, such as physicians' and surgeons' assistants and oral therapists. There is little evidence that the majority of American dental schools are either willing or able to participate in these new areas of investigation.

Almost a decade has passed since the *Survey of Dentistry* called attention to the need to move in this direction. The response has been negligible. Now, other more powerful and urgent voices have been added.

As I review the past few years, the pattern becomes clear. Four major areas of government and university cooperation in health sciences research have evolved in response to public demands: (1) fundamental research on the etiology of disease; (2) applied investigations on the treatment and prevention of disease; (3) educational research on the transmission of information and the development of therapeutic skills; and (4) the establishment of more effective and economical methods of delivering health care. In each instance, dentistry's response has been too little, too late. We embraced fundamental research with reluctance and applied research with hesitancy. The same attitudes seem to prevail toward educational and health delivery investigations.

Those of us in the university excuse our behavior with the cliché that we cannot be all things to all people, and we must proceed with caution in the acceptance of new responsibilities. I take exception to this



philosophy. Discrimination rather than avoidance, enterprise in preference to inertia, are enduring university characteristics. Sir Eric Ashby has described our current problem and offered a basis for its solution.

Round every Senate table sit men for whom the word university stands for something unique and precious in European society: a leisurely and urbane attitude to scholarship, exemption from the obligation to use knowledge for practical ends, a sense of perspective which accompanies the broad horizon and the distant view, an opportunity to give undivided loyalty to the kingdom of the mind. At the same Senate table sit men for whom the university is an institution with urgent and essential obligations to modern society; a place to which society entrusts its most intelligent young people and from which it expects to receive its most highly trained citizens; a place which society regards as the pace-maker for scientific research and technological progress. And so universities find themselves searching for a compromise. On one hand they cannot bring themselves to refuse the responsibilities laid upon them by modern society, nor the large financial grants which accompany these responsibilities. On the other hand, they cling to their traditional organisation and curricula in the hope that the values for which universities have stood since the Middle Ages may be preserved among the automatic factories and social planning and satellite-ridden stratosphere of the third millennium.

Both kinds of men around the Senate table are right. To suppose that the symptoms of split personality could be dispelled simply by bigger and better reforms in universities is to over-simplify the problem. In some directions universities must resist change; if they are to remain viable, they must display not only enterprise but inertia. Adaptation is not yet complete and in certain directions it must continue; but adaptation could overreach itself and endanger the integrity of universities, and this has to be resisted. The way to diagnose the split personality is to discriminate between those features in universities which are stable and enduring despite the scientific revolution and its accompanying social changes, and those features which are unstable and unfitted to the university's functions in contemporary society.³

In my judgment, educational research and health delivery systems research are high-priority items. It was my original intention to limit these remarks to those areas which at this period in time have general recognition as research. I have chosen not to do so because of my increasing awareness of yet another function of universities that is of concern and benefit to the government—the ongoing discussion of problems. I have the temerity to do so because research in its broadest sense involves accurate observations and the analysis of their significance. These talents are not the sole property of individuals who make up the science faculties of our universities. They are, however, the common characteristics of scholars.

Many of the major issues of our time cannot be solved without application of research technology, complemented and supplemented with wisdom from other disciplines. Moral, ethical, political, social, economic, and legal considerations are often essential in establishing public policy. We have seen evidence of this in the "human use" research regulations, and, within the past several days, President Nixon has appointed a



commission to advise him on human privacy as it relates to the utilization of computerized data.

There is a growing awareness that national policy cannot rest solely on scientific evidence, nor can it be achieved by the deliberations of ad hoc committees. Rather, it demands the thorough exploration of all possible alternative actions and their consequences. Universities have unique assets, such as personnel resources, that permit this kind of problem-solving. It may be that their ultimate "research" contribution will be in this very complex area.

If we move in this direction, we must be prepared to have many of our current beliefs and attitudes challenged. Present privileges and practices may not be able to survive the close scrutiny of enlightened contemporary citizenry. I, for one, would welcome the transition. We have become the world's largest and most prestigious forum dedicated to the discovery of dental truths. Repeatedly, we have appealed to government for resources to finance our special interest. Accordingly, we should be prepared to respond to its extraordinary needs.

Lest we worry about the ability of the university to meet these challenges, I would share with you, as I have with many audiences, the words of John Masefield, the late poet laureate of Great Britain. Significantly, they were spoken at the inauguration of a new university chancellor.

There are few earthly things more splendid than a University. In these days of broken frontiers and collapsing values, when the dams are down and the floods are making misery, when every future looks somewhat grim and every ancient foothold has become something of a quagmire, wherever a University stands, it stands and shines; wherever it exists, the free minds of men, urged on to full and fair enquiry, may still bring wisdom into human affairs.

There are few earthly things more beautiful than a University. It is a place where those who hate ignorance may strive to know, where those who perceive truth may strive to make others see; where seekers and learners alike, banded together in the search for knowledge, will honor thought in all its finer ways, will welcome thinkers in distress or in exile, will uphold ever the dignity of thought and learning and will exact standards in these things.

There are few things more enduring than a University. Religions may split into sect or heresy; dynasties may perish or be supplanted, but for century after century the University will continue, and the stream of life will pass through it, and the thinker and the seeker will be bound together in the undying cause of bringing thought into the world.

To be a member of one of these great Societies must ever be a glad distinction.⁴

REFERENCES

1. Volker, J. F.: The Continuing Confusion in Communications, *Proceedings of a National Conference on*



the Use of Audiovisuals in Medical Education, University of Alabama Medical Center, Birmingham, Alabama, 6-8 August 1969, pp 18-27.

2. Kennedy, J. F.: Message to Congress relative to a health program, 27 February 1962, in *Surgeon General's Conference on Health Communications, November 5-8, 1962*, Washington, D.C.: Public Health Service, U.S. Department of Health, Education, and Welfare, 1963, frontispiece.
3. Ashby, Sir E.: *Technology and the Academics: An Essay on Universities and the Scientific Revolution*, London: Macmillan & Co., Ltd., 1959, pp 69-70.
4. From an address delivered on the occasion of Masfield receiving an honorary degree at the Installation of the Chancellor of the University of Sheffield, 25 June 1946.



POLITICS, PRIORITIES, AND PUBLIC HEALTH

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I can best introduce my subject by quoting Sir Eric Ashby: "Have you ever thought that a scientist will go to great trouble to train himself, or to get assistants trained, to program computers, but only mechanical computers? Now politicians and administrators are walking computers. How much trouble do scientists take to program politicians and administrators? This is an art just as complicated as programming a large Atlas computer, and I do not know of any formal training given in this art. . . . There is another side to this, namely, that politicians and administrators have not learned how to program scientists either. I think if anything they are less good at it than we are at programming them, because we want to get money out of them and they do not quite know what they want to get out of us."¹

The quotation is relevant because it tells us in a few words that one of the problems of science policy is the difficulty which scientists and politicians have in understanding one another. It tells us too that science policy is not the exclusive domain of scientists. Quite the contrary—many of the most crucial decisions involving the future of science will be made by politicians. This is a fact that is often at the root of misunderstanding. Michael Polanyi said: "Any attempt at guiding scientific research toward a purpose other than its own is to deflect it from the advancement of science."² Although scientists may applaud Polanyi's statement, it is not the same thing as saying that scientists have a right to be responsible alone for their own destiny. They do not, and it is to the difficult relationship of politics and science in generating policy that I wish to address my remarks.

There is no escape from the necessity of examining the activities of scientists in the light of public interest. There is no prospect of recapturing the comfortable past when research was the preserve of a few individuals fortunate enough to have a patron and the opportunity to indulge their curiosity for the sheer



pleasure and intellectual excitement of learning more about man or his universe. The change is recent. Only one research laboratory in England existed a hundred years ago. As recently as 1912 the most famous physics laboratory in the world, Cavendish, had a total budget of about £3,000. Lord Rutherford in the years following 1920 financed a dozen Nobel Prize winners and never had more than £2,500 a year to spend.

Research was inexpensive, and few people were involved. Hence great issues of public policy were not apparent. They nevertheless existed, although they were ignored. Einstein's famous equation of 1905 literally rocked the world in 1945. The changes in recent years are well known. Gross expenditures on research and development by the United States amounted to \$21 billion in 1963-1964. The United Kingdom spent \$2 billion, France \$1 billion, and Canada about half a billion. More startling has been the rate of increase. For 15 years expenditures in the United States increased by 15 percent a year. In 25 years United States science expenditures multiplied 200 times. More recently Canadian government research and development expenditures for university scientific research increased 30-35 percent a year over a 4-year period. The trend in advanced countries has been exponential, with a doubling of scientific effort every 10-15 years.

To state the obvious, research dollars, whether spent in universities or by industry or by government, will have a major impact on the kind of society we create and the kind of life we will lead. The amount of money spent will be important, but of more profound influence will be how it is spent—the strategy of research expenditure. Our choices are numerous. Research dollars can be used to stimulate economic gain. Research dollars can help us to utilize more effectively the natural resources of our country. Research can let us share in the rewards of technological innovation, improve the health and longevity of our citizens, enrich our cultural resources, improve the quality of the environment in which we live, enhance individual intellectual opportunity, and assist us to meet our international responsibilities toward the underdeveloped parts of our world.

All these and other research objectives are worthy. The extent to which we attain any or all of them should depend in the first instance on conscious and deliberate decisions about the effort we are prepared to make. Research cannot, of course, ensure the attainment of our goals, but failure to engage in research in many instances would obstruct the possibility of reaching them. We need to know and evaluate our total research effort, and we need to decide for individual goals what share of the total effort can be allocated wisely to research.

To seek such decisions is to bring us squarely up against the more general question of goals. Identifying goals requires philosophic judgments rather than simply economic or scientific analysis. In a democracy it is the task of all citizens. We express our views individually and through our leaders in business and industry, in the universities, in the arts, in the professions, and in politics. The voices are heard by all of us, thanks to the mass media. The sounds may be distorted, but the messages are there if we have the skill to listen. Ultimately it is the task of the politicians to sense the wishes of a nation and to develop the machinery to respond to those wishes.



The politician, like other citizens, has the right to dream, and he can create his own image of the good society; but the politician has no monopoly when it comes to dreams. The kind of country a nation can be will be determined by the wishes of its people to the extent that they are crystallized and translated into action.

Science and technology have transformed our world and in doing so have imposed a new urgency on the thoughtful determination of goals and priorities. Every schoolboy can catalogue an impressive list of recent scientific or technical accomplishments. Likewise, every thoughtful citizen is impressed with the predicament that science and technology have forced on modern man—limitless power for good on the one hand, universal genocide on the other.

Contrasts are common. The achievements of science, while opening great new opportunities, at the same time bring important new problems. The agricultural revolution led to vast increases in urbanization and a host of urgent problems—crime, crowding, pollution, transportation. Communication and transportation technology have opened the eyes of the people of the poor nations to how the rich nations live. Control of infectious disease has heightened the difficulties created by overpopulation and increased the incidence of starvation. Computers and automation are creating changes in society as yet only dimly seen. Discoveries in genetics hold the promise and the problems of change in the nature of man himself.

We have reached the stage when many scientists believe that it is within our scientific and technological power to solve every major problem related to the physical needs and comfort of mankind. Yet the deeper problems of human behavior and human values in a transformed world remain, and they will not be solved by technology. Indeed, it is clear that they are heightened by technology. It is the paradox of our age that, although scientifically we can accomplish almost anything, we have so far failed to solve most of the pressing and critical problems of our time—termination of the arms race, poverty, overpopulation, pollution of our environment, aggression. These greater issues are the concern of every man. They require not only the efforts of scientists and social scientists but also, more particularly, an input of effort of a new order of magnitude.

Our choices can spell the difference between catastrophe and fulfillment. Among the important choices is the strategy of research expenditure. It is surely not good enough that such decisions are left to chance or lobbying. The decisions in the last analysis are political, and they must reflect the goals of each country and the effort its citizens are prepared to make toward them. The goals will involve investments of many kinds, only one of which is for research, and the primary decision is to determine the goals. The research effort needed for each major goal is a secondary decision. Governments must be concerned with issues such as food production rather than agricultural research, the quality of health rather than medical research, population control rather than research on fertility. In short, government must be concerned with social goals. Research related to these social goals is a means to an end.

Before you conclude that I am singing a song in praise of applied research and have no place in the score



for basic research, let me add to the melody. The conduct of basic research is itself a social goal. Such research contributes to culture, to education, to social and economic well-being. In the case of the latter the contribution may be distant and is always unpredictable. Research of this type is carried out mostly in universities. Universities occupy a unique position among institutions. They have special responsibilities not shared significantly by other institutions. Traditionally and historically they saw their role as that of generating new knowledge per se, and research of a basic nature was favored. Basic research remains today and must remain a matter of the highest priority in universities. The primary role of universities along with teaching is the generation of new knowledge, and it matters not whether the knowledge appears to be useful. As Samuel Johnson put it, "a desire of knowledge is the natural feeling of mankind." The nature of man demands that he continue to explore and that, generation after generation, he seek to learn more about the universe and about himself. Research for its own sake is one of the noblest activities of man and one of the ways of enriching life. Most of the responsibility for preserving and nourishing the tradition of pure research is vested in the universities. In an age when new technologies are transforming the world, it is important that society should renew its dedication to the importance of research undertaken simply for the sake of learning. We should guard against the temptation to argue that government should support basic research in universities because it pays off, even though we know this often to be the case. Government should support research because it is an important human enterprise in its own right.

Because it is important in its own right, decisions about the priority for basic research and the extent to which it should be supported with public funds become a government responsibility. Steven Toulmin separates choices into commensurable and incommensurable alternatives. Incommensurable alternatives are like the old story of apples and oranges—you can't compare them. For government, incommensurable alternatives are represented by such choices as those involved in resource allocation for medical, military, agricultural, and transportation research. They are political choices, and they depend on goals and priorities. Commensurable choices, on the other hand, represent choices between alternative ways for accomplishing a particular objective—for example, choices between different approaches to research on air pollution. These are not political choices. They are scientific and should be made by experts.

The distinction between issues requiring political judgment and those requiring expertise can be illustrated by considering the question of how much basic research should be supported. This question was the topic of a major study in the United States by the Committee on Science and Public Policy of the National Science Foundation.³ The contributors observed that basic research for the purpose of the question falls into two categories. The first is basic research related to specific missions of government departments or agencies where the mission has been determined by political decision. This type of basic research, not applied yet related to a mission, has been called "oriented basic research." Decisions about levels of expenditure of this type should be



made by those responsible for accomplishing the mission. They are difficult, require expertise, and depend primarily on judging the extent to which the mission will depend on basic research. Harvey Brooks suggested that experience has shown for science-related missions that basic research has usually accounted for 10-15 percent of the total research effort, depending on the mission. Obviously, in each case this should be an operational decision determined by the scientists, not a political one.

But how much basic research should be supported when it is not related to a mission? This category has been called "intrinsic basic research," and it is the kind that is carried out mostly in universities. Here the question is political, not scientific. Harvey Brooks has estimated that perhaps 5 percent of those engaged in basic research are truly outstanding but that many others should be supported to provide much of the background for the top 5 percent and for cultural reasons, and to provide trained manpower. Carl Kaysen suggested that basic research should be an overhead on applied research and development and should be set in the United States at its historical level of 9 percent of total expenditures for research and development. The point is that the choice is incommensurable, with alternative ways of spending public funds, and therefore the decision becomes a political one.

The foremost reason for supporting research in universities is to strengthen a social goal—that of having strong universities. The mission is the welfare of the universities themselves as a great cultural resource of the country. Universities provide an educated citizenry. They provide trained manpower for the complex needs of society. They provide a continuing critical examination of our world and ourselves. These are reasons for giving university research a high priority. The vigor of university research will bear heavily on the successful attainment of most other social goals. The decision, however, is essentially political.⁴

My remarks so far have been limited to politics and priorities. Let me turn now to the third element in my alliterative topic, namely, public health. I think it fair to say that the reason research has been supported so generously in the United States during the last twenty years has been the high priority accorded to health in public policy. The country has believed that the road to health must be paved with good research. That view has been shared by the scientists, and the result until recently was a rapidly growing commitment to research and a heavy emphasis on science in the training of members of the health professions. For the scientist concerned with research in a health-related field it was a golden age of opportunity. For the public, satisfied with the promise of better health, research expenditures seemed to be the ideal investment. Indeed, evidence of success was forthcoming to help strengthen the conviction that all the problems would be solved through research. The National Health Education Committee, Inc., published various editions of a booklet entitled *Does Medical Research Pay Off?* On the front cover appeared the statement: "On medical research depends the prolongation of the prime of life for all of us, and as a result, increased gross national product."⁵ This curious juxtaposition seems to suggest that living longer is not a bad thing provided that you pay taxes! The booklet in 1964 showed a



100 percent decline in the death rate from polio over the years 1951-1962, an 87 percent decline in the death rate from tuberculosis in eighteen years, 88 percent for influenza, 85 percent for maternal deaths, 90 percent for acute rheumatic fever: it showed an increase in life expectancy for Americans of almost seven years, marked reduction in the incidence of various diseases, and significant improvement in the treatment of others.

While these successes were being recorded, other events were shaping changes for the support of medical research. Among them were a growing public bewilderment and dissatisfaction with the quality and cost of health care. It has been estimated that 30 million Americans are without medical services except under extreme or acute circumstances. The cost of care nevertheless is \$63 billion and could rise to \$200 billion by the early 1980's. Costs per patient-day in hospital have risen about 250 percent in twenty years. Average costs rose from \$48.15 per day in 1966 to \$67.60 in 1969. In some medical centers they run as high as \$166.00 a day. In spite of the high costs and in spite of research, the average stay in hospital is a day longer than it was eight years ago.⁶ At the same time, many cannot get a doctor. Half the deliveries in New York's voluntary hospitals are preceded by not one single prenatal visit. Soldiers injured in Vietnam receive more prompt and better-organized care than do the victims of collision on American highways.

The result is the emergence of a new priority—that of designing better systems for the delivery of health care. Resources are being diverted to this important purpose—not, of course, without alarm being expressed over the new difficulties in obtaining research support. The point is made by nationally known figures, such as Michael DeBakey, that only 3 percent of the total national health bill went to research in 1968;⁷ but many of those concerned about the health care of the nation wonder gloomily whether increased research expenditure will lower or raise the cost of care. They might ask, too, whether a doubling or tripling of the cost of care in the next few years represents a rational reason for doubling or tripling the level of research expenditure in the same period—just to maintain the percentage. In short, the concern for a satisfactory delivery system has become an important priority.

Delivery of health care is not the only new priority. Other issues are assuming greater significance in the public mind and are moving up the priority list. Problems of overpopulation, environmental pollution, poverty, the quality of the cities, and crime are receiving more attention, although not nearly enough, in the judgment of many thoughtful observers. The urgency and seriousness of these issues is bound to result in more attention being devoted to them.

Thus the public view and political decisions have sharply slowed the rate of growth for support of health sciences research, and it seems likely that competing priorities will continue to limit growth to levels much lower than those of the fifties and sixties, regardless of the course of the Vietnam entanglement, space projects, and defense expenditures.



What is the significance of this change for those, like the members of this audience, who are engaged in research related to the public's health? One message is plain: All those involved in research in the health sciences must reexamine their goals and their methods in order to make the best possible use of the human and financial resources available. A second message of even greater importance for human welfare is hidden in the network of circumstances which prompt me to predict that in the United States the growth rate for medical research as a whole will henceforth be slower than during the last two decades. I will come to the hidden message presently, but let me first comment on the implications for scientists and planners of a reexamination of ends and means.

Most of you are employed in universities. This fact commits you to a concern for maintaining a healthy engagement in basic research—the kind that is pursued simply to increase our knowledge and understanding. At the same time, most of you are associated with professional schools of dentistry or medicine and so have a commitment to solving practical problems related to the improvement of health. These dual interests have been responsible for a good deal of ambivalence about how to proceed.

The idea that research in universities should play a role in the solution of practical problems is relatively new. It had its beginnings in North America in the passing of the Land Grant College Act in 1862. The character of American higher education was changed from that time. The new graduates, and the new techniques, transformed not only agriculture but also industry. Applied research and federal-contract laboratories have flourished in the universities. Indeed, in engineering and the physical sciences, they have grown so large in some institutions that they have warped the shape and changed the character of the university. Still, there are many, especially in the biological sciences, who cling to the earlier view that the function of the university is to conduct basic research only. Basic research has continued to be looked upon as more prestigious and in some mysterious way more fitting for the academic than applied research. The concept has been enshrined in one view of academic freedom which claims that a professor has a right to conduct research of his choosing (and, of course, to publish his results freely). The freedom of a potential sponsor to decide whether he wants to pay for the research is a limitation that is conveniently ignored when preaching this particular gospel of academic freedom. The result of widespread support for the definition is that almost every academic expects to pursue his own research interest, chosen by him without reference to the work of his neighbor or any thought to fitting himself into a coordinated attack on a major target. He expects to be judged solely on the intrinsic merit of the proposal and his capacity to carry it out.

The difficulty with this approach is that holding a Ph.D., along with having an interest in a subject, is not enough to justify allocation of resources from a limited supply. Recall Harvey Brooks's estimate that only 5 percent of those engaged in basic research are truly outstanding. How large should be the echelon beyond that 5 percent who are entitled to support?



In the health sciences the answer to that question depends in part on the extent to which the resources of qualified manpower could be more effectively organized for an integrated and coordinated attack on a health problem. I am talking specifically about the development of large-scale mission-oriented research within the universities, research which would require some overall direction and some sublimation of the view that the only good science is that in which the individual scientist is entirely free to choose his own research.

The idea is not without both danger and difficulty. Engagement in large-scale organized research related directly to a public mission can distract from a proper emphasis on basic research and more particularly from teaching. That problem has existed for some time in some universities heavily committed to federal contracts. It need not divert a university from its purposes, however. In each case key questions should be answered by the university before it commits itself to a large-scale government-sponsored mission such as an institute. Is the proposal consistent with the university's overall goals? Is the proposal one which can be undertaken without interfering with the university's teaching and research commitments? Is the program suitable for the training of graduate students? Can the university develop appropriate organizational and management practices to carry out the mission? Is the university competent to carry out the mission?

For universities and governments to enter into such partnerships requires overcoming the difficulties of attitude and organization related to unlimited freedom to choose one's own line of investigation. I believe that such organizational difficulties must be overcome in the health sciences if the resources for research are to be used wisely. "Big science" is becoming a more important instrument of modern research—not only in the physical sciences but also in the health sciences and the social sciences. While it must never replace "little science," it must take its place alongside "little science." The universities have an obligation to demonstrate and teach the methods of "big science" because many of their graduates will be called upon to contribute to this approach to research.

I do not suggest that every health problem lends itself to large-scale organized approaches. Quite the contrary—many problems are at a stage of understanding which does not yet provide promising leads for organized research. In such cases progress must await the gradual illumination which will be shed through the basic work of individual scientists. But, where opportunity exists for a frontal attack, concentration of resources in a systematic way is likely to be productive often enough to justify the investment. The problem of recognizing the need presents both opportunity and threat. The threat was spelled out by Boyd Keenan when he wrote: "Failure of professors and university administrators to recognize concern among responsible politicians could very well result in emasculation of great research universities. This *will* occur if the university fails to hammer out new goals in a rapidly changing world."⁸ Hopefully, opportunity will be a better incentive than threat; the opportunity is to do a better job with the available resources.

I turn finally to the hidden message in the circumstances of our time. Our concern with the vast problem



of "environment" has been escalating, and meetings to discuss the issues occur daily. At one such meeting in New York, a businessman, belatedly alarmed by the wasteland of the Jersey Meadows, said "Jersey Standard's officers should have been shot for putting a refinery there in the first place." Someone asked him, "Where should they have put it—in the Rocky Mountains?" The suggestion aggravated the critic, but he was not interested in the hard question of where the refinery should be located.⁹ Many conservationists find it easy to criticize destructive encroachments of technology but are unable and unwilling to offer useful suggestions about how the problems should be solved.

The story illustrates a fundamental obstacle to our capacity to make sound decisions. It is the fragmentation of our approach. As *Fortune* put it, "in modern society the principle of fragmentation outrunning the principle of unity, is producing a higher and higher degree of disorder and disability."¹⁰ Somehow we must learn to examine issues in their totality, even though we have organized our society to deal with problems in splendid isolation. Highway departments pay scant attention to the ecological effects of their engineering. Public housing authorities have built with little thought for the effect on social conditions which their programs have produced; the poor have remained poor. Power authorities have provided the energy without worrying about the pollution they have created. Health personnel have concerned themselves about the individual patient and have ignored the system. This compartmentalization has been convenient, but it has created men with a limited appreciation of the interrelationships of knowledge and action. We have become more and more specialized, and in the process we have become poorer generalists. This it seems to me is what students are telling us when they complain about the lack of relevance in the universities. It is not a rejection of specialism but a conviction that education must transcend specialism and produce citizens who are not merely skillful but are wise. Among the attributes of wisdom is the capacity to integrate, to appreciate relationships, and to make judgments based on a genuine concern for human welfare.

John Gardner has written of the necessity for renewal in societies and men. He said: "Every society must mature, but much depends on how this process takes place. A society whose maturing consists simply of acquiring more firmly established ways of doing things is headed for the graveyard—even if it learns to do those things with greater and greater skill. In the ever-renewing society what matures is a system or framework within which continuous innovation, renewal and rebirth can occur."¹¹

That is the hidden message. We must learn to take a new step in managing the affairs of men. Each of us must learn to think more broadly about how his individual efforts fit into the total mosaic of society. We must learn to think of our activity in relation to all the demands and all the priorities for a society capable of renewal. We must each contribute to placing our efforts in proper perspective and to assigning fair priority and weight to those efforts. We must reject lobbying for limited objectives in favor of lobbying for an integrated set of objectives representing our best judgments as both specialists and generalists. We must redesign our institutions



to give them youthful vigor and motivation. We must concern ourselves with the capacity of our institutions to get on with the job. If, as is true in many cases, they are showing more concern for form than substance, more respect for tradition than for achievement, then we must not be afraid to seek ways of reforming them to permit them to do those things which need to be done.

Our agenda is urgent. We must apply our vast technological capacity and our growing knowledge of behavior to the priorities which can turn us away from catastrophe and toward fulfillment. Only if organized mankind can behave rationally can there be hope for individual man—for his dreams, for his creativity, for his beauty, for his humanity.

REFERENCES

1. Ashby, Sir E., in Keenan, B. R. (ed): *Science and the University* New York: Columbia University Press, 1966, p 197.
2. Polanyi, M., in Keenan, B. R. (ed): *Science and the University*, New York: Columbia University Press, 1966, p 14.
3. *Basic Research and National Goals: A Report by the National Academy of Sciences*, 1965.
4. These remarks are largely quoted or paraphrased from Macdonald, J. B., et al.: *The Role of the Federal Government in Support of Research in Canadian Universities*, Ottawa, Ontario, Canada: The Queen's Printer, 1967.
5. *Does Medical Research Pay?*, Off New York: National Health Education Committee, Inc., 1969.
6. Faltermayer, E. K.: Better Care at Less Cost without Miracles, *Fortune*, February 1970, p 80.
7. DeBakey, M. E.: Letter to the Editor, *Fortune*, March 1970, p 65.
8. Keenan, B. R. (ed): *Science and the University*, New York: Columbia University Press, 1966, p 9.
9. Ways, M.: How to Think about the Environment, *Fortune*, February 1970, p 98.
10. *Ibid.*
11. Gardner, J.: Renewal in Societies and Men, *Annual Report of the Carnegie Corporation of New York*, 1962.



In the Headquarters Room, President Dummett with outstretched hand explained the organization of the Association to student travel grantees. The chart as part of the IADR History Exhibit was prepared by Frank J. Orland, then Vice-President, and held by Gordon Rovelstad, then President-Elect.





In a discussion after the Symposium are Capt. Gordon H. Rovelstad, Roger O. Egeberg, Assistant Secretary for Health and Scientific Affairs, HEW; John S. Zapp, Special Assistant for Dental Affairs, and Assistant Secretary for Health Manpower; Seymour J. Kreshover, Director, National Institute of Dental Research, USPHS.



Commemorating the Jubilee year, a birthday cake citing the fifty years was presented. President-Elect Rovelstad and President Dummett blew out the many candles while some of the many members and guests in attendance at the Banquet looked on.



CODA

Although the IADR story of these foregoing decades has been comprehensively explored and duly recorded, let us hope it will also constitute a prologue to the next fifty years in the active life of the Association. The Founder, William J. Gies, likewise had some thoughts for the future in this significant statement which he made after the first decade of IADR existence:

Our Association exemplifies an impersonal ideal. Through the cooperation of accredited investigators in the sciences upon which dentistry rests and which it uses, the Association promotes the discovery of truth and the dissemination of new knowledge to the end that, irrespective of beliefs, opinions, policies, or traditions, oral health-service in all its aspects may be given its greatest possible usefulness for the whole of humanity. With this history behind us, and with this ideal before us, we may proudly and hopefully look forward to the evolution of endless decades in the growth and increasing public value of our Association.

Now, two score years later, I also hold faith that IADR will move ahead in its ideals of promoting and communicating research.

As our Committee learned in gathering together the facts of the first half-century, it is not enough to make history as our Association has done; it is also essential that history be duly recorded for the immeasurable benefit of those yet to come. Thus, may I express the hope that IADR members of a future generation will see fit to write a companion tome upon the second half-century of achievements of our IADR and for each half-century thereafter. Surely, the history of the IADR reflects largely the history of dental research throughout the world. Detailed achievements of such research are to follow in another publication.

During the past fifty years, the common thread throughout this fabric of IADR history has been the tremendous growth in size, which is commendable indeed. But there is little intellectual virtue in mere quantitative growth. Thus, within the next half-century qualitative growth should be stressed, so that the International Association for Dental Research some five decades from now will surely be known as an elite intercontinental organization of research scholars.

F. J. O.



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**FACES IN PLACES
MEMBERS' FACES IN VARIOUS MEETING PLACES**

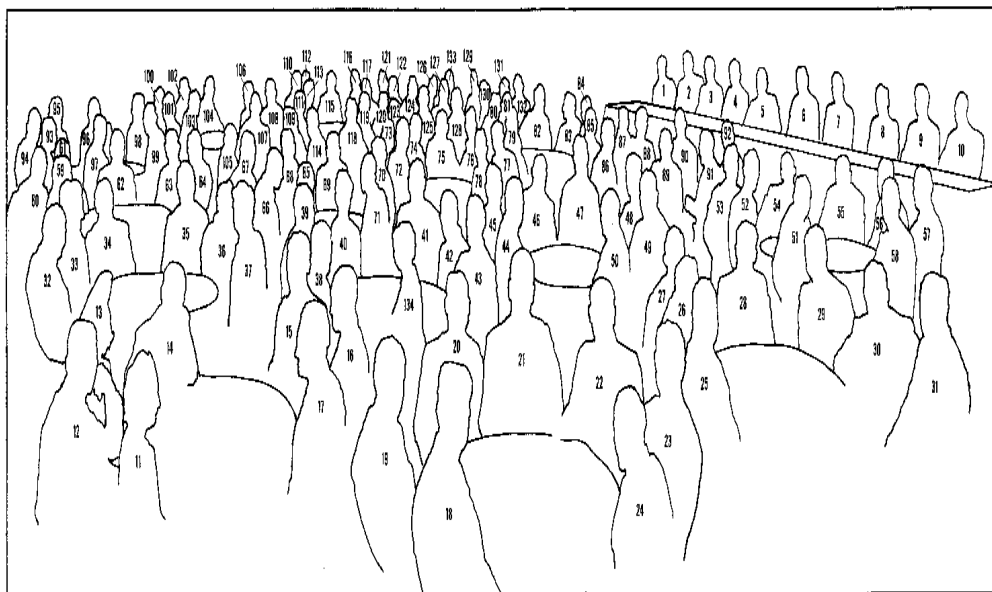


Participants in the Dental Caries Symposium held in Pittsburgh, 23 June 1932. This was in the old Mellon Institute, the entrance of which is in the background. This Symposium was held under the auspices of the Pittsburgh Section of IADR. Named from the left: John J. Enright, Mellon Institute; Theodor Rosebury, Columbia University; F. E. Rodriguez, Major in the Dental Corps, U.S. Army; Russell W. Bunting, University of Michigan; William J. Gies, Columbia University; Edward H. Hatton, Northwestern University; H. Edmund Friesell, Dean, School of Dentistry, University of Pittsburgh; and Philip Jay, University of Michigan.





Another "Caries Conference" also held at the Mellon Institute in Pittsburgh, but in a newer building. This photograph of 19 April 1950 shows participants (mostly IADR members) in this "Third Annual Conference on Dental Health". Seated from left to right: S. Wah Leung, Frank J. Orland, Thomas D. Chattaway, Homer D. Butts, Jr., Thomas J. Hill, and Milton E. Nicholson. Standing left to right: William F. Swanson, Thomas F. McBride, W. Earle Craig, Paul Pincus (who came from Melbourne, Australia), Francis A. Bull, Gerald J. Cox (who organized this Conference), Gottfried R. Lundquist, and Isaac Sissman.

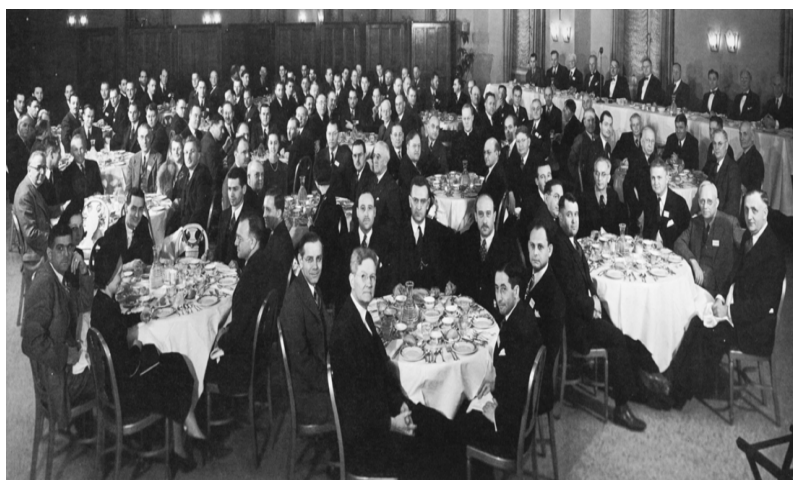


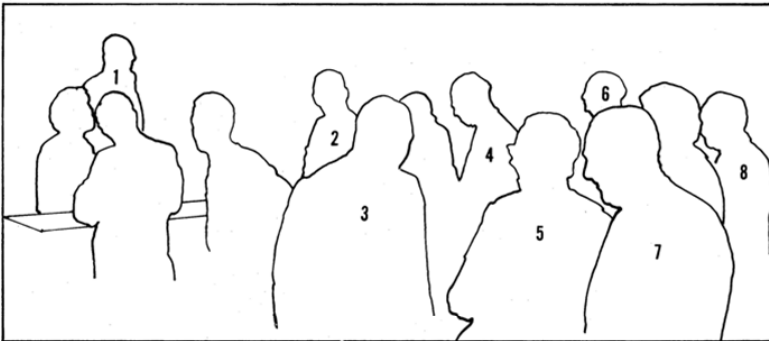
This splendid banquet at the Nineteenth General Meeting of IADR was held in the Jefferson Hotel in St. Louis on 15 March 1941. There were 134 in attendance at \$1.25 per plate. Robert Moore, M.D., Professor of Pathology and Dean of the Medical School, Washington University, presented an illustrated talk on medicine in history following the dinner. So many early and prominent members are recognizable in the panorama that an intensive effort was made at identification, but without complete success. Astute readers may fill in the blank numbers, but a prize is offered for identification of No. 134. See adjacent sketch.

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|----------------------------|--------------------------|-----------------------|
| 1. Hamilton B. G. Robinson | 44. Fred Hinds | 89. Shumway |
| 2. Carl Flagstad | 45. Alvin W. Bryan | 90. Carl O. Boucher |
| 3. William J. Gies | 46. Harry Bear | 91. D. P. Snyder |
| 4. Leroy M. S. Miner | 47. Fr. James J. Wallace | 92. C. W. Strosnider |
| 5. Robert Moore | 48. Newman Dean | 93. |
| 6. Wilmer Souder | 49. Benno E. Lischer | 94. |
| 7. LeeRoy Main | 50. Gerald D. Timmons | 95. Sumter S. Arnim |
| 8. Isaac Schour | 51. William H. G. Logan | 96. Lester W. Burkett |
| | 52. Grover C. Hunter | 97. |



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| 9. Frederick B. Noyes | 53. Ralph R. Byrnes | 98. J. Frank Hall |
| 10. Edward H. Hatton | 54. | 99. Leroy R. Boling |
| 11. Mrs. Ray E. Myers | 55. Ernest G. Sloman | 100. |
| 12. | 56. | 101. |
| 13. | 57. Charles E. Rudolph | 102. Warren Willman |
| 14. Ray E. Myers | 58. Otto W. Brandhorst | 103. |
| 15. Harold C. Hodge | 59. | 104. John Buhler |
| 16. Richard S. Manly | 60. George B. Denton | 105. |
| 17. Grant Van Huysen | 61. | 106. Edgar Coleman |
| 18. Edgar D. Coolidge | 62. David B. Law | 107. |
| 19. Elmer A. Jasper | 63. Helmut A. Zander | 108. Herbert P. Werkman |
| 20. John M. Marré | 64. Dan Y. Burrill | 109. Willard C. Fleming |
| 21. Keith L. Buechele | 65. | 110. |
| 22. William H. Bauer | 66. | 111. |
| 23. | 67. Ralph Edwards | 112. |
| 24. | 68. Russell C. Wheeler | 113. |
| 25. Norris O. Taylor | 69. Spitzer | 114. |
| 26. Moses Diamond | 70. | 115. Howard M. Marjerison |
| 27. | 71. Gerritt Bevelander | 116. Joseph F. Volker |
| 28. Joseph P. Weinmann | 72. Russell W. Bunting | 117. |
| 29. Wallace D. Armstrong | 73. Philip Jay | 118. |
| 30. Peter J. Brekhus | 74. Thomas J. Hill | 119. |
| 31. Lewis W. Thom | 75. Paul P. Sherwood | 120. John L. Wilson |
| 32. C. F. Bodecker | 76. Samuel W. Chase | 121. Basil G. Bibby |
| 33. William Lefkowitz | 77. William L. Wylie | 122. |
| 34. Haughton Holliday | 78. Marcus L. Ward | 123. |
| 35. Harold J. Leonard | 79. | 124. Eugene W. Skinner |
| 36. Mary C. (Mrs.) Agnew | 80. | 125. Ert J. Rogers |
| 37. R. Gordon Agnew | 81. Leonard S. Fosdick | 126. Floyd A. Peyton |
| 38. | 82. | 127. James Pearce |
| 39. Harry D. Spangenberg | 83. Warren R. Schram | 128. Virgil D. Cheyne |
| 40. Mrs. H. D.
Spangenberg? | 84. | 129. George C. Paffenbarger |
| 41. Edward C. Stafne | 85. Clyde Hebble | 130. Eugene J. Molnar |
| 42. B. O. A. Thomas | 86. Wendell D. Postle | 131. |
| 43. William F. Lasby | 87. Paul C. Kitchin | 132. |
| | 88. Victor L. Steffel | 133. |
| | | 134. |





Scene at Registration as old friends meet, for the Forty-third Annual IADR Meeting in the foyer of the Royal York Hotel, Toronto, on 22 July 1965:

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|----------------------------|------------------------------|
| 1. Robert M. Grainger | 5. Agnes (Mrs. Paul) Kitchin |
| 2. Paul C. Kitchin | 6. Carl A. Ostrom |
| 3. Hamilton B. G. Robinson | 7. Duncan McConnell |
| 4. Nelson W. Rupp | 8. Francis P. Scola |



At this Toronto IADR meeting in 1965 are pictured the officers while meditating at an important Council discussion in the Nova Scotia Room. In the center is President Martin A. Rushton of London. To his right is Gordon H. Rovelstad, Secretary-Treasurer, with his prime assistant—his wife Barbara. Directly under the coat of arms of Nova Scotia is Barnet M. Levy, President-Elect, and on the far right is Editor Frank J. Orland.





First Scientific Meeting of the South African Division of IADR. This was held in Johannesburg 16 September 1967 in front of the Dental School, University of the Witwatersrand.

Reading from the left—first row: J. Lemmer, J. F. van Reenen, T. R. Barrowman, A. E. Dodds (President of the South African Division and then Dean of the School), R. W. Phillips (then President of the IADR), C. J. Dreyer (presently Dean of the School), M. Shear (Secretary-Treasurer, SAD), J. van de Sandt de Villiers, and A. A. de Oliveira.

Second row: F. A. Hossack, H. Selipsky, E. Lasersohn, S. Chertkow, L. Oosthuizen, F. X. Prins, A. Jacobson, M. W. Baikie, T. J. N. Knight, J. Cohen, C. F. Valcke, E. Stein, M. M. Fine, and H. Smukler.

Third row: M. Yankelson, I. D. Dockrat, P. J. Lohse, D. H. Retief, C. W. van Wyk, S. N. Bagg, A. Lewin, V. A. Meerkotter, C. B. Preston, D. Dell, A. Volchansky, A. M. Goldman, S. A. Bushkin, B. G. J. van Rensburg, L. Fine, L. Blum, and J. B. Radomsky.

Last row: C. J. Thomas, F. R. Bertrand, and W. Meyerowitz.



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A complete index to this document is forthcoming.

