provided by IUPUIScholarWorks

The History of the Department of Otolaryngology

Head and Neck Surgery

1909 - 2016

by

Richard T. Miyamoto, M.D. Raleigh E. Lingeman, M.D. (posthumous)



SCHOOL OF MEDICINE

Department of Otolaryngology-Head & Neck Surgery

THE HISTORY OF THE DEPARTMENT OF OTOLARYNGOLOGY

HEAD AND NECK SURGERY

1909 - 2016

by

Richard T. Miyamoto, M.D. Raleigh E. Lingeman, M.D. (posthumous)

TABLE OF CONTENTS

Introduction	1
Department Chairs	2
Changes in the Scope of Practice	11
Residency Program	14
Endowed Chairs, Professorships and Lectureships	19
History of Extramural Research Funding	22
National and International Conferences	25
Physical Facilities	26
Faculty and Staff	28

Introduction

The history of the Department of Otolaryngology-Head and Neck Surgery at the Indiana University School of Medicine closely parallels that of the Medical School.

In 1905, two proprietary medical colleges existed in Indianapolis, the Indiana Medical College and the Central College of Physicians and Surgeons. These schools combined with Purdue University sparking a controversy between the two state universities.

In 1908, the presidents of Indiana and Purdue universities painfully agreed that Indiana University would carry the medical school mission for the state.

In 1909, the Indiana General Assembly passed legislation creating the Indiana University School of Medicine. The Department of Ear, Nose and Throat Medicine was established in that year.

In order to have a full appreciation of the history of the Department of Otolaryngology-Head and Neck Surgery at Indiana University it is best to consider the nine chairs who have guided the department over the past 107 years. During this time remarkable changes in the scope of practice of the department have occurred.

DEPARTMENT CHAIRS 1909-2016



John Finch Barnhill, MD (1909-1929)

Dr. Barnhill served as the first Department Chairman as well as Professor of Head and Neck Surgery. He was born in Flora, Illinois in 1865 and at the age of two moved with his family to Indiana. His great grandfather and grandmother were early settlers in the Indianapolis area. His early education was in Westfield in the Danville Normal Col-

lege. Dr. Barnhill graduated from the Central College of Physicians and Surgeons and served an apprenticeship with the famed Indiana surgeon, Dr. Joseph Eastman. For eight years Dr. Barnhill practiced general medicine in Irvington and then decided to specialize in diseases of the head and neck. He studied in postgraduate schools in New York City, London, Berlin, and Vienna. Returning to Indianapolis in 1900, he lectured in the Central College of Physicians and Surgeons and was Professor of Physiology for several years.

Dr. Barnhill initiated the first postgraduate course at the Indiana University School of Medicine in 1915. "The Barnhill Course" was an anatomical and clinical postgraduate offering, which was given to provide postgraduate education for the surgeons practicing in the Indianapolis area. It soon became well-known and attracted physicians from most of the states in this country and in Canada. This annual course was taught by Dr. Barnhill from 1915 to 1928 but he was later assisted by Dr. Edwin M. Kime who became Chairman of Anatomy. This course is the longest con-

tinuing medical post-graduate course in the United States. It has been carefully maintained by each of the subsequent Chairs and celebrated its Centennial Edition in 2015. The School of Medicine also awards annually the "John Barnhill Award" to the outstanding student in courses in anatomy.

Dr. Barnhill published numerous otolaryngology texts. One of his best known was Surgical Anatomy of the Head and Neck published in 1937 by William Wood & Company in Baltimore. He was President of the American Laryngologic Association, President of the American Laryngologic, Rhinologic and Otologic Society, and President of the American Academy of Ophthalmology and Otolaryngology. He was a member of the American Otologic Society and a Fellow of the American College of Surgeons. He was a member of the American Board of Otolaryngology.

Dr. Barnhill retired in 1928 and then lived much of the time in Miami Beach, Florida. He returned to Indianapolis each year in order to present the Annual Anatomical and Clinical Postgraduate Course. After his retirement he established a similar course at the University of Southern California at Los Angeles.

Dr. John Barnhill was directly influential in swaying Dr. Robert W. Long to give \$200,000 in securities and land for the building of Indiana University Medical Center's first teaching and research hospital. The Long Hospital was established through the Indiana State Legislature and Dr. Barnhill was among a group of physicians, including Dr. Allison Maxwell, Dean of the School of Medicine, who made the selection of the site of the new hospital, which was the first building at the IU Medical Center. The central street through the IU Medical Campus is Barnhill Drive (now a walking street).

There is no question that Dr. John Barnhill was one of the giants in the discipline of otolaryngology-head and neck surgery and the part that he played in establishing the Medical School and Long Hospital was of great importance to the Medical Center.



John Walter Carmack, MD (1930-1934)

Dr. Carmack was appointed as the second chairman of the Department of Otolaryngology at Indiana University, or as it was called at that time, The Department of Otolaryngology and Bronchoesophagology. Dr. Carmack was a graduate of the Indiana Medical College School of Medicine at Purdue University. He was Secretary of the Section of Oto-

laryngology, Otology and Rhinology of the American Medical Association. Additionally, he was a member of the Triological Society, the American Laryngologic Association, and was Secretary of the American Board of Otolaryngology. He was also a Fellow in the American College of Surgeons. Dr. Carmack was killed in a tragic airplane crash in Richmond, Indiana on December 5, 1934, when he was returning from a meeting in Detroit where he had presented a paper to the Wayne State Medical Society. He died at the age of 49, at the peak of his career and his keen interest in the activities of the Indiana University School of Medicine and Hospitals had been an inspiration to both the faculty and student body.



Carl McCaskey, MD (1934-1950)

Dr. McCaskey was appointed to fill the chair in Otolaryngology and Bronchoesophagology at the Indiana University in 1935, by Dr. Willis D. Gatch, who was Dean and Chairman of the Department of Surgery. Dr. McCaskey was born in Rigdon, Indiana and graduated from the Indiana University School of Medicine in 1908. After graduation from

medical school he interned at the old Indiana Deaconess Hospital for one year (1908-09). He did postgraduate work at the New York Postgraduate Hospital from 1915 to 1916 and later did postgraduate work at the University of Michigan Medical College.

Dr. McCaskey was well known for the work he did in head and neck

surgery, mostly wide-field laryngectomy. He was a member and pastpresident of the American Laryngologic, Rhinologic and Otologic Society; a member and past-president of the American Laryngologic Association; vice-president of the American College of Surgeons; and a Director of the American Board of Otolaryngology.



Marlow William Manion, MD (1951-1962)

Dr. Manion was appointed chairman in August 1951 by Dr. John VanNuys, Dean of the School of Medicine after Dr. McCaskey's retirement. Dr. Manion was born in Gary, Indiana on March 26, 1902. He graduated with a B.S. degree from Indiana University in 1924 and received his M.D. in 1926. From 1926-30 Dr. Manion was an intern and resident in

the Department of Otolaryngology at Harper Hospital in Detroit, which is a part of Michigan State University. He returned to Indianapolis in 1930 and received his assistant faculty appointment from Dr. Charles Emerson, Dean of the School of Medicine at that time. Dr. Manion was a member of the American Laryngologic, Rhinologic and Otologic Society and the American Bronchoesophagology Association. At the time of his appointment as Chairman in 1951 there were no residents. Dr. Manion was able to recruit one resident from the University of Louisville (which had lost its accreditation), and in several years established the education program that developed into one of the strong otolaryngology departments in the United States and Canada.

Beginning in 1930, the Indianapolis City Hospital had an ENT program that included ophthalmology. Shortly before the beginning of World War II the otolaryngology program dropped the training in ophthalmology. Dr. Manion merged the program at the City Hospital with that of the University. He was well known for the bronchoesophagology clinic that he staffed at the James Whitcomb Riley Hospital for Children and distinguished his medical and surgical practice with a deep humanitarian concern for the welfare of his patients. His compassion extended to his teaching of

students, nurses, interns, and residents. As chairman of the Department of Otorhinolaryngology and Bronchoesophagology, Dr. Manion saw the need to train his residents in clinical audiology and the rehabilitation of patients with impaired hearing and problems related to speech. He established the Section of Audiology and Speech at the Indiana University Medical Center in 1953 with a full-time faculty of non-physician specialists in these communication disorders. He recruited Dr. Fran Sonday and Dr. Carl Fuller from Northwestern University in 1953 and later Dr. James Shanks. As a result, the Indiana University established itself as one of the first institutions of medical education to include training in clinical audiology and speech pathology as part of its program for resident education.

Dr. Manion retired as Chairman of the Department of Otorhinolaryngology and Bronchoesophagology in 1962 and retired from active practice in 1972. Dr. Manion died on May 8, 1980.



David E. Brown, MD (1962-1971)

Dr. Brown succeeded Dr. Manion as Chairman of the department, being appointed by the Dean of the Medical School, Dr. John D. VanNuys, in 1962. Dr. Brown was a graduate of Stanford University, with both B.A. and M.D. degrees. He served an internship at Alameda County (California) Hospital in 1935-36 and was a resident in otolaryngology at

Presbyterian Hospital in Chicago under renowned physician Dr. George Shambaugh from 1937-39. Dr. Brown was a member of the American Laryngological, Rhinological and Otological Society; the Society of University Otolaryngologists; the American Neurotology Society; the Deafness Research Foundation; and the Otosclerosis Study Club. He was an outstanding otolaryngologist who practiced the entire scope of the discipline, but his major interest was in otology.

Dr. Brown developed an operating microscope, which he used for fenes-

tration surgery. At that time most of the otologic surgeons who were doing this operation used loupes at 3 to 4 X power, but the microscope that Dr. Brown used would go to 6 or 10 X power. Later the Zeiss Company from West Germany developed an operating microscope that is now used by many of the surgical disciplines. Dr. Brown retired as chairman of the department in 1971 and retired as a faculty member in September 1978.

Dr. Brown gave many years of loyal, effective and dedicated service to the university and, without question, the years that he was chairman of the department, he, together with what Dr. Manion had begun, provided a strong educational program for residents in this discipline.

Dr. Brown passed away on June 23, 2002 in Monterrey, California.



Raleigh E. Lingeman, MD (1971-1987)

Dr. Lingeman was appointed by Dr. Glen Irwin on September 1, 1971 as chairman of the Department of Otolaryngology to replace Dr. Brown. Dr. Lingeman received his B.A. degree from Indiana University in 1942 and graduated from the Indiana University School of Medicine in December 1944. He served a straight surgical internship for nine

months at the Rochester General Hospital in New York and, after two years of service in the Army as a Battalion Surgeon in the 49th Field Artillery Battalion of the Seventh Infantry Division, returned to Indianapolis as a resident at the City Hospital from 1947-50. Although Dr. Lingeman practiced the entire scope of the discipline, his major interest was in head and neck surgery, which was emerging as a strong part of otolaryngology in the 1950's and early 60's. Dr. Lingeman followed the program that had been initiated by Drs. Manion and Brown. During the years from 1971 to '87 the residency program developed and improved to better prepare residents for a strong clinical practice. Dr. Lingeman was a member and past Vice-President of the Triological Society and a member and

past Vice-President of the American Laryngologic Society. He served on the Council of the American Society of Head and Neck Surgery and also was a member of the Board of Governors of the American College of Surgeons, filling one of the two positions from the state of Indiana. Dr. Lingeman was a guest examiner on the American Board of Otolaryngology and was a member and two-year Chairman. Dr. Lingeman was named Betty A. Morgan Professor of Head and Neck Surgery in 1982 and held that rank until he died on October 25, 1999.



Richard T. Miyamoto, MD, FACS, FAAP (1987-2014)

Dr. Miyamoto was appointed by Dr. Walter Daly as chairman to replace Dr. Lingeman. He is a 1966 graduate of Wheaton College, Wheaton, Illinois with a B.S. in Chemistry and received his M.D. degree at the University of Michigan in 1970. Dr. Miyamoto served a straight surgical internship and later was

a resident in surgery at Butterworth Hospital in Grand Rapids, Michigan from 1970 to 1972. In 1975 he completed an otolaryngology residency at the Indiana University School of Medicine. After spending two years in the military service as a Major in the United States Air Force Medical Corps, he spent a year with the Otologic Medical Group at St. Vincent Hospital as a Fellow in Otology and Neurotology under Dr. Howard House and Dr. William House. He received an M.S. degree in Otology at the University of Southern California in 1978. He has been awarded an honorary Doctor of Engineering degree from the Rose Hulman Institute of Technology.

Dr. Miyamoto was President of the American Academy of Otolaryngology-Head and Neck Surgery, President of the Association of Academic Departments of Otolaryngology-Head and Neck Surgery, President of the American Neurotology Society, President of the Association for Research in Otolaryngology, and President of the Otosclerosis Study Group. He was Vice-President of the Triological Society, and a trustee of the Bloe-

del Hearing Research Center at the University of Washington. He has served on the Advisory Council of the American Otological Society, Chairman of its Research Foundation and has received the American Otological Society Award of Merit. Dr. Miyamoto was President of Alpha Omega Alpha of Indiana Chapter and the Founding Advisory Board Chairman of St. Joseph Institute—Indianapolis. He has served as an Associate Editor for Otolaryngology-Head and Neck Surgery and also for JARO as well as serving on eight additional editorial boards. Dr. Miyamoto served as a Director of the American Board of Otolaryngology for 10 years and was certified in Otolaryngology-Head and Neck Surgery and also in Neurotology. He also served for 6 years on the Residency Review Committee.

Dr. Miyamoto is a member of several honorific societies: the Cosmos Club; Alpha Omega Alpha; the Royal Society of Medicine; the Collegium Otorhinolaryngologicum Amicitae Sacrum; and the National Academy of Medicine.

Marion Everett Couch, MD, PhD, MBA (2014-)



Dr. Couch was appointed by Dr. Jay L. Hess, to replace Dr. Miyamoto in June 2014. She was named the Richard T. Miyamoto, M.D. Senior Professor. Dr. Couch graduated from Michigan State University with a B.S. in Microbiology in 1982. She earned an M.D. and Ph.D. from Rush Medical College in 1990. She completed her Otolaryngology Residency at Johns Hopkins in 1996. She earned an M.B.A.

from Duke University in 2010. She was Assistant

Professor in the Dept. of Otolaryngology at Johns Hopkins from 1996-2003 and at the University of North Carolina from 2003-2007. She was promoted to Associate Professor at UNC in 2007. She served as Chief of the Division of Otolaryngology – Head and Neck Surgery at the University of Vermont from 2010 -2011. In 2011, she was appointed Interim Chair and Professor in the Department of Surgery at the University of Vermont.

Dr. Couch has been President of the Society of University Otolaryngologists. She received the Honor Award and Distinguished Service Award from the American Academy of Otolaryngology-Head and Neck Surgery. As a medical student, she was a Junior inductee into Alpha Omega Alpha. In addition to her role a Department Chair, she is assuming the role as Medical Director of Surgical Services for IU Health Physicians.

CHANGES IN THE SCOPE OF PRACTICE

uring the early years of the Department at Indiana University and the Indianapolis City Hospital much of the practice was devoted to treatment if inflammatory disease of the temporal bone and the paranasal sinuses. Dr. Barnhill, who had been appointed Professor of Head and Neck Surgery, also was a pioneer in head and neck surgery. He did radical neck dissections, which had been described in 1902 by George Crile, Sr. at Cleveland. He did thyroid surgery and regional plastic surgery, which consisted of external rhinoplasty as well as cleft palate and cleft lip repair. Actually, until 1935 all of the cleft palate and cleft lip surgery done at Riley Hospital and in the community hospitals, Methodist and St. Vincent, was done by otolaryngologists. Members of the otolaryngology staff also did neurosurgery as it related to intracranial complications arising from otitis media and mastoiditis.

Members of the otolaryngology faculty at this time also were interested in facial pain such as tic doloureaux, and alcohol blocking of the gasserian ganglion of the fifth cranial nerve was done via an approach through the foramen ovale. These patients had excellent results for control of their pain for many years.

The education of the residents from the 1930's to the early 1950's was mostly with tonsillectomy, adenoidectomy, simple mastoidectomy, radical and modified radical mastoidectomy, bronchoscopy and esophagoscopy, and surgery of the nose and paranasal sinuses. In the 1940's the faculty became interested in septorhinoplasty surgery and this was also taught to the residents but was very limited. Head and neck surgery consisted of laryngectomies and radical neck dissections, which were done by Drs. Marlow Manion, Thomas Johnson and Fred Toumey. Modern otologic surgery had its beginning in the early 1950's with the development of the operating microscope by the Zeiss Company of West Germany. Prior to this time the discipline of otolaryngology was actually at a crossroads because with the use of antibiotics much of the inflammatory disease in the head and neck area could be controlled with minimal surgical inter-

vention. Otolaryngologists became more and more interested in modern otologic surgery, oncologic surgery of the head and neck, and regional plastic surgery of the head and neck as well as continuing the work that had been done for many years in general otolaryngology. For the next 40 years these areas of the head and neck have been developed and dominated by otolaryngologists.

By 1978, the diverging interests otolaryngology and ophthalmology led to an inevitable separation of the specialties. The American Academy of Ophthalmology and Otolaryngology split into two separate academies. A planned and orderly separation led to the formation of the American Academy of Ophthalmology and the American Academy of Otolaryngology. In 1980, the American Academy of Otolaryngology added Head and Neck Surgery and became the American Academy of Otolaryngology—Head and Neck Surgery (AAO—HNS). This name change reflected the expanded scope of the specialty from ears nose, and throat to include head and neck region. This included the treatment of benign and malignant tumors, cosmetic and reconstructive facial plastic surgery, and upper respiratory allergy and immunology. The identity of the Department at Indiana University was changed to the Department of Otolaryngology--Head and Neck Surgery. This was approved by the Executive Committee of the Medical School and IUPUI as well as the Board of Trustees of Indiana University. Although beginning in the 1950's there were three disciplines (general surgery, otolaryngology, plastic surgery), that did much of the head and neck surgery, gradually otolaryngology has dominated this area. The general surgeons lost interest in surgery of the head and neck except for thyroid and parathyroid surgery, and the plastic surgery section, like the general surgeons, also lost interest in head and neck surgery, although the faculty continued to do head and neck surgery for a number of years.

Beginning in the early 1970's, the Department was divided into two sections, one of otology and neurotology and the other of head and neck surgery, which consisted of general otolaryngology, head and neck oncology, regional plastic surgery of the head and neck and pediatric otolaryn-

gology. Thyroid and parathyroid surgery were brought into the purview of otolaryngology under Dr. Lingeman.

The continued advancement of diagnostics and microsurgical technique and the ability to treat lesions previously between traditional specialty lines fostered close collaboration with our Neurosurgical colleagues, in particular Dr. Robert L. Campbell the then Chairman of Neurosurgery. Acoustic Neuromas were approached through the translabyrinthine, middle fossa, and retrosigmoid approaches. Large lateral skull base lesions could be approached by combined Neurotologic, Neurosurgical and Head and Neck cooperative efforts. The cochlear implant was a prime example of translational research and our team was privileged to participate in this effort.

Dr. Michael Moore brought Microvascular Reconstruction into our department and Dr. Jon Ting introduced the endoscopic management of Anterior Skull Base lesions. Dr. Taha Shipchandler introduced new concepts into the management of Facial Paralysis.

RESIDENCY PROGRAM

The American Board of Otolaryngology (ABO) was organized in 1924 "to elevate the standards of otolaryngology, to familiarize the public with its aims and ideals, to protect the public against irresponsible and unqualified practitioners and to issue certificates of qualification in otolaryngology." The ABO was the second board to be established. (The first being the American Board of Ophthalmology in 1917.) The ABO published standards for post-graduate education in Otolaryngology and reviewed programs until 1953 when the Residency Review Committee (RRC) for Otolaryngology was established. There have been many changes in the requirements to sit for the Board examination. In 1932 the requirement of the Board was one year as an intern and two years in a specialized practice. In 1940 the general requirements were changed to one year of a general internship with one to two years for an otolaryngology residency, one year of which could be a postgraduate course in otolaryngology. By 1959 the Board requirements were changed to one year of internship followed by four years of graduate training of which three years would be in otolaryngology and one year in surgery or medicine. The five-year time frame of postgraduate training has remained but there has been an increased emphasis on further Otolaryngology-Head and Neck Training and training in related disciplines and a decrease in general surgery training.

From 1909 until 1934 there was no formal otolaryngology residency program at the Indiana University School of Medicine. However, during the 1930's there was a joint residency program in ophthalmology and otolaryngology at the Indianapolis City Hospital. During the years just prior to 1939 the ophthalmology portion of the residency program was discontinued. Parallel otolaryngology programs existed at the Indianapolis City Hospital and Indiana University from the late 1930's. The residents at the Indianapolis City Hospital and the Indiana University program received the same didactic education through continuing programs given each week by members of the faculty and the annual anatomic

and clinical course in otolaryngology, which had been established by Dr. John Barnhill in 1915. The clinical work of each residency program (City Hospital and Indiana University) was separate. The residents at the City Hospital provided service to their patients as well as teaching medical students, while the residents at Indiana University provided the clinical service to patients at University Hospital and Riley Hospital and took part in the program of medical school education. Certification by the American Board of Otolaryngology was given to the residency programs at the Indianapolis City Hospital and to Indiana University during the years that they were separate programs, and the residents's success on the Board examination was outstanding. In 1961 Dr. Marlow Manion (Chairman at Indiana University) and Dr. Robert Dearmin (Chief at the Indianapolis City Hospital) merged the programs into one that became the residency program at Indiana University. The merger of the two programs combined the faculty and staff at the City Hospital and the Indiana University.

The postgraduate anatomic and clinical otolaryngology course initially created in 1915 by Dr. Barnhill has enhanced of the residency program through the years. When Dr. Barnhill retired, and during the years that Dr. McCaskey was chairman, he and Dr. McCaskey presented this traditional course. After Dr. Edwin M. Kime retired from the teaching faculty in 1961, Dr. Marlow Manion appointed Dr. Robert Shellhamer and Dr. Lingeman to continue teaching this annual course. The anatomy and histopathology instruction was continued by Dr. Charles Tomich, Dr. Jack O'Malley, Dr. Donald Wong, Dr. Don John Summerlin, and Dr. Mark Seifert.

In 1952 the Veterans Administration Hospital on West 10th Street opened and created an otolaryngology service. Residents began to rotate through the Veterans Hospital service and the Indiana University faculty staffed for patients and for the education of the residents. In 1967 Dr. Brown established a resident rotation at Methodist Hospital in Indianapolis because he wanted to provide experience for the residents in a private practice at a community hospital. This was a rotation of 3 months during the residents' junior or second year in otolaryngology. As approved by

the American Board of Otolaryngology, the Indiana University Program included teaching hospitals at Indiana University Hospital, Riley Hospital, Veterans' Administration Hospital and Methodist Hospital.

In 1984 an Education Day program was established, honoring Dr. Marlow Manion and known as "Marlow Manion Day." The residents were required to write and present a research paper at this time. A prominent otolaryngologist was invited as a guest at this program. He reviewed the papers and honorariums were given for the first, second, and third outstanding theses. The work done by the residents in this area has been outstanding and the papers are of the quality that can be presented at national meetings and published in the otolaryngology journals. This day was subsequently renamed the Manion-Lingeman Lecture and Research Seminar.

Prior to Dr. Miyamoto's Chairmanship the department was clinically excellent and the teaching program was strong. However, a competitive research program needed to be built over time. A significant change in the residency program occurred while Dr. Miyamoto was serving on the Training Committee of NIDCD while on the NIH Advisory Council. NIH was making a concerted effort to add more MDs to the Research Cadre. An NIDCD T-32 training grant from NIH was added to the department offerings. This grant added a medical component to the long-standing grant in Speech, Hearing and Sensory Communication at Indiana University held by David Pisoni, Ph.D. in Bloomington. A summer internship was offered to from 4 to 6 medical students after their freshman year in medical school to give them exposure to some of our research faculty. (Approximately 125 freshman medical students completed this program). From this group, some chose otolaryngology as a career and went on to obtain some of the most competitive fellowships in otolaryngology and ultimately a faculty appointment. Among this group were R. Christopher Miyamoto (who was the first student in the program), Aaron Moberly, and David Zoph. A separate Residency Match Number was obtained from the Residency Review Committee and a two-year research experience was added prior to entering the clinical otolaryngology residency. Several of these residents obtained the most competitive fellowships after completing our program and went on to join outstanding faculties either here or at other leading institutions. Among this outstanding group are Ted Meyer, Akihiro Matsuoka, David Horn, Jon Ting, Nathaniel Peterson, Brian McRae, and Mike Harris.

A number of residents have been winners of prestigious Triological Society Research Awards:

2004	1st Place Paul Holinger AwardSu W. Teoh, MD
2006	Walter Work Award for Clinical ResearchDavid L. Horn, MD
2006	Walter Work Award 2 nd Place Akihiro J. Matsuoka, MD, PhD
2007	Dean M. Lierle Award, 3 rd Place Akihiro J. Matsuoka, MD, PhD
2010	Henry Williams MD Research Award Akihiro J. Matsuoka, MD, PhD
	Lawrence R. Boies, MD Resident Research AwardPeter N. Schilt, MD 1st Place Lawrence R. Boies, MD Resident Research Award Jonathan Y. Ting, MD
2012	2 nd Place Francis Lederer, MD Resident Research AwardJennifer N. Phan, MD
2016	John R. Lindsay, MD Resident Research AwardTodd J. Wannemueller, MD

In addition, the Indiana residents took First Place in the Inaugural Triological Society Academic Bowl in 2010.

Although information from old records at the Indianapolis City Hospital is incomplete, it appears that there were 163 residents trained in the Indianapolis City Hospital and Indiana University programs in the 54 years from 1933 to 1987. During Dr. Miyamoto's Chairmanship (1987-2014), an additional 98 residents completed their residencies in the department. Two of our residents were Ravdin Medalists having graduated first in their medical school classes from the Indiana University School of Medicine. They are Aaron C. Moberly, M.D. (2006) and Allison Kasey Taraska, M.D. (2009).

Until 2009, the Department Chairmen served as the Residency Program Directors. Because of increasing demands, the RRC allowed the Chair to appoint another faculty member to serve as the Residency Program

Director. Susan Cordes, M.D. served in this role until 2012 when Taha Shipchandler, M.D. took over.

The residency at Indiana University as currently constructed consists of rotations at the Indiana University Hospital, James Whitcomb Riley Hospital for Children, Wishard Memorial Hospital (now Eskenazi Hospital), Richard L. Roudebush Veterans Administration Hospital, and Methodist Hospital.

ENDOWED CHAIRS, PROFESSOR-SHIPS, AND LECTURESHIPS

Endowed chairs and professorships are crucial in recruiting and retaining world-class faculty members. They not only elevate the holder but they also honor in perpetuity the person they are named after. A donor can stimulate research in a particular direction. Endowments ensure that we have adequate resources today, tomorrow and far into the future.

Two endowed Chairs were established under Dr. Lingeman's chairmanship. One was established by Betty Morgan and the other by Dr. Virgil T. DeVault. Mrs. Betty Morgan established an endowed Chair for a Professor of Head and Neck Surgery in 1982. Mrs. Morgan was the daughter of Justin Zimmer, who founded the Zimmer Instrument Company in Warsaw, Indiana. Mrs. Morgan was much interested in head and neck cancer because of the illness of her husband, who had cancer of the larynx, and she generously gave a large sum of money to endow a Chair, which is known as the Betty Morgan Chair for Professor of Head and Neck Surgery. Dr. Lingeman was appointed as the first professor in this endowed chair and remained so until his death at which time it was passed on to Dr. Edward Weisberger.

Dr. Virgil T. DeVault, who is an alumnus of the Indiana University School of Medicine, endowed a Chair for Professor of Otology in memory of his wife, Arilla. Dr. DeVault was very interested in deafness and wanted the first professor in this endowed chair to be nationally known as well as interested in a strong research program. Dr. Richard Miyamoto was the first DeVault Professor

of Otology, and the Distinguished Investigator of Otolaryngology-Head and Neck Surgery. He remained the Arilla Spence DeVault Professor throughout his chairmanship. (Upon his retirement from the Chairmanship he was advanced to the Arilla Spence DeVault Professor Emeritus.)

Under Dr. Miyamoto's chairmanship several additional endowments were created. A change in strategy at the Indiana University Foundation occurred and the DeVault funds were converted to a permanent endowment whereby only the earnings would be allocated to the department and the principal would stay with the University. This was a departure from the original agreement.

In September 1999 Philip F. and Ruth C. Holton, through their estate. made a gift of \$6.5 million to the Department of Otolaryngology - Head and Neck Surgery at the Indiana University School of Medicine. The department is recognized nationally and internationally for its research on and treatment of profound deafness among adults and children. It is the major center in the country to receive National Institutes of Health funding to research pediatric cochlear implantation. The Holtons selected the department for their endowment because of the care given to Mr. Holton in the 1960s. Holton was president of Inland Container Corporation from 1963 to 1970, then headquartered in Indianapolis. Of the Holton's gift, \$3 million will be used to recruit outstanding faculty to the department by establishing two named professorships, the Philip F. and Ruth C. Holton Chairs in Otology; \$3.5 million will establish the Holton Otologic Research Fund. Professor Eri Hashio, Ph.D. is the holder of the Phillip F. Holton Chair. The Ruth C. Holten Chair was used to establish two Scholar funds filled by Derek Houston, Ph.D. and Tonya Bergeson-Dana, Ph.D.



Philip F. Holton



Ruth C. Holton

An endowed Lingeman Lectureship has been established by Dr. Lingeman' former residents and his family.

A George and Elaine Schoolaker Fund was established by the Schoon-maker famity. George Schoonmaker was one of Dr. Miyamoto's original cochlear implant recipients.

A Richard T. Miyamoto, M.D. Senior Professorship has been established by his colleagues, former residents, patients and family. This Senior Professorship is held by the current Chair of the Department, Dr. Marion Couch, M.D., Ph.D., M.B.A.

On June 15, 1999 an agreement was made to establish the Psi Iota Xi Endowed Professorship in Pediatric Speech & Hearing. The agreement was signed by Richard T. Miyamoto, M.D., Chair of Otolaryngology – Head and Neck Surgery, Kevin O'Keefe, President & CEO of the James Whitcomb Riley Memorial Association and Barbara Mitchell, National President of Psi Iota Xi. Upon completion of this Professorship Dr. Miyamoto was inducted into the membership of Psi Iota Xi at their National Convention as their only male member. The Psi Iota Xi Professorship has been occupied by Karen Iler-Kirk, Ph.D., followed by Marcia Hay-Mc-Cutcheon, Ph.D. followed by Charles Yates, M.D. The Riley Children's Foundation has also established a separate Richard T. Miyamoto/Psi Iota Xi Endowment Fund in Speech and Hearing.

HISTORY OF EXTRAMURAL RESEARCH FUNDING

Astrong, highly competitive research program was developed during the twenty-seven years that Dr. Miyamoto was Chairman. The process was initiated by the invitation of Dr. William House to be one of 7

co-investigators in the first-ever national clinical trial to assess cochlear implants as treatment of profound sensorineural hearing loss. (Dr. Miyamoto had served his fellowship under Dr. William House, the acknowledged "Father of Neurotology" and Dr. Howard P. House.) The scientific community at that time felt there was little pos-



Dr. William House, Dr. Richard Miyamoto and Dr. Howard House

sibility of the program succeeding because of the tremendous obstacles present to replace a deaf inner ear.

A sophisticated team of professionals needed to be assembled as many were not present at our institution at the time. During the early days of data collection, funding was entirely private. Initial funding was provided by the Psi Iota Xi Sorority and the Indiana Lions Speech and Hearing Inc. The Psi Iota Xi support of the project has continued from these early days to the present. Their support grew from a local project of the Anderson, IN chapter to a state and then the national and eventually their Centennial Project. Psi Iota Xi has paired with the Riley Children's Foundation to establish the Psi Iota Xi Professorship. The Indiana Lions Speech and Hearing, Inc., Initially supported the Cochlear Implant Program and their support has grown to support the Hearing Aid Loaner Program and all aspects of Speech and Hearing. Crucial early support was given by Morris Green, MD, the then Chairman of Pediatrics Department and Steven Beering, M.D. Dean in approaching the Riley Memorial

Association who provided a 5 year grant which was used to sequentially hire 5 experts in Deaf Education and Speech and Hearing Assessment (Barbara Young, Amy McConkey Robbins, Wendy Myers, Cathy Carotta, and Marjorie Kienle). Each of these positions was converted into a permanent hospital appointment.

Tremendous, on-going support was provided by Virgil T. DeVault, M.D. who created a research fund and the Arilla Spence DeVault Professorship occupied by Dr. Miyamoto. The subsequent research accomplishments were performed in the DeVault Otologic Research Laboratory.

During the early days of the Cochlear Implant Project, Dr. Miyamoto was asked to be an FDA Consultant and eventually an ENT Devices Panel Member. These deliberations ultimately led to the approval of single-channel cochlear implant. During these hearings the NIH became interested in the research being performed at Indiana University and Dr. Erleen Elkins then Director of the Hearing Portfolio at NIH called Dr. Miyamoto and asked him to submit a grant. This became the first NIH grant our department has held. Dr. Miyamoto has been continuously supported by the NIH-NIDCD during his entire 27 years as Chairman (two multiply-renewed NIDCD R01 grants studying speech perception, speech production and language in children with cochlear implants. He was also the site director on two NIH subcontracts.) He has twice served on the Advisory Council of the National Institutes of Health and was asked to deliver the NIH Director's Sixth Astute Clinician Lecture.

Of great note was the impressive addition of a core of linked senior investigators who were recruited to address key components of the Cochlear Implant Project. Each of these investigators supported the core grants to Dr. Miyamoto and obtained their own grant support. This talented group included Mary Jo Osberger, Ph.D., David Pisoni, Ph.D., Karen-Iler Kirk, Ph.D., Mario Svirsky, Ph.D., Steven Chin, Ph.D., Marcia Hay-McCutcheon, Ph.D., Derek Huston, Ph.D., and Tonya Bergeson-Dana, Ph.D. It is truly remarkable that each of the above fulfilled a key role in the overall cochlear implant research portfolio while at the same time earning an RO1 from the NIH. Working in parallel, Eri Hashino, Ph.D.,

developed a strong basic science presence with her work with stem cells in the auditory system. Her work is being conducted in the Stark Neuroscience Institute and she also achieved RO1 funding from the NIH and she occupies the Ruth C. Holton Chair.

NATIONAL AND INTERNATIONAL CONFERENCES

- 1979 American Laryngological, Rhinological, and Otological Society Middle Section, Dr. Lingeman, Vice President.
- January 26-27, NIH Conference Grant. Special recognition for William F. House, MD & Virgil DeVault, MD.
 Proceedings published: 1991 Cochlear Implants in Children.
 Editors: Richard T. Miyamoto, M.D. & Mary Joe Osberger, Ph.D.,
 American Journal of Otology, Volume 12, Supplement 1991.
- Miss America Conference Heather Whitestone, hosted by Richard Miyamoto, Dean Walter Daly, Chancellor Jerry Bepko.
 Co-sponsor: Alexander Graham Bell Association for the Deaf.
- 2002 American Laryngological, Rhinological, and Otological Society Middle Section; Dr. Miyamoto, Vice President.
- May 10-13, NIH Conference Grant. Cochlear Implants. VIII
 International Cochlear Implant Conference.
 Proceedings published by Elsevier B.V., Amsterdam, The Netherlands. Editor: Richard T. Miyamoto, Elsevier B.V. pp. 1-478.

PHYSICAL FACILITIES

he original ear, nose and throat clinic at the Robert Long Clinical Building was located on the second floor in the northwest corner of the building. This was a very small area and consisted of four cubicles with treatment chairs and cabinets. When Dr. Manion became chairman of the department in 1951, he moved into a larger area on the third floor above where the original clinic had been located. There was an office for the chairman and an office for the residents as well as a desk for the receptionist and the nurses. Patients waited in the hall where there were chairs, as there was no waiting area other than this. The treatment area consisted of five rooms with the necessary treatment chairs and cabinets. When Dr. Brown became chairman, he remodeled this area so that a part of the treatment area was changed to a small temporal bone lab with four microscopes and places for the residents to dissect temporal bones under Dr. Brown's supervision. In 1972, with the completion of the second phase of the building program at Riley Hospital, the department was moved to Riley Hospital and was located on the lower floor. This area was shared with the speech and hearing section. There were faculty offices as well as clinic facilities. In 1976 the Regenstrief outpatient facility for Wishard Hospital was opened and the head and neck section of the department, together with the administrative offices and bookkeeping, were moved to the third floor of the Regenstrief building. The facilities at Riley Hospital were then used for pediatric otolaryngology as well as otology and audiology and speech.

An otology research laboratory was first established in the department on the third floor of Long Hospital in the east wing in 1978. Part of this area was also used for a larger temporal bone dissection lab. The dissecting lab for temporal bone consisted of 13 stations with Richards microscopes and drills for each of the stations. At that time, Dr. Douglas Brown was director of the laboratory.

The DeVault Otologic Research Laboratory opened in 1991. It is a 3000 square foot space in the research wing of the James Whitcomb Riley

Children's Hospital. The laboratory is named after its principal early benefactor, Virgil T. DeVault, M.D. A new temporal bone dissection laboratory was also developed which was equipped with a custom-built dissection table and 15 new Zeiss Microscopes. Dr. DeVault was not only a long-time friend of the Department of Otolaryngology, but also of all of Indiana University. Dr. DeVault earned a B.S. (1927), M.D. (1929), and an honorary Doctor of Science (1977)—all from Indiana University. He was a General Surgeon by training, and is most noted for his position as the Medical Director of the United States Department of State and Foreign Service, 1950-1961. He helped establish a network of medical care for U.S. foreign service officers working worldwide. This system encompassed the hundreds of U.S. embassies and consulates around the globe. Dr. DeVault held the rank of Ambassador in the U.S. State Department. Dr. DeVault had also been very active with the Indiana University Foundation. On June 14, 1997, President Myles Brand presided over the Naming Ceremony of Virgil T. DeVault Alumni Center in Bloomington, IN for all of Indiana University (which at the time served 400,000 IU alumni worldwide.) Dr. DeVault also served as a Trustee of the Cosmos Club.

In July 1992 the ambulatory outpatient center (AOC), which is a part of University Hospital, was opened and the department moved much of its clinical work to this facility. The area at Riley remained for pediatrics as well as speech and hearing and the facility at the Regenstrief building remained as a clinic for Wishard patients. Also, the facilities for administration and bookkeeping remained in the Regenstrief building.

The Riley outpatient center (ROC) opened December of 2000 and the pediatric otolaryngology and pediatric otology sections moved to this location. Four audiology booths were built into this space and pediatric audiology moved as well. The clinical cochlear implant program remained at the original Riley location.

The Goodman Hall Neuroscience center opened and Clinical Neurotology moved in 2013 to be nearer to Neurosurgery. Gradually, anterior skull base surgery and much of head and neck surgery moved as well.

FACULTY AND STAFF

uring the years 1909 to 1971 the Department of Otolaryngology at Indiana University functioned through the efforts of part-time volunteer faculty. It would not be possible to name all of the otolaryngologists during this time frame but there were a number who devoted almost a third of their time to the service of patients both at the University group of hospitals and the Indianapolis City Hospital.

Dr. William Molt graduated from the Central State College of Physicians and Surgeons in 1896. For the next twelve years Dr. Molt practiced various parts of medicine, including Ob/Gyn and general surgery, and spent time in postgraduate study. He decided to devote his practice to otolaryngology, and more specifically to bronchoesophagology and spent part of his postgraduate study with Dr. Chevalier Jackson in Philadelphia. Dr. Molt was only the second student to spend many months in study under Dr. Jackson. Dr. Molt also spent a part of his postgraduate study under Dr. Ballinger of Chicago and Dr. Mosher of Boston. After the Department of Otolaryngology at the Indiana University School of Medicine was established in 1909, Dr. Molt became a member of the faculty and was an important surgeon in providing patient service as well as education of medical students. There was no residency program in those years, either at the Indianapolis City Hospital or at Indiana University. Much of Dr. Molt's time was spent at the Indianapolis City Hospital as Chief of the department during many of these years. Dr. Molt conducted a clinic in bronchoscopy and esophagology at the Indianapolis City Hospital each Wednesday and also at Riley Hospital at the University Hospital on Mondays. Dr. Molt performed the first endoscopic removal of a foreign body at Riley Hospital. Although there were other otolaryngologists that did much work in bronchoesophagology, Dr. Molt and Dr. Manion were best known for their endoscopic efforts.

Dr. Tom Johnson was a graduate of the Indiana University School of Medicine. After his residency in otolaryngology at the City Hospital he joined Dr. Molt in practice prior to going into the military service during

World War II. After discharge from the service in 1945, Dr. Johnson joined Dr. Molt in practice and was an associate of his until Dr. Molt retired. Dr. Johnson was not only a skillful endoscopist but he was one of the early head and neck surgeons in the Indianapolis area. Dr. Johnson developed an interest in surgery of the larynx and, throughout the years of his practice, became well known for not only laryngectomy but also conservation surgery of the larynx, mostly thyrotomy and cordectomy. Dr. Johnson did much of this surgery under local anesthesia and had excellent results for control of cancer of the larynx using cordectomy.

In 1948 Dr. Fred Toumey completed his residency at Indiana University and joined Drs. Molt and Johnson in practice. Dr. Toumey, like Dr. Johnson, was much interested in bronchoesophagology as well as head and neck surgery. During his years of practice, Dr. Toumey was well known in the Indianapolis area and greatly contributed to the teaching program at the Indianapolis City Hospital and Indiana University. Drs. Molt, Johnson and Toumey conducted a clinic on each Wednesday at the Indianapolis City Hospital and also on Monday at Riley Hospital. Considering the work that was done in those years, these three doctors contributed at least a third of their time to providing service to patients and the education of students at these hospitals.

At the time when Drs. Molt, Johnson and Tourney practiced, there was no compensation for any of the volunteer faculty. Dr. Manion was given a salary of \$1,000 each year as Chairman but he returned this to the department to use as needed for instruments and resident education.

Dr. Robert M. Dearmin was Chief of the Otolaryngology Service at the Indianapolis City Hospital for many years. Dr. Dearmin was a graduate of Indiana University and, in 1924, the Indiana University School of Medicine. He served a one-year internship at the Indianapolis City Hospital and a one-year residency at the Newark, NJ Eye and Ear Hospital under Dr. Eagleton. Dr. Eagleton was known for his work with otogenic brain abscess and petrositis. Dr. Dearmin spent four years at the University of Pennsylvania Graduate Hospital and the University of Pennsylvania after which he returned to Indianapolis and established a private practice in

1930. Dr. Dearmin was well known for his work with intracranial complications of mastoiditis and petrositis. He was one of the first otolaryngologists to use a drill in doing his temporal bone surgery rather than mallets and gouges, which most surgeons used at that time. Dr. Dearmin used an orthopedic instrument, an Albee drill, which was quite large and had to be held in the arm. With a very large cutting burr he very quickly would remove the sclerotic part of the temporal bone in doing radical mastoid-ectomies, and also in his approach to the petrus pyramid.

Dr. Burt E. Ellis contributed much to the service of patients at Indianapolis City Hospital and at Riley Hospital. He graduated from Indiana University and, in 1921, the Indiana University School of Medicine. He served an internship at the Indianapolis City Hospital from 1921 to 1922. Dr. Ellis was in general practice until 1927 when he elected to go into otolaryngology. He spent a year in Philadelphia at the University of Pennsylvania postgraduate course in otolaryngology from 1927 to 1928. Dr. Ellis was well known for his work with reconstruction of the facial nerve in the temporal bone following injury from simple or radical mastoidectomy. He became very interested in facial nerve paralysis and reconstruction of the facial nerve because of the many cases that occurred at that time. Dr. Ellis saw many children with facial paralysis and contraction of the facial muscles and severe cosmetic deformities that affected them for a lifetime. Dr. Ellis spent time with Drs. Ballance and Duel in learning reconstruction of the facial nerve and did most of this work in the Indianapolis area.

Dr. Carl B. Sputh, Sr. and Dr. Carl B. Sputh, Jr. contributed much time, mostly to the service at the City Hospital. Dr. Jerry C. Travis, who had been a resident at Indiana University prior to going into military service during the Second World War, contributed at least a third to half of his practice time to the University residency program after World War II. He also provided service to patients and education to residents at the Indianapolis City Hospital.

Dr. Lewis Morrison is a graduate of Purdue University and Indiana University School of Medicine. He spent two years in military service and

then entered private practice in the Indianapolis community. Dr. Morrison was a superb otolaryngologist who practiced the entire scope of this specialty, but his strong suit was rhinology, both functional and cosmetic surgery of the nose, and allergy of the head and neck. Dr. Morrison spent time with Dr. Maurice Cottle of Chicago and was part of many of the postgraduate programs and courses that Dr. Cottle conducted throughout the country during the years 1950 to 1970. Dr. Morrison joined Drs. Lingeman and Brown as full-time faculty in 1971. From 1970 until his retirement in 1988 he provided a superb education to the otolaryngology residents in rhinology, both septorhinoplasty surgery and surgery of the paranasal sinuses, as well as head and neck allergy. Dr. Morrison retired in 1988 but continued to give his time at Wishard Hospital and the Veterans' Hospital for the education of residents in septorhinoplasty surgery. Dr. Morrison was a member of the Triological Society; American Rhinologic Society, and the American College of Surgeons.

r. Ralph McQuiston was the first resident appointed in the Indiana University program in 1934. This was a two-year residency. Dr. McQuiston was from Franklin, Indiana where he had been a star basketball player on the Franklin College team. He graduated from Indiana University and Indiana University School of Medicine. After completing an internship, which was required by the American Board of Otolaryngology at that time, he took a two-year residency at Indiana University. Following his residency, Dr. McQuiston joined Dr. Carl McCaskey in practice. Dr. McQuiston was an outstanding otolaryngologist who practiced the entire scope of what the practice consisted in those years. His main interest was otology and he studied in one of the early courses offered by Dr. Julius Lempert in New York City for the fenestration operation for treatment of otosclerosis. When stapedectomy replaced the fenestration operation, Dr. McQuiston continued to do stapedectomy until his retirement. Ralph McQuiston contributed much of his time teaching residents at Indianapolis City Hospital as well as the Indiana University program. He staffed residents at University Hospital, Riley Hospital, and the Indianapolis City Hospital for otology and he also lectured and taught

residents much of their general otolaryngology. Dr. McQuiston had been well trained under Dr. McCaskey in intranasal sinus surgery and, in spite of not having the CT scans and the endoscopic instruments that we have today, he did excellent work with intranasal ethmoidectomy and sphenoidotomy.

Dr. J. William Wright, Jr. graduated from the University of Michigan with an A.B. degree and M.D. degree in 1942. He served an internship at the University Hospital in Ann Arbor, Michigan. After completing two years of service in the Army Air Force, he was a resident at the Indiana University from 1946 to 1948. Dr. Wright also studied under Dr. George Shambaugh at Northwestern University in 1955-56. From that time on, he practiced otology in the Indianapolis community. Dr. Wright was a Clinical Associate Professor at the Indiana University Medical Center and gave much of his time to teaching the residents otologic surgery. Dr. Wright retired from active practice in 1991.

Dr. Jack Summerlin received his B.S. degree from the University of South Carolina in 1946. He attended the University of North Carolina, which was a two-year medical school at the time, and then transferred to the Louisiana University School of Medicine where he graduated in 1951. Dr. Summerlin was a rotating intern at the Gorgas Hospital in the Canal Zone from 1952 to 1954. He was appointed as a resident at the Indiana University residency program by Dr. Manion in 1954 and completed his residency in 1956. Dr. Manion then asked Dr. Summerlin to remain as a full-time faculty member with the rank of Assistant Professor. Dr. Summerlin later returned to North Carolina where he practiced for one year but, because two of his children were born deaf, he returned to the Indianapolis area because of the better education that his children would receive at the Indiana School for the Deaf. Dr. Summerlin was reappointed to the staff of the IU Medical Center as a Clinical Associate Professor and gave much time to resident education, mostly in the area of otology. He was an outstanding educator and it was through him that many of the residents benefited from his teaching in otology.

Dr. Robert Shellhamer graduated from Temple University in 1947, did

postgraduate work at the Ohio State University and received his Ph.D. in Anatomy in 1952. He began his teaching career at Indiana University at Bloomington in the Department of Anatomy and in 1955, when the first year of medical school was moved to the Indianapolis campus, he was appointed as Associate Professor of Anatomy and Full Professor in 1965. Dr. Shellhamer was an outstanding teacher of anatomy. He had worked closely with Dr. Kime during the later years that Dr. Kime taught the annual anatomy course and during the time that Dr. Manion was Chairman he worked with Dr. Lingeman in combining the didactic anatomy as well as the applied part of the anatomy to head and neck surgery. During the years that Dr. Kime was active in teaching this annual course he gave both clinical and didactic anatomy lectures. Upon Dr. Kime's retirement in 1961 Robert Shellhamer took over the teaching of the anatomy course, providing the didactic work and having Dr. Lingeman and other members of the clinical faculty present the applied anatomy. Dr. Shellhamer was well known for his excellent teaching and was recognized both locally and nationally. He was the recipient of many awards presented to him by his students. He taught undergraduate medical and dental students and graduate students in orthopedics, ophthalmology, urology, anesthesiology, plastic surgery and otolaryngology. He was a frequent visiting professor throughout the country and his talent in relating anatomical studies to the resolution of clinical problems was unique and frequently requested. Dr. Shellhamer was killed in a tragic auto accident in December 1985. The anatomy portion of the course was assumed by Dr. Jack O'Malley and later by Dr. Mark Seifert. The temporal bone portion of course was assumed by Dr. Donald Wong.

As part of the annual anatomical and clinical course in otolaryngology, histopathy as it applied to the head and neck was presented by Dr. J.L. Arbergast. He presented this during the years that Dr. Kime taught the anatomy course, and as nearly as can be determined, histopathology was not given during the years that Dr. Barnhill presented the course. After his retirement, Dr. Arbergast continued to take part in the histopathology of the head and neck area but Dr. Frank Vellios who at the time was chairman of the Department of Pathology, taught this part of the course.

When Dr. Vellios left Indiana University, Dr. Gary Bolinger was appointed to present the histopathology part of the anatomy course. Dr. Bolinger was in private practice and his work became too busy for him to continue taking part in the course and in 1977 the teaching of histopathology was taken over by Dr. Charles Tomich. This portion of the course has been assumed by Dr. Don John Sumerlin.

Dr. Shokri Radpour joined the staff of the Department of Otolaryngology-Head and Neck Surgery in 1962. He was appointed as Instructor in 1964 and rose to the rank of Clinical Professor of Otolaryngology at the Indiana University School of Medicine. Dr. Radpour practiced in Kokomo for many years but gave time each week to come to the Indiana University Medical Center campus in order to contribute his expertise in otology to resident education. He is a graduate of the School of Medicine of the University of Tehran in Iran and served an internship at that university. He was a resident in otolaryngology at the Jersey City Medical Center and later at the University of Louisville and finally at the Kings County Hospital in Brooklyn, New York as a Chief Resident. Dr. Radpour was an outstanding otolaryngologist and educator who practiced quality work throughout the entire scope of this discipline but his major interest and long suit was otology. Dr. Radpour is a member of the American College of Surgeons; the American Academy of Facial Plastic and Reconstructive Surgery; American Triological Society, of which he was a member of the Council; and a winner of the Edmond Prince Fowler award for an outstanding research thesis that he presented as a candidate for the American Triological Society. He is also a member of the Association for Research in Otolaryngology; the American Society for Research in Otolaryngology; and the American Society for Head and Neck Surgery. Dr. Radpour retired from private practice at Kokomo in 1988 and was appointed Chief of the Otolaryngology-Head and Neck Surgery section at the Veterans' Hospital as part of the Indiana University residency program.

 $B^{\,\rm eginning}$ with Dr. Lingeman's Chairmanship in 1971, it became apparent that a full time faculty was necessary to elevate the department to the next level.

The following is a listing of faculty members who joined the department on a full-time basis. (Continued cooperation with a large cadre of community physicians formed the teaching core.)

Dr. Douglas Brown was a member of the faculty for 10 years, from 1978 to 1988. He received his B.A. in physics and mathematics from Kenyon College in Gambier, Ohio in 1964. He received a Masters Degree in physics in 1966 and a Ph.D. in physics in 1972 from Purdue University. He then spent a year at Henry Ford Hospital in the Speech and Hearing Department before joining the faculty at Indiana University as Assistant Professor and Director of the Research Laboratory. Dr. Brown worked mostly on projects with Dr. Miyamoto related to otologic research and more specifically, the use of cochlear implants.

Dr. Laverne Tubergen joined the department in 1975 and remained as a member of the faculty at Indiana University until 1983. Dr. Tubergen is a graduate of the University of Michigan and served his residency at the University of Rochester. Following military service, he spent one year at the Los Angeles Otologic Medical Group with Drs. Howard House and William House. During the years that Dr. Tubergen was a member of the staff at Indiana University he provided excellent service to patients at University and Riley Hospitals as well as education to the residents in neurotology.

Dr. Ronald Hamaker joined the faculty in 1973 and remained as a member of the faculty until 1978. Dr. Hamaker graduated from Wayne State University where he served a residency prior to going into military service. After spending two years in the service at Ft. Dix in Trenton, NJ he spent one year as a Fellow in head and neck surgery with Dr. John Conley in New York City. Dr. Hamaker was an excellent head and neck surgeon who provided much education for the residents in this area as well as in cosmetic surgery of the head and neck. He spent five years in the department and then went into private practice in the Indianapolis community.

Dr. Mark Singer joined the department after completing a fellowship in head and neck surgery at Northwestern University. He was a member

of the department from 1976 to 1980 and then went into private practice in the Indianapolis community with Dr. Ron Hamaker. Dr. Singer is well known for developing the Blom-Singer prosthesis for restoration of voice in the laryngectomy patient. This was certainly one of the major contributions to voice restoration and Dr. Singer is well known throughout the world for his work with the tracheoesophageal puncture and the Blom-Singer prosthesis.

Dr. Edward C. Weisberger joined the Department of Otolaryngology-Head and Neck Surgery in 1979 as Assistant Professor. Raised in Terre Haute, Indiana Dr. Weisberger graduated from Yale University with a B.A. in 1967 and received his M.D. degree from the University of Michigan in 1971. Dr. Weisberger interned at the Harbor General Hospital in Los Angeles for one year and spent one year in general surgery at the Valley Medical Center (1972-73). He completed his residency at the University of California in San Francisco from 1973 to 1976. After 1976, he served two years as a Lieutenant Commander with the Public Health Service in Seattle, Washington where he also was a part of the University of Washington residency program. Subsequently, Dr. Weisberger became a Senior Fellow in Head and Neck Surgery at the M.D. Anderson Hospital in Houston, Texas from 1978 to 1979 and, upon completion of the fellowship, joined the faculty at Indiana University. He is a member of the Society of Head and Neck Surgeons, American Society for Head and Neck Surgery, American Laryngologic Association, the Triological Society and the American College of Surgeons. Although Dr. Weisberger's strong suit and interests are in head and neck oncologic surgery, he practices a broad scope of this discipline, except for otology. Dr. Weisberger served Vice Chairman of the Department.

Dr. Michael Maves joined the faculty of the Department of Otolaryngology-Head and Neck Surgery in July 1981. Dr. Maves is a graduate of the Ohio State University College of Medicine in 1973 and was a resident in surgery at Indiana University Medical Center from 1973 to 1974. After completion of two years of military service he returned to Ohio State and was a resident in the Ohio State program from 1976 to 1980. Dr. Maves spent a year as a Fellow at the University of Iowa and following completion of this fellowship, joined the faculty of Indiana University in the section of Head and Neck Surgery. Dr. Maves made an outstanding contribution to the education of residents and service to patients, coming to the department though the years 1981 to 1984. In

1984 a position became available at the University of Iowa as director of the head and neck section and he left Indiana University to assume this position in September 1984. Dr. Maves became Chairman and Professor of the Department of Otolaryngology-Head and Neck Surgery at the St. Louis University School of Medicine. He was subsequently named Executive Vice President/CEO of the American Academy of Otolaryngology—Head and Neck Surgery.

The following joined the full time faculty under Dr. Miyamoto's chairmanship:

(Administrative and clinical support has been provided by many but special acknowledgement must be given to Sheri Ridge, Sarah Maxwell, Teri Stevens, Tammy Huston, Marcia Harmon, Teri Kerr, Lynette Staley, Jane Adamson, and Trena Bond.)

Dr. Michael Fritsch graduated from the University of Nebraska with a B.S. degree. He earned his M.D. degree at the University of Nebraska College of Medicine (1980). He completed a residency at the Ohio State University Hospital (1984). He completed a Neurotology fellowship in Nashville, Tennessee under Dr. Michael Glassock. Prior to this, Dr. Fritsch completed a fellowship in plastic surgery with Dr. Gene Tardy in Chicago and a one-year fellowship in head and neck surgery and microvascular reconstructive surgery with Dr. Sebastian Arena at Mercy Hospital in Pittsburgh, Pennsylvania. Although Dr. Fritsch's major interest is neurotology, he practices the entire scope of otolaryngology. Dr. Fritsch rose to the rank of Professor in the Department of Otolaryngology-Head and Neck Surgery. He is a member of the Triological Society, the American Neurotology Society and the American Otological Society.

Dr. Bruce H. Matt is a graduate of Hamilton College in Clinton, New York, with an A.B. Summa Cum Laude in Chemistry (1979). He received his M.D. degree from the University of Pittsburgh (1983). Dr. Matt completed his residency at the University of Iowa (1988) and a fellowship in pediatric otolaryngology with Dr. Robin Cotton at the University of Cincinnati (1989). Dr. Matt heads up the Section of Pediatric Otolaryngology at Riley Hospital. Dr. Matt is member of the Triological Society and ASPO.

Dr. Bruce Sterman received his B.A. degree in chemistry and zoology from Miami University in Oxford, Ohio (1980) and graduated from the

Ohio State University School of Medicine (1985). He was a resident in otolaryngology at the Cleveland Clinic from 1985 to 1990. He completed a fellowship in facial plastic surgery at the Central Institute in St. Louis with Dr. William Friedman.

Dr. Paul Righi graduated Harvard Medical School 1986. He completed his residency in Otolaryngology at the University of Vermont (1993) and a fellowship in Head and Neck Surgery at the University of Cincinnati (1994).

Dr. Jeff Wilson graduated from the University of Kentucky School of Medicine (1989) and completed his residency at the University of North Carolina (1995). He was recruited as a general otolaryngologist.

Dr. Maria S. Chand graduated from Ohio State University and received her M.D. from the University of California (Irvine) (1998). She completed a fellowship in Facial Plastic Surgery at the University of Illinois – Chicago (1999).

Dr. Susan Cordes graduated from the Indiana University School of Medicine (1993) and completed her residency In Otolaryngology at Indiana University (1998). She was recruited as a general otolaryngologist. She served as Chief of Otolaryngology at Wishard Memorial Hospital and served a Residency Co-ordinator. She is a member of the Triological Society.

Dr. R. Christopher Miyamoto received a B.S degree from Washington and Lee University and graduated from the Indiana University School of Medicine (1996). He completed his residency in Otolaryngology at the University of Cincinnati (2001) and was a fellow in pediatric otolaryngology at the Boston Children's Hospital (2002). He received the Early Career Achievement Award from Indiana University in 2007 and is a member of ASPO.

Dr. Abideen Yekinni graduated from the Indiana University School of Medicine (1992) as completed his residency at Indiana University (1997). He is a general otolaryngologist.

Dr. Melonie Nance graduated from the University of Chicago (2002) and completed her residency at University Health Center of Pittsburgh (2007).

Dr. Mimi S. Kokoska graduated from the University of Southern California with a B.S. in Biology (1984) and M.S. in Anatomy and Cell

Biology (1986). She received her MD from the University of Southern California in 1990. She completed a residency at Washington University in St. Louis (1996). She completed a facial plastics fellowship at St. Louis University (1997). She earned a Masters in Health Care Management at the Harvard School of Public Health (2010). She served as Service Line Leader and as Vice-Chairman.

Dr. Michael G. Moore graduated from U.C.L.A. (2002) and completed his residency at the Massachusetts Eye and Ear Infirmary and Harvard Medical School (2007). He completed a Head and Neck and Microvascular Fellowship at the University of Washington (2008).

Dr. Charles Yates is a graduate of Indiana University with a B.S. in Biology and B.S. in Biochemistry (1995) and an M.S. in Physiology and Biology (2000). He graduated from the Indiana University School of Medicine (2003). He completed his residency in Otolaryngology at Indiana University (2008) and a fellowship In Neurotology at the Ohio State University (2010). He is Chief of Otology and coordinates the medical student education program.

Dr. Taha Shipchandler is a graduate of Indiana University with B.A. and a double major in Economics and Chemistry. He graduated from the Indiana University School of Medicine (2003) and completed his residency at the Cleveland Clinic (2009). He completed a Facial Plastic Fellowship at Johns Hopkins (2010). He is Associate Professor and Residency Program director.

Dr. Chad Galer graduated from the University of Iowa in 2001. He completed his residency at the University of Nebraska (2006). He completed a Head and Neck Fellowship at the University of Texas M.D. Anderson Hospital 2009). He serves as Chief of Otolaryngology at the Richard Roudebush Veterans Administration Hospital.

Dr. Steve Brigance is a graduate of Washington and Lee University and received his M.D. degree from the University of Louisville (2003). He completed his residency at Indiana University (2008) and a fellowship in Head and Neck and microvascular surgery at the University of California at Davis (2009).

Dr. Stacey Halum is a graduate of the University of Wisconsin (1999) and completed her residency at the University of Wisconsin in Milwaukee (2004)). She completed a Laryngology fellowship at Wake Forest University (2005). She received the Fowler Award from the Triological

Society.

- **Dr. Jim Ulm** is a graduate of Indiana University (1975) and completed his residency at Indiana University (1980). He is a general otolaryngologist.
- **Dr. Charles William "Bill" Johnson** is graduated from Broad Ripple High School (1961), Indiana University (1965) and the Indiana University School of Medicine (1968). He did his internship at Tripler General Hospital in Honolulu, Hawaii and completed his otolaryngology residency at Indiana University (1975). He spent many years in private in Indianapolis on the volunteer faculty prior to completing his career in the department. He is a general otolaryngologist.
- **Dr. Michael Agostino** is graduate of Indiana University (1989) and completed his otolaryngology residency at Indiana University (1994). He spent many years in private practice in South Bend, IN before returning to the faculty.
- **Dr. Jonathan Ting** graduated from the University of Western Ontario (2004). Dr. Ting completed a Research Fellowship in the DeVault Otologic Research Laboratory prior to completing his residency at Indiana University (2007). He completed a Rhinology Fellowship at the Massachusetts Eye and Ear Infirmary Harvard University (2012).
- **Dr. Avinash Mantravadi** is a graduate of the Indiana University School of Medicine (2007) and completed his residency at Loyola University (2012) prior to completing a fellowship in Head and Neck Surgery/Microvascular Reconstruction at the University of Miami (2013).

Audiology and Speech and Hearing Faculty:

- **Dr. Jerry Punch** graduated with a BA from Wake Forest University (1965), MS (1967) from Vanderbilt University, and a PhD (1972) from Northwestern University. He served as Chief of Audiology and as a senior grant writer.
- **Dr. David L. Jones** graduated with a BS from Westminster College (PA). He earned an MA (1983) and PhD (1987) from the University of Iowa. He specialized in velopharyngeal dysfunction.
- **Dr. Mary Hardin-Jones** received her BA and MS from Texas Tech University. She received her PhD from the University of Iowa. She studied the impact of Cleft Palate on early vocal development.

Dawn Wetzel served as coordinator of Speech Pathology.

Wendy Myres served as coordinator of the Cochlear Implant Program and this role was assumed by Kelly Lormore.

Dr. Alan Diefendorf earned a B.S. from Oregon State University (1972), M.S. from Vanderbilt University (1974) and Ph.D. from the University of Washington (1981). He served as Chief of Audiology and Speech Language Pathology and rose to the rank of Full Professor.

Dr. Michael K. Wynn graduated with a BA from Whitman College in 1976. He earned an MA (1979) from the University of Montana and a PhD (1988) from the University of Washington.

Research faculty:

Dr. Mary Joe Osberger graduated with a PhD from the City University of New York.

Dr. Karen Iler-Kirk graduated from the University of California, Santa Barbara with a BA (1978) and MA (1980). She earned a MS from the University of Southern California (1987) and a PhD from the University of Iowa (1991).

Dr. Mario Svirsky graduated with a BS and MS in Electrical Engineering from the Universidad de la Republica in Montevideo Uruguay. He received a PhD in Biomedical Engineering from Tulane (1988). He was a research scientist at MIT.

Dr. Marcia Hay-McCutcheon earned a BA from Queen's University, Kingston, Ontario, Canada, MA from the University of Tennessee, PhD. from the University of Iowa.

Dr. Steven B. Chin graduated with a BA in Linguistics from the University of the Pacific. He received an MA (1982) and PhD (1993) from Indiana University. He served a postdural fellowship in Cognitive Psychology, Speech and Hearing, and Otolaryngology at Indiana University.

Dr. David Pisoni graduated with a BA (1968) from Queens College of the City University of New York and a PhD from the University of Michigan (1971). He completed an NIH Postdoctoral fellowship at the Massachusetts Institute of Technology, Cambridge, MA. Dr. Pisoni is a Chancellor's Professor and P.I. on a long-standing NIH Training Grant.

Dr. Derek Houston graduated with a BA in Psychology from the Uni-

versity of Oregon (1993). He received an MA (1997) and PhD (2000) from John Hopkins University. He was an NIH Postdoctoral Research Fellow in the Department of Otolaryngology at the Indiana University School of Medicine and remained to arise to Associate Professor and Phillip F. Holton Scholar. He directed the DeVault Otologic Research Lab (2014-15).

Dr. Tonya R. Bergeson-Dana graduated with a BA/MB in Psychology and Music Theory from Northwestern University (1996). She earned an MA (1997) and Ph.D. (2002) from the University of Toronto. She served an NIH Postdoctoral Research Fellowship in the Department of Otolaryngology at the Indiana University School of Medicine and remained as an Assistant Professor and Phillip F. Houlton Scholar. She directed the DeVault Otologic Research Lab from 2009-2011.

Dr. Eri Hashino earned a Ph.D. from Nagoya University (1001). She holds the Ruth C. Holton Chair.

The following joined the full time faculty under Dr. Couch's chair:

Dr. Rick Nelson graduated from Knox College (2000) and received his Ph.D. & M.D. degrees from the University of Iowa (2007). He completed his residency (2012) and a Neurotology Fellowship at the University of Iowa (2014) and joined the IU faculty as an Assistant Professor.

Dr. Cecelia E. Schmalbach is a graduate of Notre Dame University (1994) and of Jefferson College of Medicine (1998). She completed her residency at the University of Michigan (2004) and a Head and Neck Fellowship at Vanderbilt University (2005). She is Deputy Editor of Otolaryngology-Head and Neck Surgery. She is Vice-Chairman of the Indiana University Department Otolaryngology—Head and Neck Surgery and the Chief of Otolaryngology at Eskenazi Hospital. She was appointed as Professor with Tenure in 2015.

Dr. John Patrick Dahl earned an MBA from Pennsylvania State University (2000) and a PhD. from Pennsylvania State University College of Medicine (2001). He graduated from Jefferson Medical College, Thomas Jefferson University (2009). He completed his residency at the University of North Carolina (2014) and a fellowship in Pediatric Otolaryngology at the University of Washington (2015). He was appointed as Assistant Professor in 2015.

Dr. Karl Koehler completed his Ph.D. (2014) and Postdoctoral Fel-

lowship (2015) at the Indiana University School of Medicine. He was appointed as an Assistant Professor in 2015.

Dr. Elisa Illing received her M.D. degree from Indiana University (2010) and completed her residency at the University of Alabama (2015). She completed a Rhinology Fellowship at the University of Alabama (2016). She will appointed as Assistant Professor in 2016.

Dr. David Chan is a graduate of the University of Michigan and received his M.D. degree from Loyola University Chicago Stritch School of Medicine (2010). He completed his residency at Indiana University (2015) and a fellowship in Facial Plastic Surgery in Dallas-Fort Worth. He will be appointed as Assistant Professor in 2016.

Dr. Benjamin Anthony graduated from Northwestern University (2006) with a BA in Biology and BMus in vocal Performance. He received his MD from Pritzker School of Medicine-University of Chicago (2010). He completed his residency at Baylor College of Medicine (2015) and a fellowship in Laryngology at the Emory Voice Center in Atlanta, Georgia (2016). He will be appointed as Assistant Professor in 2016.

Dr. Michael Sim graduated from UC-Berkeley (2005) with a BA in Sociology/Pre-Med. He received his MD from Loma Linda University School of Medicine (2010). He completed his residency at the University of Michigan (2015) and a fellowship in Head and Neck Surgical Oncology and Microvascular Reconstruction at Vanderbilt University School Medicine (2016). He will appointed as Assistant Professor in 2016.

Dr. Sarah Burgin graduated from Notre Dame University (2005) with a BS in Pre-professional studies and Gender studies. She received her MD from the Indiana University School of Medicine (2010) and completed her residency at the University of Michigan (2016). She will be appointed as Assistant Professor in 2016.

Ψ