

## **Plastic Surgery in Chicago in the 20th Century**

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In 1900, the Chicago Surgical Society was founded by 26 local surgeons, among them such giants as Christian Fenger, John B. Murphy and Nicholas Senn. All of the founders were general surgeons- in the broadest sense of the word- and all performed plastic surgical procedures as the need arose, but none was what we would call a “plastic surgeon”.

The first World War (1914-18) was different from previous wars in many ways. It was mainly a trench war and soldiers had the uncomfortable habit of looking over the tops of trenches, only to have their faces mutilated if they were lucky enough not to be killed.

In 1916, just after the Battle of the Somme, Captain Harold Delf Gillies, an otolaryngologist in the Royal Army Medical Corps, was sent to France, where he was appalled by the many facially crippled British soldiers he discovered. At that time, there was no effective treatment for these types of injuries. He asked for and was granted permission to tackle this complex problem and in so doing, became the father of British plastic surgery. All of the plastic surgeons in Britain and many in America- as well as the rest of the world- can claim Sir Harold Gillies as their professional ancestor, including his cousin Sir Archibald McIndoe; and in Glasgow, Scotland; J. Scott Touch and Jack Mustarde.

Sir Harold’s counterparts in the U.S. army in World War I included Vilray P. Blair of St. Louis, Robert H. Ivy of Philadelphia, and Varaztad Kazanjian of Boston. John Stage Davis, their contemporary in Baltimore, is noted to be the first surgeon in America to dedicate his practice solely to plastic surgery from head to toe. Dr. Davis was the first to describe the commonly practiced “Z-plasty”.

In 1921 at the Chicago Athletic Club, four Chicago surgeons- all with M.D. and dental degrees, were among the thirty two American and Canadian surgeons who founded the American Association of Oral Surgeons. These four Chicagoans were Frederick Merrifield, William Logan, Thomas Gilmer and 73-year old Truman Brophy. The double-degree requirement for membership was dropped in 1932. The name of the organization was changed in 1926 to the American Association of Oral and Plastic Surgeons, and in 1942, to the American Association of Plastic Surgeons. Soon general surgery rather than oral surgery came to be the principal background of plastic surgeons in Chicago and elsewhere.

### **Plastic Surgery at Northwestern:**

In 1959, Orion Stuteville, D.D.S., M.D., started a plastic surgery residency at Cook County Hospital. In 1967, his program became affiliated with Northwestern University in order to provide broader training for the residents.

In a parallel development, Herold Griffith, MD., F.A.C.S. was recruited from Cornell in 1957 to develop a plastic surgery program at Chicago Wesley Memorial Hospital, one of two principal Northwestern-affiliated hospitals. Dr. Griffith had been trained by Herbert Conway, one of the world’s leading and best known plastic surgeons. Immediately prior to his arrival in Chicago, Dr. Griffith turned a year-long sabbatical for personal illness into a productive year by publishing a landmark paper on the reconstruction of pressure sores for paraplegic patients. This interest set the stage for the future close relationship of Northwestern University with the Rehabilitation Institute of Chicago. The RIC has been ranked the #1 rehabilitation hospital in America every year since 1991. Northwestern and RIC continue to jointly explore methods for improving the quality of life for spinal cord injury patients.

Dr. Griffith was joined in 1967 by Peter McKinney who also had finished his training at Cornell under Dr. Conway. Together, Dr. Griffith and Dr. McKinney began to prepare the application for approval of the Northwestern residency program. At this time, Dr. Stuteville’s program at Cook County Hospital needed affiliations with a University and a private hospital to keep its accreditation. In order to rescue the Cook County program, Dr. John Beal, Chairman of Surgery at Northwestern, incorporated the former Cook

County residency program into the new Division of Plastic Surgery at Northwestern. Dr. Stuteville became the first Chief of Plastic Surgery at Northwestern.

Over the next three years, the service grew in stature and volume of cases. When Dr. Stuteville retired as chief in 1970, Dr. Beal appointed Dr. Griffith as the Chief of Plastic Surgery. Since there were then twelve residents in the training program, Dr. Griffith divided the service into two sections; one was based at the Northwestern Hospitals (Wesley, Passavant, Children's, Evanston, and the VA) and the other was based at Cook County. Residents spent time in both sections. Dr. Stuteville continued to run the section at Cook County through 1971, at which time he became chief at Loyola. With his move to Loyola, the Cook County residency accreditation also transitioned to that institution with Dr. Griffith's approval.

Dr. Griffith remained Chief at Northwestern for 21 years. In 1973, Wesley and Passavant Hospitals formally merged to become Northwestern Memorial. At that time, the faculty consisted of Herold Griffith, Peter McKinney, and Victor Lewis. Dr. Lewis completed both medical school and plastic surgery training at Northwestern with his surgery residency training at Louisiana State University's Charity Hospital. Dr. Lewis gained practical experience in the Armed Services as a Naval officer before joining the Northwestern practice in 1977. Drs. Harris and Lewis performed the first microsurgical free tissue transfer at Northwestern with residents Bruce Cunningham and Marie Christensen assisting. All of the faculty at that time were in private practice and went unpaid for their voluntary training of residents. The first "full-time" faculty members were Drs. Desmond Kernahan and Bruce Bauer at Children's Memorial Hospital, the pediatric training facility for Northwestern residents.

The other private hospital in the Northwestern training program was Evanston Hospital where the service was run by Dr. Frank Pirruccello, followed by Martin Sullivan and John Smith. Mitchell Grasseschi and Laurie Casas later joined the faculty. John, "Mitch" and Laurie all completed their plastics training at Northwestern.

Since its inception in 1970, the Northwestern Division of Plastic Surgery has graduated 82 residents. Many have gone on to careers in academic plastic surgery and chiefs of services both in the US and abroad. Ten of the first 58 graduates were women—a very high number in those days. One of the residents, Arthur Howell, was the second African-American plastic surgeon in the U.S.

In 1991, Dr. Thomas A. Mustoe succeeded Dr. Griffith as chief, joining from the faculty of Washington University of St. Louis. Dr. Mustoe trained in otolaryngology at the Massachusetts Eye and Ear Institute and in plastic surgery at the Brigham and Women's Hospital. Dr. Mustoe founded the productive wound-healing laboratory that continues to this day. Clinically, he performed the first microsurgical breast reconstruction at Northwestern.

Dr. Dan Ladin joined the full time faculty and stayed for two years at the institution.

The residency became one of the first official "integrated" programs in 1991 with a 3-1-3 structure. Prior to that, residents with 3-5 years of surgery training were admitted to the program, but the program did not require a completed residency for entrance. A mandatory year of research was incorporated into the program, designed as a way to improve opportunities for resident-driven research, increase the maturity of the residents, and promote consideration of an academic career for finishing residents. **Dr. Michael Byun was the first medical student admitted into the integrated plastic surgery program in 1991.**

Dr. Neil Fine joined the practice in 1994. Dr. Fine completed general and plastic surgery training at the Brigham and Women's Hospital, and developed a focus in microsurgical head and neck reconstruction and breast reconstruction. He also ran the first three years of the integrated residency.

Dr. Gregory Dumanian joined the full-time faculty in 1996, having completed general surgery training at the Massachusetts General Hospital, plastic surgery training at the University of Pittsburgh, and fellowships in research and in hand surgery. He was recruited to be the first full time hand surgeon within the Northwestern Medical Faculty Foundation.

Later to join the full time faculty were Dr. Julius Few who completed his plastic surgery at Northwestern and became an attending in 2000, Dr. John Kim from Baylor and UCLA in 2004, and Dr. Rob Galiano. Dr. Galiano had been a medical student in Dr. Mustoe's laboratory for 4 years, before starting his training at the New York University Division of Plastic Surgery under Dr. Joseph McCarthy.

Over the years, there have been some notable changes within the members of "full-time" and "contributed services" faculty members. Dr. Few left the division for private practice in 2007. Dr. Joseph Daw became a partner for several years to Dr. Lewis, before leaving for the UIC division of plastic surgery. Dr. Michael Lee subsequently joined Dr. Lewis in private practice, before starting a solo practice at Northwestern. Dr. Robert Walton joined the full-time group briefly before resuming his practice at a nearby private hospital. The latest change was the transition of Dr. Neil Fine from a full-time to a contributed services member in 2010.

Funds from the estate of Dr. Orion Stuteville endowed the chair now occupied by Dr. Mustoe. This chair was officially named in January, 2010. After 21 years, Dr. Mustoe stepped down as chief but remains a member of the full-time faculty. Dr. Dumanian was named chief of the division in November 2010.

### **Hand Surgery at Northwestern:**

In 1916, the chairman of Surgery at Northwestern University Medical School, Allen Kanavel, published the first textbook of hand surgery. "Infections of the Hand" that became the standard work in the field for the next 30 years. Kanavel understood many of the concepts of modern plastic surgery, including the use of surgery to treat extremity infections, and writing of the treatment of mandibular osteomyelitis with a pedicled sternocleidomastoid flap.

Kanavel's student and then colleague, Sumner L. Koch, continued the development of hand surgery and founded, at Cook County Hospital, the first hand service in the United States. Another of Kanavel's students, Michael Mason, became Dr. Koch's associate, and they together with Harvey Allen developed one of the world's premier services for hand surgery and the treatment of burns. This group of physicians was later joined Drs. John Bell (a general surgeon) and William Stromberg. The group still exists today as the oldest continuous hand surgery practice, comprised of Drs. Daniel Nagle (orthopedics), Gerald D. Harris (plastics) and Thomas Wiedrich (plastics). Dr. Harris trained at the Buncke Clinic in San Francisco, bringing with him the first microsurgical skills at the institution. Dr. Hampartsoum Kelikian, in Northwestern orthopedics and separate from the hand surgery service, published his treatise in congenital hand surgery in the mid 1970's. Since 1975, the hand service at Northwestern has been a part of the Division of Plastic surgery. Dr. Harris became chief of the service upon Dr. Bell's retirement in 1987. In 2007, Dr. Brian Hartigan (orthopedics) became head of hand surgery education, and that passed on to Dr. David Kalainov with the untimely death of Dr. Hartigan. In 2010, the Department of Orthopedics and Division of Plastic Surgery jointly decided that hand surgery would officially be a combined service between the two disciplines.

### **Plastic Surgery at Children's Memorial Hospital**

In 1953, Dr. Clarence W. Monroe, Professor of Plastic Surgery at the University of Illinois, became chief of Plastic Surgery at Children's Memorial Hospital (CMH), one of Northwestern's main affiliates. He succeeded Frederick Merrifield whose main interests had been at Northwestern's Dental School. In 1957, Dr. Griffith joined CMH as well as the Northwestern affiliate, Wesley Hospital. Dr. Monroe retired in 1974 and was succeeded as chief at CMH by Dr. Desmond A. Kernahan, recruited from Winnipeg to become one of the first surgeons in the U.S. to perform exclusively pediatric plastic surgery. Dr. Kernahan was a New Zealander who had trained in England and had an international reputation particularly for his work with cleft lip and palate patients. He had been chief of plastic surgery at the University of Winnipeg for 12 years before coming to Chicago. When Dr. Kernahan retired in 1986, he was succeeded as chief by Dr. Bruce S. Bauer, a former resident of the Northwestern program. Also on the staff at CMH over the next two decades were Drs. Peter McKinney, Victor Lewis, Jay Pensler, Frank Vicari, Pravin Patel, and Julia Corcoran. Dr. Bauer joined the North Shore Health Systems University and stepped down as chief in 2009. Dr. Arun Gosain assumed the chief role in 2012.

### **Plastic Surgery at the Shriner's Hospital, Chicago Unit:**

A key part of Northwestern's training program since 1970 has been the Shriner's Hospital for Children located on the far west side of Chicago. The distinguished line of chiefs have included Drs. Clarence Monroe, Frank Pirruccello, Martin Sullivan, John Smith, B.H. Griffith, and currently Pravin K. Patel. Tragically, a demented self-proclaimed Neo-Nazi posing as a patient murdered Dr. Sullivan in his office in the mid 1990's. In 2000, the Shriner's Hospital was designated as the Shriner's National Craniofacial Center largely to Dr. Patel's excellent work. For the past several decades, Dr. Mitch Grasseschi, a graduate of our program at Northwestern, has dedicated clinical time at the Shrine. Currently, the academic affiliations of the Shriner's Hospital include Drs. Grasseschi and Dumanian from Northwestern, and Drs. Patel and Morris from UIC.

### **Plastic Surgery at UIC:**

The first plastic surgery training program in Chicago was started shortly after the end of World War II by Paul W. Greeley at the University of Illinois at Chicago (UIC), St. Luke's Hospital, and the VAMC of Hines, IL. Dr. Greeley was succeeded, in turn, by two of his former residents, Dr. John W. Curtin and Dr. Richard C. Schultz. The UIC program was then led by Michael E. Schafer (a Northwestern graduate), and the current chief, Dr. Mimis Cohen.

### **Plastic Surgery at Rush:**

In 1969 the Rush Medical School's charter was reactivated, and Rush Presbyterian-St. Luke's Medical Center split off from the UIC. John Curtin left his position as chief of UIC to become chairman of the Department at Rush. His successors at Rush have been Dr. Randall McNally and the current chief, Dr. John Polley.

### **Plastic Surgery at Loyola:**

For some years, Wayne Slaughter was chief of plastic surgery at both Loyola University in Chicago and the University of Wisconsin in Madison. Dr. Stuteville succeeded Dr. Slaughter at Loyola in 1971 and was in turn succeeded in 1975 by Raymond Warpeha who had had his training at Cook County hospital and at Northwestern. His training included a D.D.S., M.D., and PhD degrees and board certification in general and plastic surgery. Dr. Warpeha was succeeded in 2000 by Dr. Mary McGrath who was for a number of years chief of plastic surgery at George Washington University in D.C. She was the first woman to be chief of Plastic Surgery at an American medical school, the first woman to be elected a director of the American Board of Plastic Surgery, and the first female plastic surgeon to be a Regent and later first Vice President of the American College of Surgeons. More recently, Dr. McGrath was succeeded by Dr. Juan Angelots.

### **Plastic Surgery at the University of Chicago**

For many years Dr. Dallas Phemister was chairman of surgery at the University of Chicago. His successor, Lester Dragstedt, did some plastic surgery, but for many years there was no "real" plastic surgeon at University of Chicago. Most of what plastic surgery was done there by general surgeon, Dr. Hilger Perry Jenkins. The new chairman of surgery at the University of Chicago, Dr. Dwight Clark, wanted to get a division of plastic surgery started. However, Dr. Clark suddenly became ill with hepatitis and died after a terrible eight-month struggle. His interim successor, Dr. William Adams, only a few years from retirement, did not want to initiate any new programs, so no appointment was made.

Eventually, Adams' successor brought Harvey Zarem from Baltimore to be the first chief of plastic surgery at the University of Chicago. A few years later, when Zarem moved to U.C.L.A., Martin Robson replaced him and was in turn succeeded by his former chief, Thomas J. Krizek. In a year or two Krizek was made chairman of surgery at the University of Chicago and he appointed Lawrence Gottlieb chief of plastic surgery. Robert Parsons, and Stuart Landa helped keep the residency program running there until Robert Walton took over as chief a few years later. Raphael Lee ran an active research laboratory. Lawrence Zachary and McKay McKinnon round out the current faculty.

**Chicago Plastic Surgery Organized Medicine Contributions:**

In 1937 the American board of Plastic Surgery was founded. Dr. Sumner Koch was one of the founding directors, the only Chicagoan to be elected a Director until Paul Greeley in 1951, John Curtin in 1970, and B.H. Griffith in 1976.

Since then other Directors of the Board with ties to Chicago have been:

Thomas J. Krizek (1977) of University of Chicago  
Norman E. Hugo (1982) of Northwestern University  
Harvey A. Zarem (1982) of the University of Chicago  
Martin C. Robson (1991) of the University of Chicago  
Stephen H. Miller (1984) of Northwestern University  
Mary McGrath (1989) of Loyola University  
Bruce Cunningham (1996) of Northwestern University  
Peter McKinney (1999) of Northwestern University  
Thomas A. Mustoe (2006) of Northwestern University

Chicagoans who have been Chairmen of the American Board of Plastic Surgery are:

B.H. Griffith (1981-82)  
Martin Robson (1996-7)  
Stephen Miller (1989-90)  
Bruce Cunningham (2003-04)

In December 1965, the Chicago Society of Plastic Surgery was founded for Board-Certified plastic surgeons in Illinois, northern Indiana and southern Wisconsin. The first president was Joseph Rostrubala. In addition to providing a forum for the presentation of clinical and research papers, the society sponsors each year a visiting lecture- ship and a research competition for the residents in the 5 training programs in Chicago.

Many Chicago plastic surgeons have had leadership roles in many national organizations such as:

The American Society of Plastic and Reconstructive surgeons that has been based in Chicago for over 30 years (Presidents Paul Greeley, Norman Hugo and Bruce Cunningham).

The American Society for surgery of the Hand (Presidents Sumner Koch, Michael Mason and John Bell).

The American Association of Plastic Surgeons (Presidents Sumner Koch, Clarence W. Monroe, and Thomas Krizek).

American Society of Maxillo-Facial Surgeons (presidents Richard Schultz and Victor Lewis; Orion Stuteville and Stuart Landa)

The American Society for Aesthetic Surgery (President Peter McKinney)

Plastic Surgery Research Council (Chairman B.H. Griffith)

American Burn Association (President Martin Robson)