

Plastic Surgery

Building upon 100 years of training

Plastic surgery training in Grand Rapids, Michigan began in 1921. Building on experience gained during the first World War, Ferris Smith, MD, began a chain of mentorship and teaching that continues today, 100 years later. While training models and technology have evolved, the focus on clinical excellence and creating a culture of education remains steadfast. Over the past 100 years, Grand Rapids has established itself as a great place to learn plastic surgery.

Before arriving in Grand Rapids, Ferris Smith, MD, an otolaryngologist, worked with Sir Harold Gilles and Drs. Waldron, Sheehan, Risdon and Pickrell in the Gilles Maxillofacial Unit, a hospital developed specifically to treat head and neck injuries encountered during WWI by the Allied Forces. From 1916 to 1918, Dr. Smith practiced alongside Gilles, working 18-hour days to treat soldiers injured in conflict. The specialty of plastic surgery was born during the war, in the use of skin grafts, tubed flaps, rotation flaps, Z-plasties and serial excision of wounds and cancers of the skin.

At the time, plastic surgeons were trained using the mentorship model. A physician would complete medical school training with some surgical training and spend one to three years as a mentee under the guidance of a surgeon who practiced plastic surgery techniques. The mentee would round on all their mentors' patients, see patients in the clinic and observe surgical cases.

After arriving in Grand Rapids in 1918 and establishing the plastic surgery training program, Dr. Smith trained many of the early giants of the specialty; including Clarence Straatsma, MD, Wallace Steffenson, MD, and Reed Dingman, MD, DDS. These trainees helped establish the American Society of Plastic Surgeons and each served terms as president. Dr. Smith was a founding member of the American Association of Plastic Surgeons. Together, these physicians, as well as other trainees, also helped found the Plastic Surgery Foundation and the American Board of Plastic Surgery.

The mentorship model of training continued at Blodgett Hospital into the 1970's under the leadership of Drs. Steffensen and Smith. They trained Mark Gorney, MD, founder of The Doctor's Company, which was developed by doctors to provide physicians with malpractice insurance.

Across town at Butterworth Hospital, Ralph Blocksma, MD, saw the need for a formal residency training program in plastic surgery. His first resident, Sam Noordhoff, MD, completed training in 1967. This residency was one of a few formal plastic surgery residency programs in the U.S. and trained two residents per year, each spending two years training in plastic surgery after three years of general surgery training. Dr. Blocksma's tenure as program director was followed by John Beernink, MD, who carried on the tradition of excellence, training luminaries in plastic surgery such as Robert Mann, MD, Scott Brundage, MD, John Polley, MD, Joe Huntstad, MD, Dennis Hammond, MD, Brad Bengston, MD, and David Fisher, MD. Program leadership transitioned to Steve Ringler, MD, (1997–2009) and then to

Ronald Ford, MD, (2009 to present).

As plastic surgery training and the expanse of plastic surgery procedures grew, the need for a different training model emerged. In 2009, the Residency Review Council, a governing body overseeing all residency programs, made plastic surgery fellowship training three years in length. Alternatively, students could be trained under a new integrated six-year training model.

In Grand Rapids, the six-year training model began in 2011 and has trained 22 residents. These graduates are all board certified and practice in Michigan and several other states, including Texas, Arizona, North Dakota, Indiana and Florida. Many completed advanced training in some of the most prestigious fellowships in the country, including Brigham and Women's Hospital/Harvard Medical School, Manhattan Eye and Ear Institute, The Buncke Clinic, University of Southern California, Baylor College of Medicine, Miami University, the craniofacial fellowship at the University of Michigan and the University of New Mexico. Many former residents now train residents in their own practices across the U.S. and Canada.

As of 2022, the Spectrum Health/Michigan State University College of Human Medicine Plastic Surgery Residency program has 23 faculty, including three pediatric craniofacial plastic surgeons. Many faculty members completed advanced fellowship training in microsurgery, hand surgery or breast and cosmetic surgery. Our core faculty perform more than 7,000 plastic and hand surgery procedures in our community each year. Our residents train with other plastic surgery subspecialists, including oculoplastics, head and neck ENT microsurgeons and dermatology surgeons doing Moh's surgery. Due to the sheer volume and complexity of procedures done in the city and the growth of our faculty, we applied for an increased complement of residents. The ACGME in Plastic Surgery granted us the ability to expand to three residents per year. This growth will occur over the next six years when we will then be fully staffed with a total of 18 residents. We currently have 13 total residents that each spend six years in training. They complete over 18 months of training in general surgery including trauma, surgical ICU, pediatric surgery and oncologic surgery. Our residents graduate with some of the highest numbers of procedures performed of any residency in the country, especially in hand surgery, breast surgery and cosmetic surgery, logging between 3,000 and 4,000 plastic surgery procedures during their training. Our residents cover all facial fracture patients cared for at our Level 1 trauma center, all head and neck reconstruction procedures, as well as about 75% of all hand trauma calls.

Several simulation labs have been integrated into the curriculum, including a full week of microsurgery training and a monthly refresher course in microsurgery. These labs are completed in conjunction with the Michigan State University Grand Rapids Research Center, located within the Medical Mile. This longitudinal training opportunity allows residents to develop microsurgical skills in the lab prior to working in the operating room with microsurgeons. The refresher courses help residents maintain skills throughout training. Other simulation opportunities include an eight-week cadaver dissection course run by PGY-4s that is performed in conjunction with Michigan State University at the anatomy lab in the Michigan State University Secchia Center, also located within the Medical Mile. Additionally, they attend industry sponsored saw bones labs for facial fractures and a cadaver arm course for wrist surgery and nerve surgery. In 2022, our first simulation lab will be opened for cleft lip and palate repairs.

We have built a reputation for clinical, educational and basic science research and our residents and faculty regularly present their original research at local, regional, national and international meetings. Our faculty are nationally and internationally known as thought leaders and experts in breast surgery, cleft lip and palate repair and complex craniofacial reconstruction. Our graduates and faculty have been

instrumental in the development of multiple procedures that have become commonplace and standard of care in our specialty including the SPAIR breast reduction by Dr. Hammond, the Fisher repair technique for cleft lip by Dr. Fisher, buccal flap reconstruction of cleft palates by Dr. Mann, craniofacial distraction by Dr. Polley and the refinement of tumescent techniques by Dr. Hunstad. Key to our excellence is our greatest asset, our residents. We have been able to recruit some of the top medical students in the country to train with us. Our current group of residents come from universities across the country, including Southern Illinois University, Medical College of Wisconsin, Ohio State, Indiana University, University of New Mexico, Wayne State University, Oakland University, University of South Dakota, University of South Carolina, West Virginia University, Florida International COM, and the University of Nevada.

Our residency is diverse—nearly 50% of our residents are female and 25% from underrepresented minorities. This provides us a rich outlook and helps foster a community of constant intellectual discourse.

It is not all work for our residents and faculty. Our program promotes the development of close relationships, friendships and camaraderie during training. Activities such as the annual “Lecture on the Lake” given by Dr. Hammond from his pontoon boat at his summer lake cottage, as well as twice annual resident retreats, and a yearly pool party for new interns, help develop and maintain close bonds between faculty and residents. Residents look forward to the biennial Michigan Academy of Plastic Surgeons meeting on Mackinac Island which is a time of relaxation, respite and interaction with other residents and faculty from the state. Many former residents attend this meeting due to its quality and the opportunity to spend time with previous mentors and co-residents. We pride ourselves on our family atmosphere and the relationships that develop during residency that often last a lifetime.

As we reflect on 100 years of training plastic surgeons in Grand Rapids, Michigan, many things have changed. Looking back through our history, we can appreciate what has remained the same—the drive for excellence, culture of education and that Grand Rapids remains a great place to learn plastic surgery.