

MARY LEE PETERS, M.D.

PLASTIC SURGEON, RESEARCHER, INNOVATOR, THEOLOGIAN, PROGRESSIVE, AND MUCH MORE!

EARLY LIFE

Mary Lee Peters was born in Richmond, Virginia, the third of four children born to Howard and Alice Peters. Her family traced their roots to Revolutionary times and her grandmother was a member of the Daughters of the American Revolution. Alice Peters was a graduate of Roanoke College. Howard attended Princeton Seminary and graduated in 1941. He joined the Virginia Methodist Conference and practiced his vocation for 50 years.

Howard was known for his affable demeanor and for his gifts in composing and delivering his sermons. Howard's father and grandfather both served the Methodist Church. Howard's first assignments were to the remote rural churches of Virginia. His wife, Alice, played the piano and sang hymns. During World War II, Howard assisted the Military by making decedent notifications to families in the remote areas where there was no telephone, telegraph, or home mail service. He said this was the most difficult part of his career.

Howard's uncle was a United States Senator and Howard provided benedictions to the Senate on several occasions. In 1961, Rev. Peters integrated blacks into the congregation – including front-row seating – at the First United Methodist Church in Hampton, Virginia, where his father also had served. He was skillful in leveraging his personal warmth and legacy status at this church to make this work out in a time when it was controversial.

Although an early and strong supporter of racial and social justice, Rev. Peters was not progressive enough on women's issues to suit

his daughters. He said, "I can't lead if I get too far ahead of my congregation." He had a distinguished career and his funeral at age 89 was attended by 23 ministers, many family and supporters from all over the country.

Mary Lee's brother is also a member of the Virginia Methodist Conference. Like his father, he is known as a gifted preacher and for his people skills. Their older sister was a Professor of Music who passed away in Princeton, New Jersey, in 2017. Her younger sister lives in Charlottesville, Virginia.

Mary Lee's uncle, Warren Moorman, M.D., was a plastic surgeon in Roanoke, Virginia. She spent several months training with him, where she developed a deep knowledge of community-based plastic surgery.

EDUCATION

Mary Lee attended public schools in Virginia. Her father's assignments took the family to several Virginia communities. Charlottesville was her home for much of her early education. Mary Lee graduated cum laude with a B.A. degree in 1973 from the University of Virginia in Charlottesville. She received her M.D. at the Medical College of Virginia in Richmond in 1977.

MEDICAL TRAINING

Dr. Peters served her surgical internship at Barnes Hospital of Washington University in Saint Louis, Missouri, from 1977-78 (Fig. 1).



Fig. 1. Mary Lee Peters, MD, at Barnes Hospital, 1977.

She then entered the surgical residency program at Johns Hopkins University in

Baltimore, Maryland (Fig. 2). This was the premier surgical residency in America and known for its rigor.



Fig. 2. Mary Lee Peters, M.D. at Johns Hopkins, 1978.

After completing her residency at Johns Hopkins, Dr. Peters accepted a Commission in the Public Health Service to work at the National Institutes of Health (NIH). She knew Dr. Anthony Fauci during this time and worked as a researcher in the Murray Brennan and Stephen Rosenberg laboratories. Dr. Rosenberg had just become the Director of Surgical Research at the NIH. She remained with the NIH through mid-1981 (Fig. 3).



Fig. 3. Mary Lee Peters, MD, at the NIH with Dr. Rosenberg and research team in 1981.

In 1981, Dr. Peters joined Tufts University in Boston for two years of general surgery training. In 1983, she entered the Plastic Surgery

Residency program at Georgetown University Medical Center in Washington, DC. She graduated as a Plastic Surgeon in 1984. Dr. Peters then completed the Van Beek Microvascular Fellowship in Minneapolis, Minnesota, in 1985.

While with Dr. Van Beek, Dr. Peters performed the first successful double arm reimplantation in an 11-hour surgery. Both arms survived and 8 years later the patient had reasonable function. Dr. Van Beek became very well known for this and ultimately ten successful cases were performed. Dr. Peters provided both television and print media interviews. A newspaper article including detailed drawings of the procedure was published on May 31, 1985 (Fig. 4). Coverage of this medical first was also publicized by the United Press International.



Fig. 4. Dr. Peters' interview for the first double arm reimplantation in 1985.

EARLY PRACTICE

Dr. Peters began her practice in Washington, DC in 1985, as Chief of Plastic Surgery at Washington Hospital Center. She became Board Certified in Plastic and Reconstructive Surgery in 1987.

AWARDS

Dr. Peters was elected to the Aesthetic Society in 1996 in recognition of her knowledge, skill, experience, and interest in aesthetic procedures. She received awards from both the Federal Bureau of Investigation (FBI) and Public Health Service for service to her country. Currently, Dr. Peters is Co-Chairperson of Plastic Surgery at Swedish Medical Center in Seattle, Washington,

and is also a member of the Surgical Quality Committee.

RESEARCH

Dr. Peters' first peer-reviewed publication as a lead author was in 1983 in the *Journal of Parental and Enteral Nutrition*. This study was based on her work on iron supplementation as part of total parenteral nutrition performed at the National Cancer Institute of the NIH in the Murray Brennan laboratory. She also presented "The Origin of Alanine in Human Skeletal Muscle" at the Association of Academic Surgeons in 1981.

Her basic science research projects at the NIH under the direction of Stephen Rosenberg, MD, were the use of a gluconeogenic inhibitor in a rat sarcoma model. The NIH obtained an Investigational Drug Number from the Food and Drug Administration (FDA) for use of this medication in a subsequent human trial. Also, they identified tumor-specific antigens for a mouse sarcoma. This work was an early basis for developing an understanding of the immunology of cancer. This has grown into the field of personalized tumor genetic therapy. Their laboratory also developed a human radioisotope model to define the difference between tumor and normal tissue utilization of several different substrates. This is critical in providing local chemo- and immunotherapy infusions directly into the tissues intraoperatively as part of the surgical treatment of advanced aggressive cancers.

In 1985, as part of the Van Beek laboratory team, Dr. Peters investigated the ability of a prosthetic tissue expander to lengthen peripheral nerves and the effect of nerve lengthening on nerve conduction. This provided the groundwork to allow an extension of nerve repair procedures, making more direct repairs possible. Increasingly, allografts and conduits have replaced the need for autografts and the associated donor-site issues. Tissue expanders have become the accepted reconstructive practice for many plastic surgical needs.

Dr. Peters' most recent peer-reviewed publication, "A Novel Technique in Mentoplasty," was accepted in 2021 by the *Plastic and Reconstructive Surgery* journal.

YEARS OF PRACTICE

After 3 years in Washington, DC, Dr. Peters relocated to Seattle in 1988 and joined the practice of Alfred Blue, M.D. In 2004, she moved her practice to the Cabrini Medical Tower, where she practiced primarily aesthetic surgery until 2015, when she joined Swedish Medical Center. Dr. Peters pioneered chin augmentation and created a face lift technique for reconstruction for skin cancer patients in the critical aesthetic areas. She also innovated several techniques for postpartum aesthetic reconstruction.

Dr. Peters innovated a strategy to improve surgical outcomes by identifying and reorienting negative patient cognitive biases to positive. Also, she was an early proponent of considering the financial toxicity associated with complications of reconstructive surgical care. Her practice emphasizes making choices consistent with patients' positive values.

Dr. Peters was an early adopter of many techniques starting with liposuction and tissue expanders. She used local antibiotic beads as adjunct for breast implant infection control. She also was an early user of tranexamic acid (TXA) to reduce blood loss in major plastic surgery procedures. She has pioneered several aesthetic surgery techniques for patients after massive weight loss and taught at patient seminars.

Dr. Peters is very well-versed on local tissue transfers; later in her practice, she treated a baby with spina bifida using gluteal flap closure immediately after birth. She has been involved in medical education for surgical residents at Swedish Medical Center and the University of Washington.

Dr. Peters is known for the diversity of her practice and her care of many underserved patients. In 2015, she was a founding member of

the Swedish Plastic and Aesthetic Clinic. Dr. Peters had a close working relationship with black breast surgeon Dr. Patricia Dawson. She was a steadfast and consistent supporter of Dr. Dawson's efforts to recognize breast surgery as an equal and yet separate and distinct specialty from General Surgery in 1999. The creation of the Breast Clinic in the True Family Women's Cancer Center in Seattle was a tangible recognition of the progress in women's healthcare. The vision shared by Drs. Peters and Dawson was to provide breast cancer patients and surgeons the recognition and support they deserve. Through consistent efforts on behalf of their patients over many years, breast cancer reconstruction has become the accepted procedure rather than something just offered selectively.

Dr. Peters is a strong supporter and early adopter of an open and affirming approach to patients and staff. The diversity of her patients and clinic staff reflects this approach. Her current practice partners include Black and Latino women plastic surgeons. She was a member of the surgical team that traveled to Honduras providing medical and surgical therapies, including cleft lip procedures, to the underserved. Dr. Peters participated 25 years ago in one of the first same-sex weddings of a life-long friend in Richmond, Virginia.

WOMEN SURGEONS

Dr. Peters created a bond between the women surgeons in Seattle. There were very few female surgeons in the 1980s, and she made it a point to get to know them all. Dr. Peters was a mentor for many. She met most on her own but also got to know some through her cousin, who was one of the first gynecologic oncological surgeons in Seattle. Women surgeons have prospered and are now a robust community in Seattle.

SCHOOL OF THEOLOGY

In 2009, Dr. Peters was awarded a Master's Degree from the School of Theology at Seattle University after several years of course work in conjunction with her busy surgical practice. She

maintains a large library of philosophical and theological books and participates in a weekly study group.

PERSONAL INTERESTS

Mary Lee Peters has enjoyed a fulfilling life as a mother, grandmother, daughter, spouse, aunt, and sister (Fig. 5).

Fig. 5. Photo of Dr. Peters as a mother 1989.



She has been a long-term supporter of the Seattle Opera and is known for her interest in cooking. She socializes with friends and colleagues over cooking and maintains a large

personal collection of cookbooks. She attended cooking school in Italy with her daughter, who is an entrepreneur.

Dr. Peters also has a deep interest in art. Her son-in-law is a well-known art broker. Mary Lee has also been known for her interest in photography and film. Her son is a filmmaker, and she has maintained digital photos of her own patient work for many years.

She also has participated in several marathons (Fig. 6) and enjoys teaching her granddaughter about nature while growing vegetables and herbs in her home garden.



Fig. 6. Dr. Peters and her daughter after a marathon.

Dr. Peters' husband is an orthopedic surgeon and implant designer. One of the important concepts in knee replacement implant design is named after her (MLP-Medial or Lateral Pivot Design; *Journal of Bone and Joint Surgery*, 2003) (Fig. 7).

Fig. 7. Dr. Peters with her husband, 2019.



