

Institutional Profile

The University of Oklahoma College of Medicine Department of Surgery: Indian Territory to the 21st Century

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The Surgery Department of the University of Oklahoma College of Medicine is profiled in this article, including history, goals, opportunities, and demographics. Our research programs, clinical resources, teaching hospitals, and faculty diversity are reviewed. The local and national contributions of our faculty members and 212 chief residents who have completed our program are enumerated.

THE UNIVERSITY OF Oklahoma was founded in 1890 at Norman, Indian Territory. The University's first venture into medical education began as a 2-year basic sciences curriculum in 1900. The founding dean of the "Medical Studies Program" was Dr. Lawrence Upjohn who remained as Dean until 1904 when he left Indian Territory to join his father and uncle in a small pharmaceutical company in Kalamazoo, MI. The Executive Dean of the University of Oklahoma Health Sciences Center occupies the Lawrence Upjohn Chair in Medicine.

The fledgling medical college remained as a 2-year basic sciences program with clinical studies at other medical schools until 1910 when a 2-year community-based clinical teaching program was established in Oklahoma City.¹

The medical college continued as a "Class B" (probationary) school until 1919. A new era in the development of the medical college began in 1915 when Dr. LeRoy Long became Dean and Chief of Surgery (Fig. 1) following an agreement with the Governor that a university teaching hospital would be constructed. The Governor kept his promise by removing \$220,000 from the construction budget of the state capitol stating that "Oklahoma needs a university hospital more than it needs a dome on this capitol."² The University Hospital was completed in the fall of 1918 and the medical college became a "Class A" school in the spring of 1919. (The dome on

the Oklahoma State Capitol was completed in 2000 at a cost of \$22.5 million.) Dr. Long became a Fellow of the American College of Surgeons in 1913, the year of its founding.

In Indian Territory and the early years of Oklahoma statehood (46th state, 1907), medical credentialing was problematic. To assure competent care for their personnel, the railroad companies established hospitals and imported reputable physicians, including Dr. Long, who were referred to as "railroad surgeons."³

Dr. Long established a new level of surgical care, although clinical teaching⁴ at the medical school continued to be primarily community-based.

The first surgery resident was appointed in 1920 and this began what we consider to be a rich tradition in surgical education.

In 1928, the basic sciences building and Crippled Children's Hospital (so called because polio rehabilitation was a major purpose) were completed in Oklahoma City, and all 4 years of the medical college were moved to the Oklahoma City campus. The clinical years remained largely community-based until 1956.

The first full-time chairman of the Department of Surgery, Dr. John A. Schilling, arrived in 1956 (Fig. 2). Dr. Schilling was a graduate of Harvard Medical School where he was president of his senior class. He trained in surgery at Roosevelt Hospital in New York City and was on the surgery faculty at the University of Rochester before his tenure at Oklahoma.

Dr. Schilling was widely published and recognized as a researcher in wound healing. He remained at the University of Oklahoma from 1956 to 1974 when he joined the surgery faculty at the University of Washington, where he subsequently became chairman.

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FIG. 1. LeRoy Long, M.D.



FIG. 2. John A. Schilling, M.D.



FIG. 3. G. Rainey Williams, M.D.



FIG. 4. Russell G. Postier, M.D.

Dr. Schilling's first faculty was a remarkable group of young surgeons who were obviously "upwardly mobile." All were Markle Scholars⁵ with varied research interests. Four of the first full-time faculty became departmental chairmen and one became founding Dean at the University of Arizona College of Medicine. University of Oklahoma surgery faculty members and residents have been active both locally and nationally in surgical education and surgical organizations.

The following is a summary of faculty activities over the years: President, American College of Surgeons, 1; Chairman, American Board of Surgery, 3; Vice Chairman, American Board of Surgery, 1; President, Southern Surgical Association, 1; President, Southwestern Surgical Congress, 3; Governors, American College of Surgeons, 8; Medical School Deans, 2; Undersecretaries, Health, Education, and Welfare, 2; Surgery departmental chairmen, 9 at 11 universities; Pediatric Surgery academic chiefs, 2; and Shock Society Presidents, 3.

In 1974, Dr. G. Rainey Williams (Fig. 3) succeeded Dr. Schilling as Department of Surgery Department chairman. Dr. Williams was a graduate of Northwestern University School of Medicine and had trained in surgery at Johns Hopkins during the Blalock years.

Dr. Williams had a long and distinguished tenure as chairman. In addition to many other achievements and honors, Dr. Williams was a member of the Johns Hopkins Society of Scholars, elected to the Oklahoma Hall of Fame, and was President of the Southern Surgical Association. Dr. Williams served as chairman

until 1996 when he retired as a result of ill health and subsequently died in 1997.

Dr. Russell G. Postier became Interim Chairman in 1996 and Chairman in 1997 following Dr. Williams' death (Fig. 4). Dr. Postier is a graduate of the University of Oklahoma College of Medicine and trained in surgery at Johns Hopkins Hospital. He is regarded as the regional expert in pancreatic/biliary surgery. He has recently completed his tenure as Chairman of the American Board of Surgery. It is remarkable that the department has had only three chairmen dating back to 1956.

The mission of the University of Oklahoma Department of Surgery is: "To improve the health of all people, to deliver excellent, innovative patient care, and to educate physicians and surgeons for the future." Our core values are: 1) compassionate respect for all with whom we work; 2) commitment to excellence in all our endeavors; 3) honesty, integrity, and ethical behavior; and 4) to foster creativity, innovation, and research. Our specific areas of focus are education, clinical care, and research.

Our three teaching hospitals are on the same campus connected by all-weather walkways. The Oklahoma City Veterans Affairs (VA) Hospital is a "Dean's Committee" hospital, which was completed in 1952 and has markedly expanded since that time. The VA encompasses all surgical specialties, including cardiac, and is a major asset to our teaching programs. A bed capacity of 170 active beds and a huge outpatient population provide a wealth of surgical patients requiring a broad spectrum of care. Approximately 950

general, cardiothoracic, and plastic surgical procedures are performed annually by our residents with careful attending oversight.

The Pediatric Surgery residency was approved in 1978 with Dr. Ide Smith as the first chief. He was followed by Dr. William Tunell from 1986 to 1996. Dr. David Tuggle is currently the chief of Pediatric Surgery with three additional faculty pediatric surgeons. The Pediatric Surgery residency accepted one resident every other year until 2006 when they began accepting one resident each year. A total of 1702 surgeries was performed during the past academic year. Nineteen residents have completed the Pediatric Surgery residency, 10 of whom are on university faculties and two of whom are chiefs of pediatric surgery residencies. The Children's Hospital has recently moved into a completely remodeled, state-of-the-art facility. The hospital has 322 beds and 72 bassinets.

In 2001, our Medical Center was certified as the only Level I trauma center in Oklahoma. The Trauma Service has five faculty members, including the chief of service, Dr. Roxie Albrecht. The Trauma Service is remarkably busy with 2,361 admissions and 11,016 trauma-related emergency department visits during the past academic year. The trauma center is located at our third teaching hospital, Presbyterian Tower. Presbyterian is a 357-bed hospital for trauma and adult services with an adjacent outpatient clinic facility.

The Department of Surgery has six endowed chairs totaling \$9 million. One of our valuable resources is the departmental library, which is readily available to faculty and residents and which is staffed by a librarian who occupies an endowed chair.

The Department of Surgery has long had a major program in surgical research, starting with the first full-time chairman, Dr. Schilling, and continuing to the present. Notable surgical researchers have included Dr. Schilling, Dr. Lerner Hinshaw, Dr. Lazar Greenfield, Dr. Ronald Elkins, Dr. Larry Pennington, Dan Brackett, and Megan Lerner. Of note, the Greenfield vena caval filter was developed by Dr. Greenfield while he was on the faculty at the University of Oklahoma. Dr. Hinshaw did much of the seminal work in sepsis and shock focusing on the role of steroids in its treatment. In addition, Dr. Greenfield did extensive research in the field of shock physiology using pulmonary artery catheters when they were initially introduced into clinical use. The current basic research efforts of the department focus on pancreatic and other gastrointestinal cancers. The clinical research program focuses on surgical infection and inflammation in trauma patients and is headed by Dr. Roxie Albrecht, Chief of Trauma Services.

Beginning in 1952, our surgery residency has accepted four categorical residents each year. In 2009,

we increased that number to five. Since the advent of our full-time faculty in 1956, 212 chief residents have completed surgical training at Oklahoma. Research is encouraged but not required and most of our residents take advantage of our own research resources, although some go to other institutions for varying periods of time. In addition to trauma surgery, we consider laparoscopic, vascular, plastic, pediatric, cardiothoracic, and endoscopic experience to be integral to our training program.

Recently, a state-of-the-art surgical simulation laboratory was completed on our campus, which will contribute significantly to the development of surgical skills of both residents and students. The simulation laboratory includes a DaVinci Robotic Surgery System identical to the system in our main operating suite at Presbyterian Tower.

The construction of a comprehensive cancer center was begun in 2008 with completion scheduled for 2010. This facility will add additional surgical oncology experience as well as additional surgical faculty. This will be the only comprehensive cancer care center in Oklahoma City.

We currently have 23 general surgery residents in our training program from 14 different medical schools. Eight are female and 15 are male. The University of Oklahoma Health Sciences Center currently has 469 residents and fellows in 60 medical disciplines.

We consider diversity in resident training, case load, surgical interests, and faculty stability to be major positive factors in our residency program. The surgical case loads at the three teaching hospitals (Presbyterian, Children's, and VA) consistently meet and exceed Accreditation Council for Graduate Medical Education requirements.

During the academic year 2007–2008, 3237 general/vascular surgeries were performed as well as 1702 pediatric surgeries, 897 plastic procedures, and 749 cardiothoracic surgeries. All of these were operating room cases. Each hospital has an active minor surgery clinic as well.

Since the selection of the first surgical resident in 1920, the University of Oklahoma Department of Surgery has been a major source of surgical care in Oklahoma. We have been careful to avoid becoming "provincial" by recruiting a diverse faculty and by resident selection. We are pleased, however, when our own outstanding students select our residency program for their surgical training. Our residents who want to pursue fellowship training have been selected by many nationally recognized programs, which our faculty regard with pride.

The University of Oklahoma Health Sciences Center (Fig. 5) strives to create an ambience that includes the



FIG. 5. University of Oklahoma Health Sciences Center.

latest technology, research opportunities, and accessible attending consultations, both formal and informal. Ours is a proud tradition dating back to Indian Territory with the firm conviction that we will build on our heritage.

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