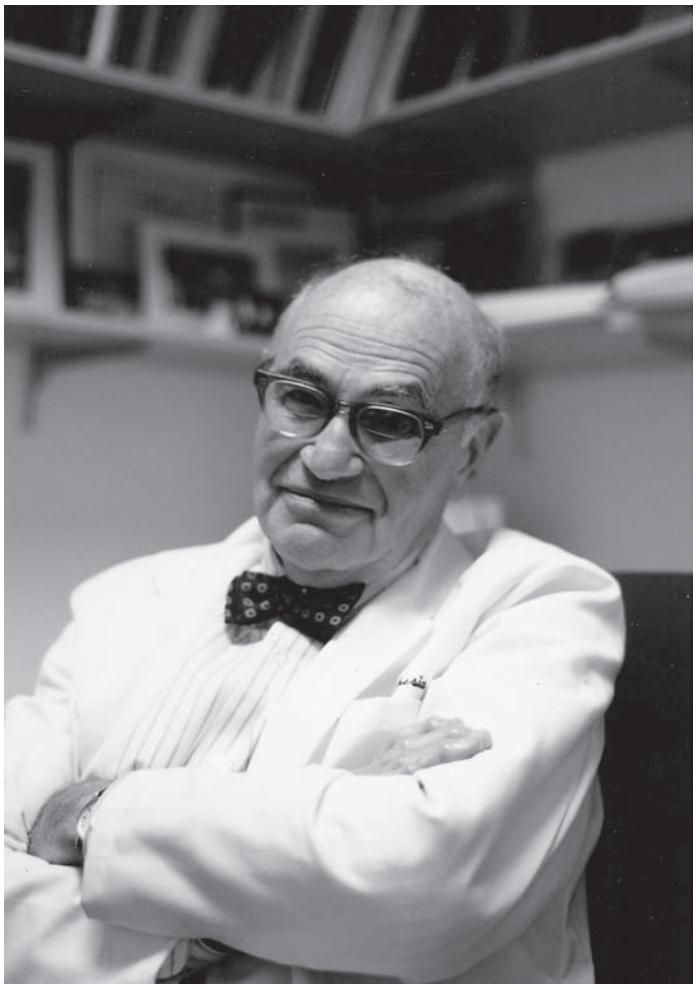
THE FACULTY OF MEDICINE
Harvard University

Leroy D. Vandam



Leroy David Vandam, M.D., the first Harvard Medical School Professor of Anesthesia at the Peter Bent Brigham Hospital, now Brigham and Women's Hospital, died April 8, 2004 in Needham, Massachusetts in the 90th year of his life.

Roy, as friends knew him, served as Anesthetist-in-Chief at Brigham and Women's from 1954 to 1979. For more than a half century his scholarly achievements and distinguished service in anesthesiology were essential components in the maturation of the specialty to the position it now comfortably occupies at the high table of academe.

Leroy Vandam justly merits the accolade of 'Great' in the specialty he helped define, a distinction accorded to few, arguably less than a dozen. These individuals' superlative scholarly and organizational achievements, amplified from the podia of their respective universities, provided both engine and example that saw the science and art of anesthesiology come of age as an academic discipline.

The limits of a brief memoir interdict the citation of but a few of Vandam's accomplishments. At HMS/BWH he served on or chaired, among others, the HMS Committee on Admissions, Committee on Human Studies, Standing Committee on the Countway Library, Conflict of Interest Committee, Department of Anesthesia and the Committee to Consider the Organization of the Department of Anesthesia. The latter led to the creation of an autonomous Department of Anesthesiology at HMS on October 17, 1969. Because of his long tenure as the most senior of anesthesiologists, he was often referred to as the 'Dean' of anesthetists at Harvard, a distinction he rather enjoyed.

As a life-long scholar, he valued his appointment as Trustee of the Boston Medical Library as among his most satisfying, serving two terms as President, the first from 1979 to 1982 and again from 1982 to 1985. During his tenure, the BML won an NEH challenge grant to support book restoration and solicited a major gift from the Eleanor Naylor Dana Charitable Trust. He was instrumental in securing the William

Gordon Lennox collection of books on the history of epilepsy and in establishing the Franc D. Ingraham Memorial Book Fund. Vandam, always the frugal one, also introduced better financial accountability and revised the BML's investment policy.

Roy also served nine years as Trustee of the Wood Library-Museum of Anesthesiology, the world's largest anesthesia museum/library, contributing for many years thereafter to the publication of more than 25 annual editions of anesthesia history.

The world of organized medicine and science often tapped Vandam's talent and energy. After a period with the World Health Organization, he chaired the Advisory Panel of the U.S. Pharmacopoeia, and was a member of the editorial boards of nine major journals, among them *Survey of Anesthesiology, Clinical Pharmacology and Therapeutics, New England Journal of Medicine* and the *Journal of Clinical Anesthesiology*. He served as Editor of Anesthesiology, now the specialty's most prestigious journal, from 1962-1970, transforming it from a trade publication featuring medical case reports and descriptive clinical studies into, in his own words "a truly scientific and medical resource." Those were the years—at the hospital in which he fully matured as an administrator, mentor, and ambassador of the specialty—in which he was engaged in the Herculean task of transforming a service-only division of the surgical services into a thoroughly professional and independent department committed to the educational and research mission of the academic enterprise.

In Washington, he chaired the National Academy of Science's Committee on Anesthesia of the Medical Research Council from 1965-1970, and served on the National Institute of Health's Training Grant Committee for Surgery, Radiology and Anesthesiology as well as the Pharmacology and Toxicology Training Grant Committee from 1963-1966.

Roy Vandam's contributions to and recognition by the American Society of Anesthesiologists are legend. He received its highest honor, the Distinguished Service Award, in 1977. He delivered the society's most prestigious oration, The Rovenstein Lecture, in 1979.

Leroy David Vandam was born at home, in New York City, on January 19, 1914. He was the only son and the second of three children born to Esther, a homemaker, and Albert Vandam, a self-made man and owner of a successful textile business. As was the case with so many of his generation, he chose to minimize the influence of both his Jewish heritage and his early life experiences, especially in the milieu of Harvard, its teaching hospitals, and the social climate of the day. His son, Albert, writes, "In today's parlance, Roy was a prodigy, jumping from the 5th grade to an exam-required, very progressive preparatory school, Townsend Harris Hall. Among his classmates were Cornell Wilde, Herman Wouk, and Jonas Salk. He entered Brown University at age 16, undertaking a rigorous pre-medical curriculum with high honors as a Francis Wayland Scholar for consecutive Dean's List participation in addition to achieving both the Phi Beta Kappa and Sigma Xi distinctions." His last two summers as an undergraduate were further enriched by the study of invertebrate biology and biophysics at the Cold Spring Harbor on Long Island, New York.

During these years he also developed an artistic side that he would continue to hone throughout his life. He had, by all accounts, a natural talent and was deeply drawn to art as a possible career. By his own admission, his mother prevailed on him to follow medicine, and art—perhaps his true love all along—became his avocation.

Both medicine and art occupied Vandam during his years at NYU Medical School. During his first two summers of training, he escaped academic work for classes at the Art Students League of New York, where he studied drawing, etching, lithography and composition. Notebooks and single sheets preserved from that era show the detailed attention and representational fidelity that would so beautifully enhance his early watercolors. He spent one summer session studying pathology at Bellevue Hospital and filled a notebook with drawings of cadavers. His interest in pathology continued after graduation, when he accepted a residency at Boston's Beth Israel Hospital. This period witnessed his singular growth as both an artist and researcher. He was, among other things, drawn to the graphic illustration of coronary arterial circulation and its demonstrated pathologies revealed by anastamoses. This was part of a general effort to demonstrate the presence of anastomoses in the cerebral arteries in particular, as his then mentor, Professor Monroe Schlesinger, had shown in human coronary circulation in patients suffering from atherosclerotic occlusion. Though the study produced no positive findings, Roy's interest in this project can profitably be seen as an ambitious attempt to find fusion between his medical and artistic sides.

In 1940, Roy switched fields. He entered a surgical residency at Beth Israel Hospital and distinguished himself by becoming Chief Resident in 1942. At the urging of a surgeon, Dr. Charles Mixter, he joined the Army Medical Corps that same year and was assigned to the 4th Auxiliary Surgical Group at Lawson General Hospital in Atlanta. Not long after, he received a medical discharge due to a deteriorating eye condition that would lead, after two years of recurring ocular hemorrhages deemed to be tuberculin-related, to the tragic loss of his left eye.

This loss had a profound influence in his personal life and professional career. While a patient at Hopkins' famed Wilmer Eye Institute for tuberculin desensitization, Roy was given an appointment as a Research Fellow. He became deeply involved first with research in pharmacology and then cardiac physiology, and it was here that he encountered the Chief of Anesthesia, Austin Lamont, M.D., who influenced his eventual entry to anesthesia. Gary Strichartz, a close professional colleague of Vandam's, characterizes his early research work as an investigation of "…some putative 'long-lasting local anesthetics' in rabbits, giving the first hints about his next major research area. All the compounds turned out to be neurotoxic, causing microscopic nerve lesions, as reported in his first two papers published in *Anesthesiology*." Roy also became closely allied with the vascular and cardiac research of Alfred Blalock and others. Ironically, Blalock, Chief of Surgery at Hopkins, opposed the formation of an academic department of anesthesia, so Lamont departed for the University of Pennsylvania. This left Vandam stranded at Hopkins as a research fellow. He began new work on catheterization of human vessels, joining with Richard Bing in order to better understand, and to correct surgically, the pathology of coronary artery malformations. Vandam further became involved in a series of novel studies of human cardiac function, calculating cardiac output with catheters for invasive intravascular pressure, gas analyses for oxygen and CO2. Studies of the various modes of cardiac shunting provided material for seven publications on various aspects of this subject in 1947, all applying sound principles of physiology and physics to the understanding of cardiac malformations and the remarkable intrinsic compensatory responses that kept humans alive. These measurements, assuredly, gave Blalock great insight into his pioneering approaches to the surgical cure of congenital malformations.

In 1949, Vandam matriculated from Hopkins to the more anesthetist-friendly environs of Philadelphia, where he and Professor Robert Dripps published an article in *Circulation* on the anesthetic management of patients with heart disease.

Roy's interest in the neuropathological actions of local anesthetics was reborn after the move to Penn. Sent by Dripps to Bellevue to attend a course on nerve blocks (for the relief of chronic pain) taught by E.A. Rovenstine, he returned to establish a pain therapy clinic with James Eckenhoff, beginning a collaboration and close friendship that was to last throughout their lives. A neurologist at Cornell had raised concern about the neurological sequelae of spinal anesthetics, and Vandam and colleagues began a four-year prospective study of the complications of spinal anesthetics. Concern about the very same issue has recently arisen again, and the early work of Vandam and Dripps on 10,098 spinal anesthetics, and of Vandam and E.J. Wolley on a similar concern regarding brachial plexus blocks, is still quoted as evidence for the great safety of such procedures when the correct methods are followed.

The Vandam family, wife Regina and sons Albert and Samuel, spent the early 1950s in Pennsylvania, Roy honing his skills as a working clinician, researcher, and academician. Albert reports that Roy "…would spend six and a half days each week at the hospital, where the surgical schedule required anesthesia coverage on Saturday mornings. He would don a bow tie and jacket for a formal midday Sunday dinner at home, this being perhaps the one time that the family could count on being together."

The picture that emerges of Vandam after he became the Chief of the anesthesia service at Peter Bent Brigham Hospital in 1954 highlights every aspect of his delightful (though somewhat forbidding) presence. He taught by example, a trait recognized by family, friends, and colleagues: on weekdays, writes his son Sam, "He was off to the Brigham before anyone else was awake, even after a winter storm; weekends always ended with a Sunday evening visit to counsel his patients on the schedule for Monday." And Elliott Miller, a former resident, echoes delightfully that he "…prided himself greatly in being the first at work in the morning. His mood was elevated to ecstasy on snowy mornings when his competitive colleague, Surgeon-in-Chief Francis Moore, was unable to get out and resorted to calling Roy for a ride! No matter how bad the weather might be, residents and staff who were late usually received a scolding or at least a strong look."

Vandam's time at the Brigham was characterized by his desire to bring a new distinction to the nature and practice of anesthesiology, a task he undertook at the expense of his own research. The effort to create an independent academic department from a clinical service associated with surgery was not unique to the Brigham but was underway in most major medical centers in the USA. But it took longer and was much more difficult at the Brigham because of firmly held beliefs of the senior surgical leaders. He concentrated his efforts on building his residency program into one of the best in the country, attracting young men and women who would become, under his tutelage and with his continued guidance, outstanding scholars, teachers, researchers, and leaders in an increasingly complex medical and scientific world. He was most proud of the many who achieved academic excellence as deans, chiefs and professors.

Roy was as engaging as he was gutsy. He was a gracious host to the many guests he invited home and came to see his department as an extension of his family, but he was always exacting in the clinical setting. Indeed, says Miller, "Roy had such a powerful and strong personality that he evoked a wide diversity of responses from other people. He was uncompromising in his defense of the rights, safety and needs of patients. And he stood by his residents. If a surgeon said he did not want a particular resident, that resident would be assigned to that surgeon's cases with Roy himself as staff-visit in the same room!"

In settling in to his life and work at the Brigham, Roy again found time for his painting. During summer

vacations in New Hampshire and later in Maine and on Nantucket, he rediscovered and more painstakingly explored his gift for and commitment to watercolor. But despite becoming a highly reputed watercolorist, he never seemed satisfied with any of his paintings. Gary Strichartz, Roy's associate and an artist in his own right, notes that his early work from this period "…is highly representational, composed with a painterly eye and engaging large panoramas of mountain or shoreline." Later on, "Structures become the dominant objects in the field, their roofs and corners set at rakish angles to emphasize their struggle upward from the earth." Roy often focused on buildings of historic interest, such as the birthplace of W.T.G. Morton, the Boston dentist who 'discovered' general anesthesia. "In this way Vandam integrated his love of art with his evolving interest in the history of anesthesia." Roy's elegantly spare illustrations added greatly to early editions of his book, *Introduction to Anesthesia*, first published in 1957 and still considered a standard text for residents. Four times, his paintings graced the cover of JAMA, a spot usually reserved for works from an artist with historical credentials. In Roy Vandam, it seems, art and anesthesia were wed forever.

Vandam's legacy will always rest in the strength of mind and constancy of heart that generated seminal research on a major anesthetic technique, spinal anesthesia, produced a basic textbook, *Introduction to Anesthesia*, now in its 9th edition, and created many of the specialty's academic leaders that are widely held in large measure responsible for the maturation of the profession as a distinguished and learned discipline.

If Roy thought highly of himself, if he thought himself a consummate clinician in and around Harvard and its exemplary hospitals, if he spoke with an occasional note of derision about those of whom he thought little, it is because he earned, by his passion and principles, the right to do so. He took the greatest satisfaction in his skills as a clinician. Though the list of those he anesthetized included Robert Frost, the King of Saudi Arabia, and the recipient of the first renal transplant, he was most pleased when asked to provide anesthetic care to members of the Brigham and Harvard communities.

In his Rovenstein Lecture, he said, "A clinician is a doctor of patients and their illnesses, someone who derives satisfaction and moral uplift in understanding them; and because of the perceptive, gentle care bestowed, engenders the same feeling in those treated." And that comment can just as well be applied to his students, colleagues and friends: we have a great sense of satisfaction and moral uplift from having known a "Giant" in our time, Leroy David Vandam, MD.

Respectfully submitted,

Albert Vandam
Samuel Van Dam
Elliott Miller
Gary Strichartz
Richard Kitz, *Chairman*