

WILLIAM VARE SHAW, M.D. 55

William Vare Shaw, M.D., died Monday, July 30 in Alexandria, Virginia. He was 85. A native of Philadelphia, he developed into a major force in the nascent world of international molecular biochemistry in the second half of the twentieth century.

He began as a chemistry prodigy at Williams College, a rising star in internal medicine at Columbia University's College of Physicians and Surgeons, and then became the protégé of Dr. Donald Frederickson at NIH (later its legendary director and the founding head of the Howard Hughes Medical Institute).

In 1969, Dr. Shaw proposed the creation of a new biomedical center at the University of Miami as a joint venture with the British Laboratory for Molecular Biology (LMB) at Cambridge University. The LMB was the creation of the Medical Research Council (MRC), the UK's NIH, and has produced some 16 Nobel laureates from its unique organizational nexus: The LMB is an international fraternity of scientific excellence, with Nobel prizes as byproducts of its mission.

Shaw began the British chapter of his life by taking a year's sabbatical at the LMB at Cambridge, but when US funding for the venture fell through, he became a permanent and integral part of the LMB and gradually became a driving force in the Medical Research Council's leadership in biochemistry.

Shaw had the luck to arrive at the LMB in the dynamic afterglow of its twin Nobel Prizes in 1962, with the Nobel recipients Francis Crick, Jim Watson, John Kendrew, and Max Perutz still in residence there, and with Perutz, its founding director and its first chairman, as Shaw's mentor. Those associations made an expatriate of Shaw for the next thirty years, but put him at the very pinnacle of molecular biology.

The Medical Research Council funded the entire spectrum of medical sciences, not only at the LMB and its associated institutions, but in universities and hospitals across the UK. That fact opened the way for Dr. Shaw to make his greatest contribution to the world of molecular biology: The creation and development at the University of Leicester of a new biochemical center to rival Oxford and Cambridge.

Sir Hans Kornberg, the founding professor of biochemistry at Leicester, was also a member of the LMB, and he brought Dr. Shaw to Leicester to become his successor and the implementor of his vision for the university.

Shaw also became the driving influence at Leicester behind the creation and growth of new research areas, most notably in the application of biophysical methodologies such as NMR, rapid reaction kinetic methods, and x-ray crystallography to biology, which established biochemistry as the key strength of the university's research portfolio. He also planted the research seeds that led to the creation of the Henry Wellcome Laboratories of Structural Biology and, more recently, the Leicester Institute of Structural and Chemical Biology.

Shaw's appointment as professor of biochemistry was only the first step. Five years later, Leicester, with the support of the MRC, became the first university to found a new medical school in the UK since WWII and made Dr Shaw one of its founding figures. When he retired in 1998, the University of Leicester had become a biochemistry juggernaut and a serious competitor to Oxford and Cambridge. Shaw was seen as "a true visionary who recognized that biochemistry as a discipline was changing and that the department needed to mirror these changes by expanding into areas such as structural biology and molecular biology."

His mid career movement from clinical medicine to biochemistry gave him a unique professional formation within the British scientific world: His successor at Leicester pointed out that he was not only an exceptional academic biochemist, but was, unusually, in British terms "medically qualified, and in his earlier days of clinical practice in America had witnessed first hand the amazing curative properties of antibiotics. Given his profound earlier experiences it was perhaps not surprising that Bill Shaw dedicated much of his scientific career to understanding the molecular basis of anti microbial resistance and the rational design of new antimicrobial agents".

One of his star students added an apt footnote, saying that that Dr. Shaw's research was way "ahead of his time. His passion was for understanding antibiotic resistance in bacteria, which was not then recognized as a major biomedical problem. Today you read about little else in the mainstream science media." His gentle humility left his considerable accomplishments relatively unheralded in his own country.

An American friend nonetheless wrote what should be Dr. Shaw's epitaph: "He was a real apotheosis of clinical medicine who transcended its horizons and became a significant player in the world of its parent discipline, dedicated to tirelessly pushing the frontiers of molecular biochemistry."

Dr. Shaw is survived by a younger brother, Dr. John A. Shaw, of Chevy Chase, Maryland; two sisters/cousins Susanne Vare Hulme and Mary Read "Mimi" Hulme O'Malley of Newtown Square, Pennsylvania; two cousins, Maj. Gen. (ret'd) O.L. Peacock of Cashiers, N.C, and Ida May Peacock Terry of Vero Beach, Fla. Five children; Lisa M. Shaw of Barcelona, Spain; William Scott Shaw, and Thomas Vare Shaw of Alexandria, Virginia; Kathryn Shaw Patterson of Brookline, Massachusetts, and Joanna Shaw of Leicester, England, and nine grandchildren. His marriages each ended in divorce.

A memorial service will be held in Chevy Chase, MD in late September, and his ashes scattered by his family on the waters of his beloved Penobscot Bay in Maine with the coming of spring.