Neal Nathanson, Microbiology

September 6, 2022

Neal Nathanson, the former chair of the department of microbiology in the Perelman School of Medicine as well as its former associate dean for global health programs and Penn's former vice provost for research, passed away due to complications of leukemia and pneumonia on August 11. He was 94.

Born in 1927, Dr. Nathanson earned a BS in biochemistry from Harvard University in 1949, then a medical degree, also from Harvard, four years later. He then completed his residency at the University of Chicago. To satisfy his military service, he led the Polio Surveillance Unit at the agency that would later become the Centers for Disease Control, where he helped increase the safety of early polio vaccines. He served for two years in the military as an epidemic intelligence service officer, then moved to Baltimore in 1957 to begin postdoctoral study in virology at the School of Public Health at Johns Hopkins University. He remained at Johns Hopkins until 1979, where he rose to become the head of infectious diseases in the department of epidemiology.

In 1979, Dr. Nathanson joined Penn's School of Medicine faculty as chair of the department of microbiology. At Penn, he rose to prominence for his definitive work on the epidemiology of polio. Among his important contributions to the field were his delineation of the two major routes by which poliovirus could be disseminated in its host, the introduction of immuno-suppression to understand the role of the immune response in recovery from primary viral infections, the demonstration that lymphocytic choriomeningitis could be prevented or enhanced by immune manipulation, and the detailed genetic analysis of bunyavirus virulence. He did some of the first studies of the visna virus of sheep, the prototype of the lentiviruses, of which the AIDS virus is another member, and conducted NIH-funded research on the methods by which HIV causes disease.

At Penn, Dr. Nathanson was a staunch advocate for women. In 1980, he hired Susan Weiss, who was the second woman to join the microbiology department. “He was really a great mentor to me for many years,” Dr. Weiss said.

“At the time when he hired me in 1980, no one thought coronaviruses were very interesting or important, and he believed in me.” Dr. Nathanson advanced through the ranks at Penn, taking emeritus status in 1995. That same year, he took a position as the School of Medicine's vice dean for research. In 1998, he was named director of the Office of AIDS Research of the National Institutes of Health (Almanac May 19/26, 1998 (https://almanac.upenn.edu/archive/v44n34/052698b.html)). Dr. Nathanson brings a powerful scientific intellect, great compassion, and long administrative experience to the task of leading the NIH AIDS research program at this critical time,” said NIH director Harold Varmus. At the NIH, Dr. Nathanson led an office that coordinated scientific, budgetary, legislative, and policy elements of the NIH AIDS research program.

After serving at the NIH for two years, Dr. Nathanson returned to Penn as the vice provost for research (Almanac November 14, 2000 (https://almanac.upenn.edu/archive/v47n12/111400.html)), “President [Judith] Rodin and I are thrilled that someone of Neal's stature will head our research efforts,” said then-Provost Robert Barchi. "I can't think of anyone with a better combination of world-class personal research, and science policy experience at the national and local level, to lead our research efforts in the near-term." While he was in this position, the departments of microbiology and neurology endowed a lectureship in his honor (Almanac February 5, 2002 (https://almanac.upenn.edu/archive/v48/n21/Nathanson.html)). At Penn, Dr. Nathanson oversaw an over-$500 million research enterprise and played a central role in Penn's research-related strategic planning for research, including assisting in the transfer of new technology from the research laboratory to the public.

In 2003, Dr. Nathanson retired from the Provost's Office and returned to being a professor emeritus of microbiology. In what he jokingly called his "fourth retirement," he also focused on his affiliations with numerous scientific societies. He continued pouring time and effort into his teaching, winning the Perelman School of Medicine's Special Teaching Award in 2014 (Almanac April 29, 2014 (https://almanac.upenn.edu/archive/volumes/v60/m32/pdf/042914.pdf)), and also served as PSOM's associate dean for global health programs from 2004 to 2014. Outside of his Penn responsibilities, Dr. Nathanson also served as the president of the American Epidemiological Society, an editor of Epidemiologic Reviews, and the founding editor of the American Journal of Epidemiology at Johns Hopkins University.

“He was an irascible iconoclast,” said former colleague Glen Gaulton, the vice dean and faculty director of the Center for Global Health at Penn. “He had his way of doing things, and I have to say, he was right 99.9% of the time. He was completely without artifice; he just did what he thought was right.”

He is survived by his wife, Valerie Epps; his daughter, Katherine Nathanson, the Pearl Basser Professor in the Perelman School of Medicine; his first wife, Constance; his brother, Larry; his sons, John and Daniel; and seven grandchildren. Memorial services will be held in the fall in Philadelphia and Cambridge, Massachusetts. His family asks that any charitable donations be made in support of the Neal Nathanson lectureship in the department of microbiology at the Perelman School of Medicine. Checks can be made payable to the “Trustees of the University of Pennsylvania” and sent to: Penn Medicine Development, c/o Andrew Bellet, 3535 Market Street, Suite 750, Philadelphia, PA 19104. To give online, please visit: https://micro.med.upenn.edu/donate/ (https://micro.med.upenn.edu/donate/).