

John W. Saunders, Jr.

John W. Saunders, Jr., professor emeritus of biological sciences at the State University of New York at Albany, has spent more than half a century studying the major organizing structure of the vertebrate limb. His studies of this structure -- the apical ectodermal ridge, or AER -- helped to identify the role of secreted growth factors emanating from the AER and how these factors help pattern the developing limb. He and his colleagues were also some of the earliest investigators to look at cell death as a part of normal development.

In 1996, Dr. Saunders received the SDB Edwin Grant Conklin Medal for his innovative work in this area. Throughout his career, he has received many other honors, including his election, in 2006, to the National Academy of Sciences, to the American Association for the Advancement of Science, which elected Dr. Saunders a fellow in 1983, and a life member in 1997.

“His analyses ... are part of a legacy to developmental biology,” John F. Fallon wrote about Dr. Saunders in a 2002 article in the *International Journal of Developmental Biology*, adding: “The body of his published work remains central to the understanding of limb development and is a major reason for the premiere place that the developmental biology of limbs holds in our research and teaching today.”

Dr. Saunders earned his master's of science degree in zoology in 1941 from the University of Oklahoma, where he also obtained his undergraduate degree a year earlier. After attending Johns Hopkins University for several years, in 1943 he traveled to the Pacific to serve in the U.S. Navy. Three years later, he returned to Johns Hopkins, where he received a doctorate in 1948.

In addition to becoming professor emeritus of biological sciences at the State University of New York (SUNY) at Albany in 1985, Dr. Saunders is a summer embryology staff instructor at the Marine Biological Laboratory (MBL) in Woods Hole, MA, where he has taught since 1995, and where he previously taught from 1958 to 1963.

His prior academic and research appointments include leading professor of biological sciences at SUNY, Albany, from 1967 to 1985; professor of anatomy at the University of Pennsylvania from 1966 to 1967; chairman of the Department of Biology at Marquette University from 1958 to 1965; assistant, associate, and full professor of biology at Marquette University from 1949 to 1965; instructor in zoology at the University of Chicago from 1948 to 1949; graduate assistant in biology at Johns Hopkins University from 1941 to 1948.

Dr. Saunders was a member of corporation of the Mount Desert Island Biological Laboratory in Salisbury Cove, ME, from 1954 to 1983, and, from 1954 to 1958, served as a summer investigator there. In 1959, he became a member of corporation of MBL, where he also served on the board of trustees from 1969 to 1972, and as a summer investigator from 1958 to 1972.

Dr. Saunders has held memberships in a number of prestigious scientific societies, including the American Association for the Advancement of Science, which he joined in 1946. He is an emeritus of the American Association of Anatomists. In 1948, he became a member of the American Society of Zoologists, for which he served as program officer from 1959 to 1962, membership committee chairman from 1959 to 1960, chair of the developmental biology division in 1963, and secretary from 1964 to 1966. He became a member of the International Society of Developmental Biologists in 1957, and the SDB in 1966. From 1967 to 1969, he served on SDB's executive committee and, in 1968, served as president. Previous memberships also included the Wisconsin Academy of Sciences, Arts and Letters, 1950; American Institute of Biological Sciences, 1957; the New York Academy of Sciences, 1958; Society for Experimental Biology and Medicine, 1964; Association for the Advancement of Aging Research, 1969, and council member from 1969 to 1970; and the Society for Cell Biology, 1960.

Each year since 1995, the SDB has awarded the Edwin Grant Conklin Medal to an eminent scientist with a significant research program in developmental biology and a strong commitment to mentoring young scientists. Edwin Grant Conklin (1863-1952) spent most of his distinguished career in the Department of Biology at Princeton University where, as chair for a quarter of a century, he played a key role in the department's growth and development.