

Nobel Laureate, 'Father of Modern Cell Biology' George Palade Dies at Age 95

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Nobel Laureate George Palade (pronounced "pa-LAH-dee"), M.D., considered the father of modern cell biology, died at home on Tuesday, October 7 at age 95 after a long illness. Palade, Professor Emeritus of Medicine and Cellular and Molecular Medicine, and founding Dean for Scientific Affairs at the University of California, San Diego School of Medicine, was a resident of Del Mar, California, with his wife Marilyn Farquhar, Ph.D., Chair of Cellular and Molecular Medicine at UC San Diego.

Memorial services are pending.

"We are saddened by the death of our respected colleague. Dr. Palade had a tremendous impact on the course of science, as well as a personal impact on countless colleagues and students who were inspired by his teaching and his example," said Chancellor Marye Anne Fox. "His legacy will certainly live on in the work of so many brilliant scholars who benefited from Dr. Palade's guidance and wisdom."

Palade was internationally recognized for his pioneering use of electron microscopy and cell fractionation. He was best known for his work in establishing the pathway for synthesis and transport of proteins along the secretory pathway, illuminating how cells build and transport their protein building blocks . He was also an extraordinary teacher and mentor to some of the leading scientists in the field today. An important mission throughout his life was to train new generations of scientists, based on his belief that scientific discovery is "an enterprise that continues generation after generation."

He was awarded the Nobel Prize for Physiology or Medicine 1974 for his contributions to the understanding of cell structure, chemistry and function, a prize he shared with Albert Claude and Christian de Duve. Among his many international honors, he was the recipient of the National Medal of Science, the Gairdner Special Award, and the Albert Lasker Award for Basic Medical Research and the Louisa Gross Horwitz Prize, and had been a member of the National Academy of Sciences since 1961. He also was a member of the Institute of Medicine, the American Academy of Arts and Sciences, the Royal Belgian Academy of Medicine, and the Royal Society of London.

"George Palade is among the greatest biologists of the 20th century," said Günter Blobel, M.D., Ph.D., 1999 recipient of the Nobel Prize in Physiology or Medicine, and John D. Rockefeller, Jr. Professor and Howard Hughes Medical Institute Investigator at Rockefeller University. "He is one of the founding fathers of cell biology. His discoveries are followed up by thousands of scientists all over the world. He has been a mentor, an inspiration and a role model for several generations of cell biologists. It has been my greatest privilege to get to know him and to work with him."

Palade was recruited to UC San Diego from Yale University in 1990 to serve as UCSD School of Medicine's first Dean for Scientific Affairs. He created the department of Cellular and Molecular Medicine, which has risen to become one of the preeminent cell biology programs in the nation.

"George Palade was not only one of the leading scientists of his era, but was a pioneer in modern cell biology, using electron microscopy to study and describe subcellular structures for the first time," said David A. Brenner, M.D., Vice Chancellor, Health Sciences at UC San Diego. "I personally learned about cell biology from him and his wife, Marilyn Farquhar, at Yale University. UC San Diego will always be indebted to him for his leadership in building the basic sciences at the School of Medicine. With his exquisite taste in recruitment he brought many talented individuals here who continue his legacy, and he was instrumental in bringing such important programs as the Howard Hughes Medical Institute and the Ludwig Institute for Cancer Research to UCSD."

To honor him, the George E. Palade Endowed Chair was established at UC San Diego by friends and colleagues and the Richard Lounsbery Foundation. Peter Novick, Ph.D., whose groundbreaking work in the field of cell biology has contributed to a novel understanding of internal cellular transportation systems, was recently recruited from Yale University as the first scientist to hold the Chair, which is supported by the Margaret Shaw Roberts Fund created by a bequest from the Joseph N. Roberts Estate.

"It is a particularly thrilling honor to be appointed as the George Palade Chair," said Novick. "During my graduate training and formative years as a junior faculty member at Yale, George was always my hero and keenly insightful advisor. He started our field of membrane traffic and challenged us all to bring the field to the advanced level of mechanistic detail that it has since attained."

Palade was born in Jassy, Romania on November 19, 1912 and earned his M.D. in 1940 from the Faculty of Medicine of the University of Bucharest, Romania. At the urging of his father, he had become a doctor and briefly practiced medicine, including a stint in the medical corps of the Romanian Army during World War II. But it was clear to him early on that his interests - better suited to anatomy than patient care - lay in the emerging field of biomedical sciences. In 1946, he came to the United States to pursue studies at New York University where he became intrigued by the promise of electron microscopy in advancing the field of cell biology.

He soon moved on to the Rockefeller Institute, where he would spend much of his career and where he conducted the groundbreaking cell research that would later earn him the Nobel Prize. He pioneered tissue-preparation methods, advanced centrifuging techniques and cell fractionation; and conducted groundbreaking studies using the powerful new technology of electron microscopy, resulting in the discovery and description of several cellular structures, including the ribosomes which are the parts of the cell responsible for the synthesis of all proteins. He sought to discover what chemicals, enzymes, and activities were associated with each part of the cell.

He left the Rockefeller Institute in 1973 for Yale, where he was Chair of the new Department of Cell Biology. He wrote that "the main reasons for this move was my belief that the time had come for fruitful interactions between the new discipline of cell biology and the traditional fields of interest of medical schools, namely pathology and clinical medicine."

In 1990, he left Yale for UC San Diego, where he served until his retirement in 2001. His leadership resulted in the recruitment of many distinguished leaders in science who are doing ground-breaking work at the forefront of a number of areas that have provided understanding of the cellular and molecular basis of many diseases including cancer, Alzheimer's Disease, inflammatory diseases, and immune diseases. He also succeeded in drawing many important private and public sponsors of biomedical research and training to the School, including the Howard Hughes Medical Institute, the Ludwig Institute for Cancer Research and support of the Markey Foundation for Graduate Student Fellowships. After his retirement, he continued to serve as an advisor to the UC San Diego School of Medicine leadership, which honored him by re-naming its Cellular and Molecular Medicine West Building as the George Palade Laboratories in March 2004.

Along with his wife Marilyn Farquhar, he is survived by his children Georgia van Deusen of New York City; Philip Palade, Ph.D., of Little Rock, Arkansas; Douglas Farquhar, J.D., and Bruce Farquhar of San Diego, California; and grandchildren Heather van Deusen of New York City, and Hilary van Deusen of Boulder, Colorado. In lieu of flowers, the family requests that gifts be made to the George Palade Lectureship Fund at UCSD. Checks may be made payable to the UC San Diego Foundation with the notation of "George Palade Lectureship" and mailed to:

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