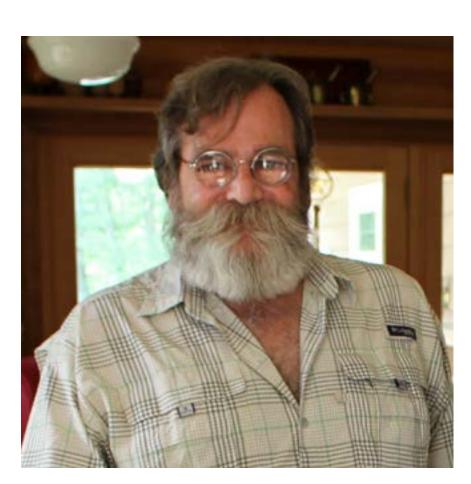
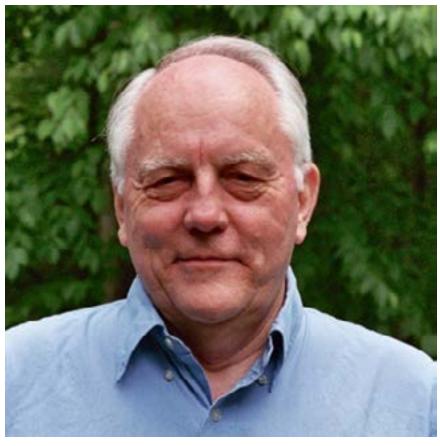


## IN MEMORIAM: VISIONARIES WHO SHAPED CARTA



On February 27, 2016, CARTA lost our original supporter and champion, **James H. Handelman** (born 1954), Director of the Mathers Foundation of New York.

Modest and humble to a fault, Jim always insisted on keeping a low profile, and brushed off any attempt to give himself due credit for jump-starting the entire CARTA enterprise. Without Jim, the heart and soul of CARTA's efforts - the symposia on human origins and the Anthropogeny Graduate Specialization program - would not exist today.



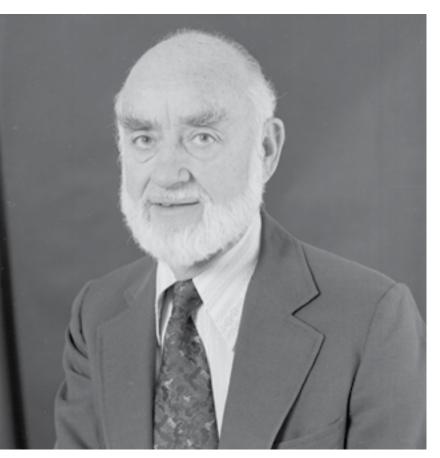
Roy D'Andrade (November 6, 1931 - October 20, 2016) was Emeritus Professor of Anthropology at the UC San Diego and the University of Connecticut. D'Andrade was a cultural anthropologist and a founder of cognitive anthropology. His research interests included African-American family structure, personality, color perception, and mathematical models for reconstructing mitochondrial lineages.



Elizabeth Bates (July 26, 1947 -December 13, 2003) was a Professor of Cognitive Science at UC San Diego. Bates was an authority in the science of how the brain is organized to process language and known for her pioneering work in child development and language acquisition. She was one of the founding members of the UC San Diego Department of Cognitive Science, the



Ernst Beutler (September 30, 1928 -October 5, 2008) served as Professor and Chairman of the Department of Molecular and Experimental Medicine at the Scripps Research Institute. Beutler made important discoveries relating to glucose-6-phosphate dehydrogenase deficiency, X-chromosome inactivation in female mammals, and he made fundamental contributions to the understanding of Tay-Sachs disease, galactosemia, and sickle cell and other hemolytic anemias. He played a major role in pioneering new therapies for leukemia, bone marrow transplantation in acute leukemia and 2-chlorodeoxyadenosine in lymphoid malignancies.



**Theodore Bullock** (May 16, 1915 -December 19, 2005) was Professor Emeritus of Neurosciences and served as Chairman of the Neurobiology Unit



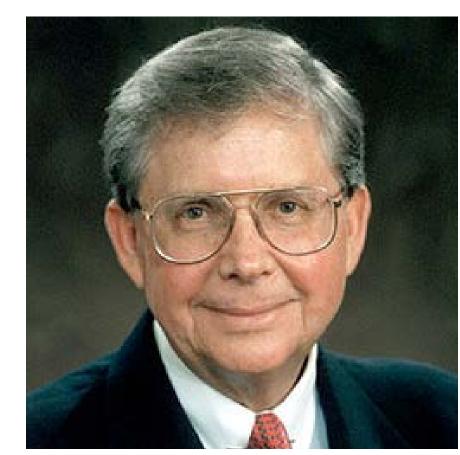
**Gerald Edelman** (July 1, 1929 - May 17, 2014) was a Professor of Neurobiology at The Scripps Research Institute. A pre-eminent biologist, Edelman's focus on the structure of antibodies led to a Nobel Prize in Physiology or Medicine, which he shared with Rodney Porter, in 1972.



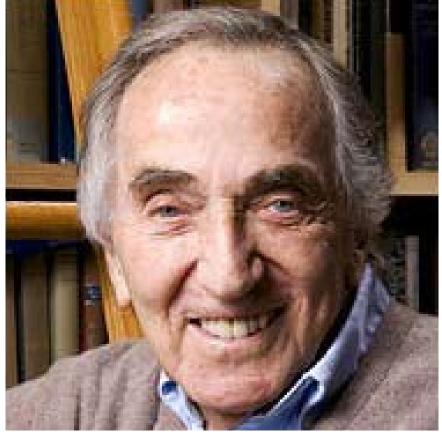
Jeffrey L. Elman (January 22, 1948 -June 28, 2018) was a founding member and Distinguished Professor of Cognitive Science at UC San Diego Elman was a pioneer in artificial neural networks and an internationally recognized scholar in the field of language processing and learning. He served as Dean of the Division of Social Sciences from 2006 to 2014 and was a holder of a Chancellor's Associates Endowed Chair. Most recently, Elman was a founding Co-Director of the Halıcıoğlu Data Science Institute at UC San Diego. He was also founding Director of the Center for Research in Language, founding Co-Director of the University's Kavli Institute for Brain and Mind, and the University's first Director of Online and Technology Enhanced Education to support the expansion of educational access at UC San Diego.



Andrew Hill (June 6, 1946 - September 12, 2015) was the J Clayton Stephenson Professor of Anthropology at Yale University and a Curator and Head of the Division of Anthropology in the Yale Peabody Museum of Natural History. A renowned palaeoanthropologist, Hill published many important contributions relating to African studies, human evolution, environment, ecology, evolutionary theory, anthropology and archaeology. He discovered many internationally important sites, including a trail of hominid footprints dating to about 3.6 million years old at Laetoli, an archaeological site in Tanzania.



Lewis Judd (February 10, 1930 -December 16, 2018) was the Chair of the Department of Psychiatry in the UC San Diego School of Medicine from 1977 to 2013, guiding the Department to become a leader in biology psychiatry



Leslie E. Orgel (January 12, 1927 -October 27, 2007) was Senior Fellow and Research Professor at the Salk Institute for Biological Studies. He contributed to the development of ligand- field theory. Orgel was a Fellow of the Royal Society and a Member of the National Academy of Sciences.



George Palade (November 19, 1912 – October 8, 2008) was UC San Diego School of Medicine's first Dean for Scientific Affairs, where he created one of the preeminent cell biology programs in the nation, and served as a Professor of Medicine. Nobel Laureate. Considered to be the father of modern cell biology, Palade was awarded the Nobel Prize in Physiology and Medicine, along with Albert Claude and Christian de Duve, in 1974. UC San Diego established the George E. Palade Endowed Chair in his honor.

first such academic department created in the United States.

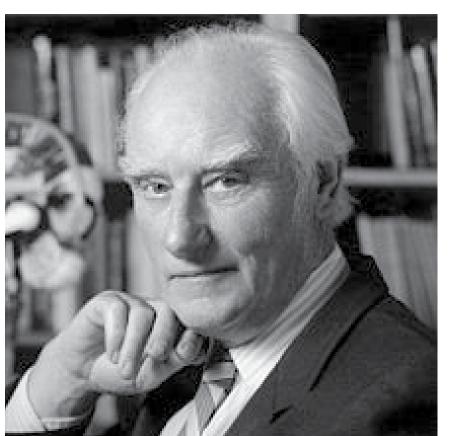


Kurt Benirschke (May 26, 1924 -September 10, 2018) was among the earliest faculty at the UC San Diego School of Medicine where he served for nearly a quarter of a century as a noted pathologist, geneticist, and expert on the placenta and reproductive systems of humans and myriad mammalian species. He became internationally known for his successful efforts to create the world's first "frozen zoo," a novel "cell bank" to preserve the eggs, sperm and other tissues of endangered species.



**Wolfgang "Wolf" Berger** (October 5, 1937 - August 6, 2017) was a Professor and former Interim Director of the Scripps Institution of Oceanography at UC San Diego. Berger was one of the pioneers in paleoceanography and seamlessly integrated all branches of oceanographic science: physical,

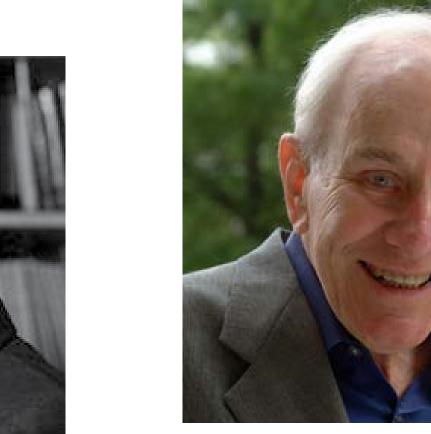
of Scripps Institution of Oceanography. Bullock was one of the founding fathers of neuroethology and a renowned neurobiologist. His pioneering investigations included studies of sensory systems, especially in fish, neurophysiology of nerve cells, and electrical activity and evolution of the brain.



Francis Harry Compton Crick (June 8, 1916 - July 28, 2004) was British molecular biologist, biophysicist, and neuroscientist and held the post of J.W. Kieckhefer Distinguished Research Professor at the Salk Institute for Biological Studies. Famously, Crick and J. D. Watson proposed the doublehelical structure of DNA in 1953. Crick and Watson subsequently suggested a general theory for the structure of small viruses. Crick, Watson, and Maurice Wilkins were jointly awarded the 1962 Nobel Prize in Physiology or Medicine "for their discoveries concerning the molecular structure of nucleic acids and its significance for information transfer in living material."



research. He also served as Director of the National Institute of Mental Health (NIMH) from 1988 to 1992 and was a Vice President of the American Psychiatric Association. Judd was an expert in biological psychiatry and clinical psychopharmacology.



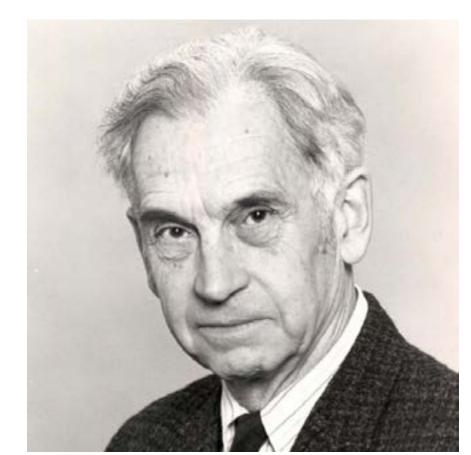
Morris Goodman (1925 - November 14, 2010) was Distinguished Professor of Anatomy and Cell Biology at Wayne State University School of Medicine and a Professor in the Center for Molecular Medicine and Genetics. Goodman is known worldwide for his research in molecular evolution and molecular systematics.



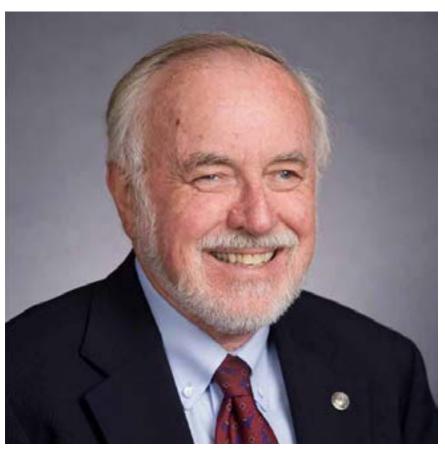
Steve Heinemann (February 11, 1939 - August 6, 2014) was a Professor of Neuroscience at the Salk Institute for Biological Studies where he focused his research on the molecular mechanisms by which nerve cells communicate with each other at specialized connections known as "synapses." His pioneering



Bob Katzman (November 29, 1925 - September 16, 2008), Professor Emeritus and was the Florence Riford Chair for Research in Alzheimer's Disease at UC San Diego, and he was the founding Director of the Shiley-Marcos Alzheimer's Disease Research Center at the UC San Diego. Katzman played a major role in making San Diego one of the major centers for Alzheimer's research in the United States, if not the world, bringing prominent neuroscientists and major funding to a program that had been virtually nonexistent before his arrival in 1984.



Ernst Mayr (July 5, 1904 - February



**David Woodruff** (1943 - December 16, 2015) was an Emeritus Professor of Biology and founding Chair of the Section of Ecology, Behavior and Evolution in UC San Diego's Division of Biological Sciences. Woodruff was a world-renowned conservation geneticist and biogeographer who championed UC San Diego's role in conservation science for 35 years.



John Wooley (1945 - April 20, 2015) was the long-time Associate Vice Chancellor for Research and Professor of Pharmacology at the UC San Diego. Wooley was also an Adjunct Professor in Pharmacology and in Chemistry and Biochemistry, and a Strategic Advisor and Senior Fellow of the San Diego Supercomputer Center.

chemical, biological and geological. His research included investigations of plankton ecology, the carbon cycle, the history of climate, and the productivity of the oceans.

Achilles Dugaiczyk (1930 - October 31, 2005) was a professor of Biochemistry at UC Riverside. As an esteemed biochemist, his research interests focused on the fundamental aspects of molecular evolution, specifically on the evolution of specific small DNA inserts in primates. research on neurotransmitter receptors in the brain helped lay the groundwork for understanding diseases of the brain. Heinemann established the Salk Institute's Molecular Neurobiology Laboratory.

3, 2005) was the Alexander Agassiz Professor of Zoology, Emeritus, at Harvard University. Mayr was one of the 20th century's leading evolutionary biologists and his work has contributed to the conceptual revolution that led to the synthesis of Mendelian genetics and Darwinian evolution, and to the development of the biological species concept. His theory of peripatric speciation has become widely accepted as one of the standard modes of speciation and is the basis of the theory of punctuated equilibrium.











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