



IN MEMORIAM

George A. Bartholomew
Professor of Ecology and Evolutionary Biology, Emeritus
UC Los Angeles
1919 – 2006

George A. Bartholomew (“Bart” to his students, colleagues, and friends), a distinguished emeritus professor in the UCLA Department of Ecology and Evolutionary Biology, passed away at age 87, October 2, 2006, of complications from cancer. Bart was an outstanding scientist of international renown; he was one of the major founders (with Per Scholander and Knut Schmidt-Nielsen) of the modern fields of comparative animal physiological ecology and behavioral physiology. He also played important roles in shaping the history of his department (initially the Department of Zoology, then Biology, then Organismic Biology, Ecology and Evolution, most recently Ecology and Evolutionary Biology) and of the life sciences at UCLA. Through the departmental Bartholomew Research Fellowship Awards (established by him and his wife after his retirement) he continues to support graduate students working in areas related to his broad interests.

Bart earned A.B. (1940) and M.A. (1941) degrees from the University of California Berkeley. He served as a physicist in the U.S. Naval Bureau of Ordnance during World War II. He earned his Ph.D. at Harvard (1947) and joined the UCLA faculty shortly thereafter. He retired in 1989.

Bart was a highly creative and productive researcher. His research career extended over 63 years of publication of over 150 research papers [W.R. Dawson, his first doctoral student, gives a detailed description and analysis of his research output in: *Integrative and Comparative Biology* 45: 219-230 (2005)]. He had a broad gauge synthetic view of the functional adaptations of organisms (he did some important work on plants in addition to many studies of animals) to natural environments, bringing together the fields of physiology, behavior, and ecology. He was a major pioneer in the study of desert organisms and was a central player in the establishment of his fields of research in both Australia and South Africa. He was a strong advocate for studying organisms in the field as well as in the laboratory. He was flexible in the research methods he used, bringing new technologies to field investigations. His last published words on his personal philosophy and approach to research may be found in: *Integrative and Comparative Biology* 45: 330-332 (2005).

The stature of his contributions to science was recognized by his elections to the National Academy of Science (1985) and to the American Academy of Arts and Sciences (1981). He also received many other honors, including the first Grinnell Medal awarded by the Museum of Vertebrate Zoology at the University of California Berkeley (1983). He was awarded an honorary D.Sc. by the University of Chicago (1987). In 1980 he was president of the American Society of Zoologists, now the Society for Integrative and Comparative Biology (SICB). He personally considered the most satisfying award he had received to be the establishment within SICB (1992) of the George A. Bartholomew Award. That award is given annually to a “Distinguished young investigator in comparative physiology, comparative biochemistry, or related fields of functional biology.”

He was a distinguished teacher at both the undergraduate and graduate levels. He was presented with a UCLA campus Distinguished Teaching Award (1966) in recognition of his mentoring of graduate students. A high proportion of his doctoral students (42) and postdoctoral scholars (14) went on to become significant figures

in their own fields of study. His reputation as a mentor has become near legendary. His academic genealogy is described by A.F. Bennett and C. Lowe in *Integrative and Comparative Biology* 45: 231-233 (2005) and is given in detail on a website: [http:// bartgen.bio.uci.edu/ tree](http://bartgen.bio.uci.edu/tree).

He worked extensively for many years with the then Film Unit of University Extension, especially with the eminent photographer Robert Dickson, developing with them a series of 30 teaching documentary films that are still widely used. With colleagues Malcolm Gordon, Fred White, Alan Grinnell, and C. Barker Jorgensen he was a major contributor to the development and production of a textbook of comparative ecological physiology that had four editions (first edition 1968; fourth 1982) and was both influential in the development of its field and widely adopted internationally. He also co-authored an introductory zoology textbook.

He was one of the most significant figures in the post World War II history of his department. He was a central player in the transition (in the later 1950s) from a department that was run in a somewhat authoritarian and centralized fashion to its present egalitarian, participatory, and shared governance mode. He was a low-key, soft spoken, thoughtful, creative, and balanced observer and participant in departmental and campus affairs for about 40 years. He served terms as chair of both Zoology and Botany (at the time a separate department) and helped facilitate the merger of the two that produced Biology. He was an important influence on the founding of the UCLA Molecular Biology Institute and on the recruitment to the department of the first group of molecularly oriented faculty before the Department of Molecular, Cell and Developmental Biology was formed.

Bart was born June 1, 1919 in Independence, Missouri. His parents were George A. Bartholomew and Esther C. Bartholomew (Carstensen). His father was a commercial artist and his mother worked as a sales person and later was a children's wear buyer for the Joseph Magnin Department stores in the San Francisco area. In 1942 he married Elizabeth Burnham (Betty), his wife for 50 years, and mother of their two children, Bruce Bartholomew and Karen B. Searcy. Once her children left home, she accompanied Bart on many of his travels. She died in 1993. In 1994 Bart married Ruth L. Myers. Bart and Ruth traveled extensively and enjoyed painting. Ruth died in August 2006. In addition to his two children, Bart is survived by four grandchildren, Mulan B. Tarnas, Yuan Bartholomew, Brian Searcy, and Steven Searcy, and 3 great grandchildren Camden, Tristan, and Caiden.

Professor Bartholomew has left a lasting legacy at UCLA and among his numerous doctoral students, post-doctoral associations, their students, and the many students that he taught.

Malcolm S. Gordon
Kenneth A. Nagy
Victoria Sork