

Austin L. Hughes 1949–2015

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Austin Leland Hughes, 66, died unexpectedly on October 31, 2015. He was a Carolina Distinguished Professor of Biological Sciences at the University of South Carolina and served as director of its Institute for Biological Research and Technology. His research program emphasized sequence analysis of genes from a wide variety of systems as a means of understanding the mechanisms of adaptive evolution, with an emphasis on vertebrate immunity.

Dr. Hughes was a fellow of the American Association for the Advancement of Science and a member of the Witherspoon Council on Ethics and the Integrity of Science. He also authored two books—*Evolution and Human Kinship* (1988) and *Adaptive Evolution of Genes and Genomes* (1999)—and over 300 peer-reviewed scientific papers, including in the journal *Immunogenetics*. His most influential article was published in the journal *Nature*, entitled “Pattern of nucleotide substitution at major histocompatibility complex class-I loci reveals overdominant selection” (Hughes and Nei 1988). This work revolutionized the study of selection at the nucleotide level, especially for genes of the immune system.

Dr. Hughes earned a baccalaureate in philosophy from Georgetown University in 1969, continued education in zoology and received diplomas from the University of Maryland

and West Virginia University, and then a doctorate in zoology from Indiana University in 1984. His dissertation was entitled “Seasonal trends in male life history in the mosquitofish *Gambusia affinis* and their adaptive significance.”

Dr. Hughes mentored numerous biologists who have currently active research programs, including Meredith Yeager at the National Cancer Institute, Helen Piontkivska at Kent State, Jack da Silva at the University of Adelaide, Haiwei Luo at The Chinese University of Hong Kong, and Bob Friedman, along with Federica Verra, Stephanie Irausquin, Priyasma Bhoulmik, Pierre Rivailler, Jeffrey French, April South (co-mentored), and current students Chase Nelson and Saravanan Rajabojan.

References

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