



Robert E. (Bobby) Espinoza (1967-Present)

Professor of Biology and Associate Dean of the
College of Science and Mathematics

California State University, Northridge

"Find someone who is doing what you aspire to do and who is successful, and ask what he or she did along the way. Ask how and why he or she became successful." Robert E. (Bobby) Espinoza, 2006.

Overview

Dr. Robert Espinoza is a professor of Biology and Associate Dean of the College of Science and Mathematics at California State University. Espinoza is currently researching herpetology. One semester a year he serves as the Associate Dean of the College of Science and Mathematics, where he works to improve student success across his campus. His research Laboratory of Integrative and Comparative Herpetology (LICH) seeks to understand how forces such as evolutionary history, the physical environment, and interactions among species affect an animal's morphology, physiology, ecology, behavior, and life history. His more recent studies include: thermal biology of small lizards from cold climates, temperature-dependent performance of atypical geckos (diurnal and cold-climate species), and evolution and biological consequences of diet, especially herbivory in reptiles. He has been published in numerous journals, including a select few:

- Espinoza, R. E. 2009. Western fence lizard (*Sceloporus occidentalis*). Pp. 234-237, in: *Lizards of the American Southwest: A Photographic Fieldguide*, L. L. C. Jones and R. E. Lovich (eds.). Rio Nuevo Press, Tucson, Arizona.
- Espinoza, R. E. 2009. Mohave fringe-toed lizard (*Uma scoparia*). Pp. 278-281, in: *Lizards of the American Southwest: A Photographic Fieldguide*, L. L. C. Jones and R. E. Lovich (eds.). Rio Nuevo Press, Tucson, Arizona.
- Espinoza, R. E. 2009. Western banded gecko (*Coleonyx variegatus*). Pp. 312-315, in: *Lizards of the American Southwest: A Photographic Fieldguide*. L. L. C. Jones and R. E. Lovich (eds.). Rio Nuevo Press, Tucson, Arizona.
- Espinoza, R. E. and K. de Queiroz. 2008. Historical perspectives: Richard Emmett Etheridge. *Copeia* 2008:708-717. [pdf]
- Abadala, C. S., A. S. Quinteros, and R. E. Espinoza. 2008. Two new species of *Liolaemus* (Iguania: Liolaemidae) from the Puna of northwestern Argentina. *Herpetologica* 64:458-471. [pdf]
- Espinoza, R. E. and S. Quinteros. 2008. A hot knot of toads: aggregation provides thermal benefits to metamorphic Andean toads. *Journal of Thermal Biology* 33:67-75. [pdf]

Early Life and Career

Robert (Bobby) Espinoza's earliest memories revolve around biology and the earth sciences. Espinoza's father, Robert Sr., worked as a bus mechanic for San Diego Transit; his mother, Carol, was a homemaker and later a hospital finance administrator. Espinoza remembers being instantly captivated by the lives of amphibians and reptiles in kindergarten, when older children brought tree frogs and a gopher snake into their classroom for show-and-tell. By the age of six, he was gathering specimens for his own animal and rock collections, and knew he wanted to be a scientist when he grew up.

Espinoza and his younger sister were raised in San Diego, California, an area that had a tremendous influence on his developing interest in environmental biology. The region's extraordinary biodiversity allowed Espinoza, now a herpetologist, access to a variety of different animals, as well as an assortment of people who shared his scientific interests. Before he was a teenager, Espinoza had joined the San Diego Herpetological Society, where he had the benefit of learning from older, more experienced adults about studying these animals.

At 14, and after months of pleading with the owner, Espinoza got his first job at a pet store, because it allowed him to interact with many types of animals. Later, working as an undergraduate research assistant for Dr. Joy Zedler at San Diego State University (SDSU), Espinoza conducted surveys of the amphibians and reptiles of the Tijuana Estuary. Another professor at SDSU, the herpetologist Dr. Richard Etheridge, was especially influential and introduced Espinoza to a group of South American lizards that he continues to study.

After starting his master's degree at SDSU, Espinoza followed his dissertation advisor, Dr. C. Richard (Dick) Tracy from Colorado State University to the University of Nevada, Reno, where he ultimately received his Ph.D. He was awarded a post-doctoral fellowship at the Carnegie Museum of Natural History and landed a position at California State University, Northridge (CSUN) before he had finished his Ph.D. Espinoza is currently a herpetologist, and a Professor in the Department of Biology at CSUN. One semester a year he serves as the Associate Dean of the College of Science and Mathematics, where he works to improve student success across his campus. And because CSUN is designated as a Hispanic Serving Institute, Espinoza has many opportunities to improve outcomes for this growing population of historically underserved students.

Importance of Mentoring to Career

Mentors have played an invaluable role in the development of Espinoza's career. Not surprisingly, he finds mentoring to be one of the most rewarding aspects of teaching and research. Espinoza's first mentor was his high school biology teacher, who, ironically, strongly discouraged him from pursuing a career in the field of biology. "There aren't many jobs," Espinoza remembers her saying, "and the money is not good. You should only pursue it if you really feel strongly about it." He did. Espinoza's first college mentor, Richard Etheridge, introduced him not only to the animals that he continues to study, but also to a number of the colleagues that he still works with today. Etheridge also taught him what others did not—namely that it was okay to call himself a "herpetologist" rather than an "ecologist" or "physiologist." This had a big influence on him as he continued to shape his career goals. And despite being retired for nearly two decades, Etheridge still provides timely advice to Espinoza on a regular basis. Espinoza also credits his dissertation advisor, Dick Tracy, who taught him how to write well, apply for grants, give professional presentations, and who still answers questions and gives helpful advice.

Mentoring Others

Espinoza has been mentoring other minorities in the field since early in graduate school, and continues to be involved in a number of minority mentoring programs. As a graduate student, Espinoza visited elementary and high schools with high minority enrollments, where he discussed careers in biology as an alternative to medicine. Espinoza admits that while the alternative careers he advocates may not have the same prestige as a career in medicine, he believes more minorities should pursue fields like environmental biology because they can be equally rewarding. Espinoza was once the Chair of the Membership Diversity Committee of the Society for Integrative and Comparative Biology, a mentoring program for minorities that matches students with professionals who share their research interests. Espinoza was also formerly involved in Bridges to the Doctorate at CSUN, a program funded by the National Institutes of Health (NIH) that provided support for students pursuing Ph.D.s in the biomedical sciences. He has also mentored undergraduate students through the NIH-funded Research Initiative for Scientific Enhancement (RISE), who have been accepted into Ph.D. programs.

Advice to Young Professionals

More than publications, grants, or professional accolades, Espinoza feels that helping his students grow into successful, independent thinkers is his most significant achievement. He says watching them become respected professionals in their own right continues to be the highlight of his career. Although Espinoza feels that his career chose him, mentors and mentoring have been, and continue to be, an important component of his success. The advice Espinoza has for those considering a career in the environmental field applies across the board: "Find someone who is doing what you aspire to do and who is successful, and ask what he or she did along the way. Ask how and why he or she became successful. Once you find someone who matches your goals, the key is in understanding their path to success."

For More Information

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