

2005 Edward S. Deevey Award



Edward S. Deevey, a founder of modern paleoecology, was a dedicated student advisor who mentored many investigators active in the field today. To honor his memory and encourage high-quality research by graduate students, the Paleoecology Section presents an award to the student or recent graduate making the best oral or poster presentation in paleoecology at the ESA Annual Meeting. Zoe V. Finkel, a recent Ph.D recipient from the Oceanography Department at Rutgers University, won the 2005 Deevey Award for her talk entitled “Climatically driven macro-evolutionary change in the size of marine planktonic diatoms.” Dr. Finkel’s presentation examined fossilized marine diatoms over the Cenozoic to determine a macro-evolutionary record of their size. She demonstrated that the marine diatom frustule decreased by ~2.5-fold over the last half of the Cenozoic, which was strongly correlated with the equator-to-pole and surface-to-deep-ocean thermal gradients. The correlation between average diatom frustule size and the oceanic thermal gradients suggests that climatic changes have shaped the size distribution of primary producers in the ocean, potentially altering the rate of carbon cycling there. The presentation synthesized results recently pub-

lished in *Proceedings of the National Academy of Sciences*. The judges committee was particularly impressed with her careful consideration of alternate hypotheses and the important implication of her research for carbon cycling.

Dr. Finkel has a B.Sc. in Environmental Science from the University of Manitoba and an M.Sc. in Biology from Dalhousie University. Currently, she is an Assistant Professor of Environmental Science at Mount Allison University in Sackville, New Brunswick, Canada, where she is continuing her research on the interaction of organisms with their environment from the physiological to ecological evolutionary and biogeochemical scales.

Philip Higuera received honorable mention for his presentation entitled “The relative importance of vegetational vs. climatic controls on post-glacial fire regimes in the southern Brooks Range, AK.” Mr. Higuera is a Ph.D candidate in the College of Forest Resources at the University of Washington. Coauthors Linda B. Brubaker, Patricia Anderson, Feng Sheng Hu, Ben Clegg, and Tom Brown, assisted him with this research. The Paleoecology Section thanks students who competed for this year’s Deevey Award and encourages others to participate in the 2006 competition, to be held at the ESA Annual Meeting in Memphis, Tennessee. The Section also appreciates the efforts of the 2005 Deevey Award Selection Committee: Jason Lynch (Chair), Bob Booth, Dan Gavin, Jack Williams, and Jason McLachlan.