

## **PAUL DURST**

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### **EDUCATION:**

- Duke University; Biology, PhD, 2014  
*Ecological Factors and Historical Biogeography Influence the Evolutionary Divergence of Insular Rodents*, Advised by V. Louise Roth
- University of California, Berkeley; Integrative Biology, BA, 2006

### **PROFESSIONAL EXPERIENCE:**

- *Assistant Director, STEM Education*, Council on Science and Technology, Princeton University, July 2017 – Present

### **POST-DOCTORAL RESEARCH EXPERIENCE:**

- *SPIRE (Seeding Postdoctoral Innovators in Research and Education) Postdoctoral Fellow*, University of North Carolina – Chapel Hill, September 2014 – July 2017

### **TEACHING EXPERIENCE:**

- *Instructor of record*, Principles of Biology, UNC Pembroke, Fall 2016
- *Instructor of record*, Molecular Ecology, UNC Pembroke, Spring 2016
- *Guest lecturer*, Animal Adaptations, Duke University, 2015
- *Guest lecturer*, Evolution and Development, UNC Chapel Hill, 2014
- *Guest lecturer*, Islands and Evolution, NC State, 2014
- *Guest lecturer*, Comparative and Functional Vertebrate Anatomy, Duke University, 2013
- *Howard Hughes Research Fellows Program Graduate Student Coordinator*, 2012-2014
- *Organizer*, Responsible Conduct In Research Graduate Student Forum, “Permits and Procedures for Animal and Plant Research”, 2011
- *Teaching Assistant*, Duke University 2009-2014
  - Lecture Courses: AIDS and Other Infectious Diseases
  - Lab Courses: Principles of Biology, Animal Physiology, Comparative and Functional Vertebrate Anatomy

### **GRANTS, AWARDS AND FELLOWSHIPS:**

- SPIRE Fellowship (see Post-Doctoral Experience), 2014-2017
- NSF Doctoral Dissertation Grant, 2013
- Duke Biology Departmental Grant-In-Aid, 2013
- Duke Biology Departmental Grant-In-Aid, 2012
- SciFund Challenge (a crowd-sourced funding initiative; \$1,046 raised), 2012
- Duke Biology Departmental Grant-In-Aid, 2011
- Sigma Xi Grant-In-Aid, 2011
- Graduate Fellowship, National Evolutionary Synthesis Center, 2010
- Duke Center for Science Education Student Outreach Grant, 2010
- Duke Biology Departmental Grant-In-Aid, 2009

- Honorable Mention, NSF Graduate Research Fellowship Program, 2009
- James B. Duke Fellowship, 2008

#### **PUBLICATIONS:**

- Lea, A.J., T.P. Vilgalys, P.A.P. Durst, J. Tung, 2016. Maximizing ecological and evolutionary insight from bisulfite sequencing data sets. *bioRxiv*, doi: 10.1101/091488 (accepted at *Nature Ecology and Evolution*)
- Allf, B., P.A.P. Durst, D.W. Pfennig. Behavioral plasticity and the origins of novelty: the evolution of the rattlesnake rattle. *The American Naturalist*, 188(4), doi: 10.1086/688017
- Durst, P.A.P. & V.Lx. Roth, 2015. Mainland size variation informs predictive models of exceptional body size change in rodents. *Proceedings of the Royal Society B*, 282, 20150239, doi:10.1098/rspb.2015.0239
- McClain, C.R., P.A.P. Durst, A.G. Boyer, C.D. Francis, 2013. Unravelling the determinants of insular body size shifts. *Biology Letters*, 9(1), doi: 10.1098/rsbl.2012.0989
- Durst, P.A.P. & V.L. Roth, 2012. Classification-tree methods provide a multifactorial approach to predicting insular body-size evolution in rodents. *The American Naturalist*, 179(4), 545-553, doi: 10.1086/664611
- Durst, P.A.P, 2005. Habitat preferences of the avian community on the island of Moorea, French Polynesia, *The Biology and Geomorphology of Tropical Islands: Student Research Papers - 2004*. Richard P. Gump Biological Station, University of California, Berkeley, 2004.

#### **POSTERS & PRESENTATIONS:**

- *Co-phylogeography of Channel Island deer mice and their ectoparasites*. Presentation, 9<sup>th</sup> California Islands Symposium, 2016
- *Alternate hosts influence the genetic structure of an ectoparasite of *Peromyscus maniculatus* across the California Channel Islands*. Presentation, Society for the Study of Evolution/Society of Systematic Biologists/American Society of Naturalists Joint Meetings, 2016
- *Epigenetic mechanisms underlying phenotypic plasticity in Mexican spadefoot toad tadpoles (*Spea multiplicata*)*. Poster, IRACDA National Conference, 2016
- *MHC Genotyping in a Natural Population of Yellow-Bellied Marmots (*Marmota flaviventris*) Using Next-Generation Sequencing*. Poster, IRACDA National Conference, 2015
- *The phylogeography of *Peromyscus maniculatus* across the northern California Channel Islands*. Presentation, Society for the Study of Evolution/Society of Systematic Biologists/American Society of Naturalists Joint Meetings, 2014
- *Defining extreme: a new perspective on insular mammalian body size change*. Presentation, American Society of Mammalogists Meetings, 2013

- *Examining factors influencing body size change for insular rodents.* Presentation, Society for Integrative and Comparative Biology Meetings, 2013
- *Is there an island rule? Utilizing classification trees to evaluate insular body size in rodents.* Poster, Society for the Study of Evolution/Society of Systematic Biologists/American Society of Naturalists Joint Meetings, 2010

#### **PRE-DOCTORAL RESEARCH EXPERIENCE:**

- *Field Technician*, University of Chicago, May – September, 2007  
Studied the effects of omnivory on a multi-trophic level food web in the marine intertidal zones of New Zealand. Duties included field surveys of intertidal communities, lab feeding trials, and morphometric measurements of various intertidal mollusks.
- *Field Coordinator*, University of North Dakota, May – September, 2006  
Assessed the changing biodiversity of small mammal, reptile and amphibian communities in response to climate change across southwestern North Dakota. Duties included negotiating land use with private land owners, setting lines of snap traps, Sherman traps and pit traps, field identification of small mammals, amphibians, and reptiles, mark recapture studies for small mammals, and driving surveys of amphibian and reptile diversity.
- *Field Technician*, UC Berkeley, May – August, 2005  
Studied the effects of the sex-ratio distorting *Wolbachia* bacteria on the butterfly *Hypolimnas bolina* as part of an NSF funded REU (research experience for undergraduates) from UC Berkeley. Duties included collecting wild butterflies, rearing captive butterflies, and conducting mating experiments with captive butterflies.
- *Independent Field Research*, Gump Research Station, September – November, 2004  
Studied the habitat preferences of birds on the island of Moorea, French Polynesia, and the impact of introduced species on native and endangered species. Duties included dawn and dusk point counts, communication with private land owners, and analysis of data.

#### **OTHER SYNERGISTIC ACTIVITIES**

- Mentored and conducted research with undergraduates from Duke, Johnson C. Smith University, and UNC Chapel Hill (resulting in an undergraduate first-authored publication; see Allf et al. 2016)
- Interviewed by BBC World Service, 2015
- Public presentation at the North Carolina Natural Science Museum, 2014
- Biology Graduate Student Steering Committee, 2011-2013
- Student Representative, Duke Biology Faculty Search Committee for Integrative Biologist, 2012
- Interviewed for *Shipwrecked on Dry Land*, a radio documentary for NPR, 2012
- Duke Center for Science Education grant recipient (\$500); developed an outreach module for elementary school students, 2010
- Junior Editor, American Journal Experts, 2009-2012
- Memberships: American Society of Mammalogists, American Society of Naturalists, Duke Chapter of Sigma Xi, The Wildlife Society
- Manuscript Reviewer: PLOS One, Evolutionary Biology, Molecular Ecology, Proceedings of the Royal Society B