Lauren B. Buckley

PERSONAL University of North Carolina at Chapel Hill, Department of Biology

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EDUCATION Stanford University, Department of Biological Sciences, Stanford, CA USA

Ph.D. Biology, September 2001 - September 2005

- Dissertation: Lizards distributions on islands: community ecology and biogeography
- Committee: Joan Roughgarden (chair), Paul Ehrlich, Terry Root, and Peter Vitousek

Williams College, Williamstown, MA USA

B.A. Biology (honors), B.A. Mathematics, June 2000

Professional
Experience

Assistant Professor. Department of Biology, University of North Carolina Chapel Hill 01/2009 -

Postdoctoral Fellow. National Center for Ecological Analysis and Synthesis 11/2007 - 12/2008

Postdoctoral Fellow. The Santa Fe Institute 10/2005 - 10/2007

Visiting Scholar. University of California, San Diego. Host: Walter Jetz 10/2005 - 10/2007

Honors

NCEAS Postdoctoral Fellowship	2007
Santa Fe Institute Postdoctoral Fellowship	2005-2007
Stanford Department of Biological Sciences Excellence in Teaching Award	2002
Best Student Poster Award, Society for Conservation Biology Annual Meeting	2000
NSF Predoctoral Research Fellowship	2001-2004
NSF REU, Rocky Mountain Biology Laboratory. Mentor: Neo Martinez	1999
NSF REU, Wellesley College. Mentor: Martina Koniger	1998

Refered Journal Buckley L. B. and Jetz W. 2009. Lizard community structure along environmental gradients. *Journal Publications of Animal Ecology* in press.

Buckley L.J. and Buckley L.B. 2009. Toward linking ocean models to fish population dynamics. *Progress in Oceanography* doi: 10.1016/j.pocean.2009.09.009.

Buckley L. B. and Jetz W. 2008. Linking turnover of species and environments. *Proceedings of the National Academy of Science* 105: 17836-17841. (Covered by *Environmental Research Web*, *Scientific American*, et al.)

Buckley L. B. 2008. Linking traits to energetics and population dynamics to predict lizard ranges in changing environments. *American Naturalist* 171:E1-E19.

Buckley L. B., Rodda G.H., and Jetz W. 2008. Thermal and energetic constraints on ectotherm abundance: a global test using lizards. *Ecology* 89:48-55.

Buckley L. B. and Jetz W. 2007. Insularity and the determinants of lizard population density. *Ecology Letters* 10:481-489. (Covered by *Conservation Magazine*, *Science Daily*, *United Press International*, et al.)

Buckley L. B. and Jetz W. 2007. Environmental and historical constraints on global patterns of amphibian richness. *Proceedings of the Royal Society B* 274:1167-1173.

Buckley L. B. and Roughgarden J. 2006. Climate, competition, and the coexistence of island lizards. Functional Ecology 20: 315-322.

Buckley L. B. and Roughgarden J. 2006. A hump-shaped density-area relationship for island lizards. Oikos 113: 243-250.

Buckley L. B. and Roughgarden J. 2005. Effect of species interactions on landscape abundance patterns. Journal of Animal Ecology 74:1182-1194. (JAE highlighted article)

Buckley L. B. and Roughgarden J. 2005. Lizard habitat partitioning on islands: the interaction of local and landscape scales. Journal of Biogeography 32: 2113-2121. (cover article)

Buckley L. B. and Roughgarden J. 2004. Biodiversity conservation: effects of changes in climate and land use. Nature 430: 1 (doi:10.1038/nature02717).

Invited Presentations

University of North Carolina, Curriculum in Ecology, April 2009

Duke University, Graduate Program in Ecology, January 2009

Society for Advancement of Chicanos and Native Americans in Science Annual Meeting, October 2008

Organized oral session "Grinnellian Niches or Just Statistical Correlates? Opportunities for Ecological Inference From Species Distribution Models", Ecological Society of America Annual Meeting, August 2008

UC Santa Barbara, Department of Ecology, Evolution, and Marine Biology, June 2008

Harvey Mudd College, Department of Biology, March 2008

University of North Carolina, Department of Biology, February 2008

University of South Carolina, Department of Biology, January 2008

University of Connecticut, Department of Ecology and Evolutionary Biology, January 2008

UC San Diego, Section of Ecology, Behavior, and Evolution, December 2007

UC Los Angeles, Department of Ecology and Evolutionary Biology, December 2007

UC Davis, College of Agricultural and Environmental Science, November 2006

Santa Fe Institute, Competitive Strategies in Complex Systems Workshop, December 2006

University of New Mexico, Department of Biology, October 2005

Santa Fe Institute, February 2005

Symposium "Body Size, Biophysics and Biological Stoichiometry", Ecological Society of America Annual Meeting, August 2003

Conference Presentations

2006, 2008 Metabolic Ecology Gordon Conference. Poster presentation Ecological Society of America Annual Meeting. Oral presentations 2004, 2005, 2006, 2007, 2008, 2009

International Biogeography Society Meeting. Poster presentations	2003, 2005, 2007
Bay Area Conservation Biology Symposium. Oral presentations	2003, 2004, 2005
Society for the Study of Evolution Annual Meeting. Oral presentation	2004
Society for Conservation Biology Annual Meeting. Poster presentation	2000

UNC Global Change Ecology, Biol490 Teaching

Spring 2010 Spring 2009

UNC Seminar in Phenology and Climate Change, Biol669

Faculty for Workshop on Theoretical Ecology and Climate Change, March 2009 International Centre for Theoretical Physics, Trieste, Italy Experience includes lecturing and leading a lab for a group of graduate students and postdocs primarily from developing countries. Directors: G. A. Canziani, G. A. De Leo, A.P. Dobson, M. Pascual.

Faculty for Complex Systems Schools

Experience includes lecturing to international and interdisciplinary groups of graduate students and postdocs and advising independent research.

• Santa Fe Institute, Santa Fe, NM	June 2007
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• Santa Fe Institute and Institute of Mathematical Sciences, Chennai, India January 2006

Grants Joint NCEAS/NESCent working group (~\$100,000)

2007

Mechanistic distribution models: energetics, fitness, and population dynamics (Co-PI with M. Angilletta, R. Holt, and J. Tewksbury)

National Geographic Society Research and Exploration Grant (\$20,000) 2004

The ecological development of spatial diversity patterns within terrestrial insular communities

(Co-author with J. Roughgarden)

Stanford University Field Studies Program Grant (\$9,100) 2004

Stanford University Field Studies Program Grant (\$7,900) 2003

Stanford University Center for Evolutionary Studies Grant (\$4.650) 2003

Stanford University Center for Evolutionary Studies Grant (\$3,980) 2002

INVITED NCEAS Working groups

WORKSHOPS AND WORKING GROUPS

Towards understanding marine biological impacts of climate change
The role of niche conservatism in producing biodiversity gradients

2009-2011
2008-2009

NCEAS & NESCENT Working group

Mechanistic Range Models: energetics, fitness, and population dynamics 2007-2009

Santa Fe Institute Workshop on Ant-Plant Interactions 2008

NSF Workshop on Scaling in Biology, UC Davis, Davis, CA 2007

DISCCRS II, Dissertation Initiative for Climate Change Research Symposium, Asilomar, CA 2006

Spatial Ecology Workshop, Mathematical Biosciences Institute, Columbus, OH 2006

Professional Service

Journal reviewer, American Naturalist, Austral Ecology, Biological Journal of the Linnean Society, Biology Letters, Bioscience, Conservation Biology, Current Zoology, Ecography, Ecological Applications, Ecology, Ecology Letters, Evolutionary Applications, Functional Ecology, Global Change Biology, Global Ecology and Biogeography, Journal of Animal Ecology, Journal of Tropical Ecology, Integrative and Comparative Biology, Oecologia, Oikos, PLoS ONE, PNAS, Wildlife Research.

Science and Education Coordinating Committee member, National Ecological Observatory Network (NEON) Domain 2 (2009-present)

Proposal panel, NSF IGERT, November 2009.

Proposal reviewer, NSF Population and Evolutionary Processes and Advancing Theory in Biology, National Geographic Society Committee for Research and Exploration Application review and planning committee member, DISCCRS (Dissertation Initiative for Climate Change Research Symposium) III (2007), SFI complex systems summer school (2006, 2007 & 2009), SFI postdoctoral fellowships (2006).

Member, American Association of Geographers, American Society of Naturalists, Ecological Society of America, International Biogeography Society.

Organizing Committee Chair, Bay Area Conservation Biology Symposium.

2005

Outreach

Panel member and mentor, Society for Advancement of Chicanos and Native Americans in Science		
Annual Meeting.	2008	
Seminar, NSF GUTS (Growing Up Thinking Scientifically) program for middle school	girls. 2007	
Mentor, Biology Alumni Panel, Williams College.	2007	
Science advisor, New Mexico Super Computing Challenge.	2007	
Field Studies Program Mentor, Stanford University.	2003 & 2004	