

**Mollie K. Manier**  
Hopkins Marine Station of Stanford University  
Oceanview Blvd.  
Pacific Grove, CA 93950 USA  
(831) 655-6210 (o), (831) 655-6215 (f)  
(831) 869-8846 (c)  
manier@stanford.edu

### **Education**

Doctor of Philosophy, Oregon State University, Zoology, minor in Statistics 2005  
Advisor: Stevan J. Arnold  
Thesis: "Population genetics, ecology and evolution of a vertebrate metacommunity"  
Bachelor of Arts, University of California at Berkeley, Integrative Biology 1997  
Advisor: Harry W. Greene  
Thesis: "Geographic variation in the long-nosed snake (*Rhinocheilus lecontei*): beyond the subspecies debate"

### **Honors, Grants and Fellowships**

NIH Ruth L. Kirschstein National Research Service Award Postdoctoral Fellowship 2005-2008  
NSF Doctoral Dissertation Improvement Grant 2003-2005  
NSF GK-12 Teaching Fellowship 2002-2003  
EPA Science to Achieve Results Fellowship 1999-2002  
Graduate Opportunities Program, Summer Research Opportunities Program, 1997  
UC Berkeley  
Integrative Biology Departmental Citation, UC Berkeley 1997  
Biology Fellowship, Molecular and Cell Biology, UC Berkeley 1996

### **Research Positions and Training**

Stanford University, Hopkins Marine Station, Postdoctoral Research Fellow 2005-present  
Advisor: Stephen R. Palumbi  
Research, laboratory management, technician and intern supervision  
UC Berkeley, Blodgett Forest Research Station, Herpetologist 1998  
Collected and surveyed amphibians, wrote final report  
UC Berkeley, Museum of Vertebrate Zoology, Curatorial Assistant of Herpetology 1996-1997  
Herpetology collection maintenance and management  
UC Berkeley, Integrative Biology, Research Assistant to Dr. Eileen Lacey 1996  
Behavioral observations of captive social tuco-tuco colonies  
UC Berkeley, Integrative Biology, Research Assistant to Mary Poteet 1995  
Sampled and dissected trematode-infected snails  
Princeton University, Ecology and Evolutionary Biology, Research Assistant to Elizabeth Gaines 1993  
Observations of wolf scent-marking behavior

### **Professional Activities**

Referee for *Bioinformatics and Biology Insights*, *Biological Journal of the Linnean Society*,  
*Canadian Journal of Zoology*, *Conservation Genetics*, *Copeia*, *Evolutionary Applications*, *Herpetologica*, and *Biology of Boas and Pythons* (book)  
Co-organizer, Biology Graduate Student Symposium, Oregon State University, 2000-2003

Hatfield Marine Science Center  
 Chair, Student Committee for Teaching, evaluation of Dr. Michael Blouin for tenure, 2000  
 Zoology, Oregon State University

**Teaching Positions**

Applied Statistics for Science and Technology, Instructor, Mathematics and Statistics, 2007  
 California State University at Monterey Bay, Marina, CA  
 Cell Biology Laboratory, Graduate Teaching Assistant, Zoology, Oregon State University 2005  
 Genetics, Graduate Teaching Assistant, Zoology, Oregon State University 2003-2004  
 NSF GK-12 Science Fellow, Garfield Elementary School, grades K-5, Corvallis, OR 2002-2003  
 Principles of Biology, Graduate Teaching Assistant, Zoology, Oregon State University 1998-1999  
 Natural History of the Vertebrates, Undergraduate Student Instructor, Integrative 1997  
 Biology, UC Berkeley

**Selected Presentations** (\*invited speaker)

\*World Congress of Herpetology, Manaus, Brazil 2008  
 \*School of Molecular Biosciences, Washington State University, Pullman, Washington 2008  
 Society for the Study of Evolution, Society of Systematic Biologists, and 2008  
 American Society of Naturalists, University of Minnesota, Minneapolis, Minnesota  
 Developmental Biology of the Sea Urchin, Marine Biological Laboratory, 2008  
 Woods Hole, Massachusetts (poster)  
 \*Department of Biological Sciences, University of Rhode Island, Kingston, Rhode Island 2008  
 \*John and Mary Louise Riley Seminar Series, Bodega Marine Laboratory, 2007  
 University of California, Davis  
 Developmental Biology of the Sea Urchin, Marine Biological Laboratory, 2006  
 Woods Hole, Massachusetts (poster)  
 Genetics of Speciation, American Genetics Association Annual Symposium, 2006  
 University of British Columbia, Vancouver, Canada (poster)  
 Society for the Study of Evolution, Society of Systematic Biologists, and 2006  
 American Society of Naturalists, SUNY Stonybrook (2 presentations)  
 Western Society of Naturalists, Seaside, California 2005  
 American Association for the Advancement of Science, Pacific Division, 2003  
 San Francisco State University, California Academy of Sciences  
 Society for the Study of Evolution, Society of Systematic Biologists, and 2003  
 American Society of Naturalists, California State University, Chico  
 American Society of Ichthyologists and Herpetologists and The Herpetologists' League, 2000  
 La Paz B.C.S., Mexico  
 American Society of Ichthyologists and Herpetologists and The Herpetologists' League, 1997  
 University of Washington

**Outreach Activities**

SMILE Program (Science and Math Interactive Learning Experiences), Assistant Teacher 2002-2003  
 Bi-monthly after-school program for grades 3-5, Garfield Elementary School,  
 Corvallis, OR  
 Corvallis Outdoor School, Scientist Instructor 2002  
 Soil Field Study, Aquatic Field Study, Grade 8, Lebanon, OR  
 American Women in Science Career Workshop, Tour Leader 2002  
 Introduced middle school girls to laboratory research in genetics, Corvallis, OR

- Presentations on reptiles and amphibians with live animals 1999-2003  
 Wilson Elementary School, Grade 2, Corvallis, OR  
 Lincoln Elementary School, Grade 4, Corvallis, OR  
 Garfield Elementary School, Grades 4-5, Corvallis, OR  
 Science Factory workshop, Eugene, OR  
 Willamette Valley Community School, Grades 5-12, Corvallis, OR
- CyberSisters, Mentor 1999-2000  
 Guided two middle school girls on independent science projects. One student went on to present her project poster at the Annual Meeting for the Society for Northwestern Vertebrate Biology in 2001; Corvallis, OR.

### **Publications**

- Howard D, SR Palumbi, L Birge and **MK Manier**. *In press*. Sperm and speciation. In Sperm Evolution (TR Birkhead, DJ Hosken and S Pitnick, eds). Elsevier.
- Manier MK**, CM Saylor and SJ Arnold. 2007. Adaptive divergence between ecotypes of the terrestrial garter snake, *Thamnophis elegans*, assessed with  $F_{ST}$ - $Q_{ST}$  comparisons. *Journal of Evolutionary Biology* 20(5): 1705-1719.
- Manier MK** and SJ Arnold. 2006. Ecological correlates of population genetic structure: a comparative approach using a vertebrate metacommunity. *Proceedings of the Royal Society, London B* 273(1604): 3001-3009.
- Manier MK** and SJ Arnold. 2005. Population genetic analysis identifies source-sink dynamics for two sympatric garter snake species (*Thamnophis elegans* and *T. sirtalis*). *Molecular Ecology* 14(13): 3965-3976.
- Manier MK**. 2004. Geographic variation in the long-nosed snake (*Rhinocheilus lecontei*): beyond the subspecies debate. *Biological Journal of the Linnean Society* 83(1): 65-85.
- Manier MK** and SR Palumbi. *In review*. Intraspecific divergence in sperm morphology of the green sea urchin, *Strongylocentrotus droebachiensis*: implications for selection in broadcast spawners. *BMC Evolutionary Biology*.
- Manier MK** and SR Palumbi. *In prep*. Evolution in small packages: variation in sperm morphology.