

## *Curriculum Vitae*

### **SACHA N. VIGNIERI**

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#### Education

- Ph.D. in Zoology, University of Washington (2005)  
Advisor: Dr. Jim Kenagy
- B.A. in Integrative Biology, University of California, Berkeley (1993)  
Advisors: Dr. Steven Glickman and Dr. Harry Greene

#### Research Interests

- Behaviour, ecology and evolutionary biology of mammals
- Ecological and population genetics
- Conservation and landscape genetics

#### Post-doctoral Professional Experience

- 2007-2008 Post-doctoral Fellow, Harvard University.  
Ecological genetics of adaptive color variation in beach mice.
- 2006-2008 University of California President's Postdoctoral Fellow, UC San Diego.  
Ecological genetics of adaptive color variation in beach mice
- 2005-2006 Leverhulme Fellow, Centre for the Study of Evolution, University of Sussex.  
Theoretical population genetics

#### Pre-doctoral Professional Experience

- 1996-1998 Research Assistant, School of Fisheries, University of Washington.  
Population structure of the northern fur seal
- 1996 Field Research Assistant, National Marine Mammal Laboratory, NOAA.  
Population and foraging ecology of Pribilof Island northern fur seals
- 1995 Field Research Assistant, Wildlife Biology, University of Washington.  
Den site selection of northern flying squirrels
- 1993-1994 Field Research Assistant, Integrative Biology, UC Berkeley.  
Ecological interactions of two species of Pteropid bats in the Samoan Islands
- 1992-1993 Research Assistant, Field Station for Behavioral Research, UC Berkeley.  
Behavioral endocrinology of spotted hyenas

#### Teaching Experience

Teaching assistantships, University of Washington:

- Biogeography (1999-2001)
- Vertebrate Zoology (1998)

Tutorials, University of Sussex:

- Topics in Evolutionary Theory (2006)

Guest lectures, University of Washington:

- Biogeography, Conservation Biology, Mammalogy (2001-2004).

#### Professional Service

Sustainable Ecosystems Institute

- Roster of Scientific Review Panelists (2007-present)

University of Washington, Zoology/Biology Department

- Faculty Appointments committee (2003)

- Graduate Program committee (2002-2003)
- Graduate Representative to the Faculty (2001)
- Organizer, Zoology Graduate Student Symposium (1999)
- Burke Museum Mammalian Diversity Outreach program (2001-2003)

American Society of Mammalogists

- International Relations committee (2000-2006)
- Conservation of Land Mammals committee (2000-present)
- Honoraria committee (2005-present)

Invited Seminars

- 2007** Influence of habitat, behavior, and landscape on gene flow and adaptation in natural populations of small mammals, Ecology and Evolutionary Biology seminar series, University of California, Santa Cruz.
- 2006** Gene flow in the Pacific jumping mouse (*Zapus trinotatus*): the connection between ecological mechanisms and patterns of genetic structure. Evolution seminar series, Centre for the Study of Evolution, University of Sussex, Falmer, UK.
- 2005** Streams over mountains: influence of riparian connectivity on gene flow in the Pacific jumping mouse (*Zapus trinotatus*) Anna M. Jackson Award presentation, American Society of Mammalogists.
- 2005** Importance of riparian connectivity to gene flow in the Pacific jumping mouse (*Zapus trinotatus*). Cooperative Fish and Wildlife Research Unit seminar series, Washington State Department of Natural Resources.

Contributed Papers

- 2007** Spatial genetic structure precipitates rapid bottleneck and founder effects in the patchily distributed Pacific jumping mouse. Population Genetics for the Conservation of Animals II, International Workshop, Centre for Alpine Ecology. Trento, Italy.
- 2005** Streams over mountains: influence of riparian connectivity on gene flow in the Pacific jumping mouse (*Zapus trinotatus*), British Population Genetics Group.
- 2004** Understanding connectivity in patchy environments, limited gene-flow and unexpected migration patterns in the Pacific jumping mouse, *Zapus trinotatus*, Society for Conservation Biology.
- 2004** Dispersal as a driver? Effects of local processes on regional patterns in the Pacific jumping mouse (*Zapus trinotatus*), Ecological Society of America.
- 2004** Effects of habitat restricted gene-flow in a patchily distributed species, the Pacific jumping mouse (*Zapus trinotatus*), Society for the Study of Evolution.
- 2004** Does habitat heterogeneity restrict gene-flow? Fine scale genetic structure in the Pacific jumping mouse (*Zapus trinotatus*), American Society of Mammalogists.
- 2003** Can we predict range wide effects from local results: hierarchical population structure in the Pacific jumping mouse, American Society of Mammalogists.
- 2002** Can local results predict regional effects: hierarchical population structure in Pacific jumping mice, Society for Conservation Biology/British Ecological Society.
- 2001** Connections between hierarchical population levels, American Society of Mammalogists.
- 2000** Predicting patch occurrence across the geographic ranges of four small mammals in Washington, Pacific Ecology Conference.
- 2000** Predicting patch occurrence across the geographic ranges of four small mammals in Washington, American Society of Mammalogists.

Awards

- University of California President's Post-doctoral Fellowship (2006-2008) \$85,000
- Putnam Expedition Grant (2007) \$11,000

- Alexander Agassiz Fellowship in Oceanography and Zoology (2006-2007) \$12,000
- Leverhulme Trust Visiting Scholar Fellowship (2005-2006) £18,100
- Anna M. Jackson Award, American Society of Mammalogists (2005) \$750
- U.S. Environmental Protection Agency Science To Achieve Results (EPA STAR) Pre-doctoral Fellowship (2003-2006) \$100,000
- British Ecological Society Scholarship to attend a joint meeting of BES and Society for Conservation Biology (2002) \$175
- Department of Biology Travel Award, University of Washington (2002) \$450
- Richard C. Snyder Award, University of Washington (2002 and 1999) \$950
- Grant in Aid of Research, American Society of Mammalogists (2001 and 2002) \$2000
- Grant in Aid of Research, Sigma Xi (2000) \$900

#### Professional Society Affiliations

- American Society of Mammalogists
- Ecological Society of America
- Society for the Study of Evolution
- Society for Conservation Biology

#### Reviewer

- *The American Naturalist, Animal Conservation, Biological Conservation, Conservation Biology, Conservation Genetics, Journal of Applied Ecology, Journal of Animal Ecology, Journal of Mammalogy, Molecular Ecology*

#### Publications

**Vignieri SN** (2007) Cryptic behaviors, inverse genetic landscapes, and spatial avoidance of inbreeding in the Pacific jumping mouse. *Molecular Ecology* 16, 853-866.

**Vignieri SN, EM Hallerman, BJ Bergstrom, DJ Hafner, AP Martin, P Devers, P Grobler, and N Hitt** (2006) Mistaken view of taxonomic validity undermines conservation of an evolutionarily distinctive mouse: A response to Ramey et al. *Animal Conservation* 9, 237-243.

**Vignieri SN** (2005) Streams over mountains: influence of riparian connectivity on gene flow in the Pacific jumping mouse (*Zapus trinotatus*). *Molecular Ecology* 14, 1925-1937.

**Vignieri SN** (2003) The isolation and characterization of eight highly variable microsatellite markers in the Pacific jumping mouse (*Zapus trinotatus*). *Molecular Ecology Notes* 3, 638-640.

**Drea CM, SN Vignieri, and SE Glickman**, (2002) Responses to olfactory stimuli in spotted hyenas (*Crocuta crocuta*): I. Investigation of environmental odors. *Journal of Comparative Psychology* 116, 331-341.

**Drea CM, SN Vignieri, HS Kim, ML. Weldele, and SE Glickman**, (2002):II. Discrimination of conspecific scent. *Journal of Comparative Psychology* 116, 342-349.

**Hoekstra HE, JM Hoekstra, D Berrigan, SN Vignieri, A Hoang, CE Hill, P Beerli, and JG Kingsolver** (2001) Strength and tempo of directional selection in the wild. *Proceedings of the National Academy of Sciences* 98, 9157-9160.

**Kingsolver JG, HE Hoekstra, JM Hoekstra, D Berrigan, SN Vignieri, CE Hill, A Hoang, P**

Gibert, P Beerli (2001) The strength of phenotypic selection in natural populations. *The American Naturalist* 157, 245-261.

Publications in Progress

**Vignieri SN** (in prep) There goes the neighborhood: The importance of spatial relatedness to the loss of genetic diversity. *Conservation Biology*

**Vignieri SN** and D Waxman (in prep) Reproductive modes and genetic variation. *Genetics*.

Dickerson, BR, Ream, RR, **Vignieri SN**, Bentzen, P, and Antonelis, GA (in prep) Signature of past population expansion masks current population structure in philopatric fur seals. *Evolution*

Mullen, LM, **SN Vignieri**, J Gore, HE Hoekstra (in prep) Opposing patterns of genetic and phenotypic divergence in beach mice. *Evolution*

Yang HP, **SN Vignieri**, D Waxman (in prep) Sex and selfing under disruptive selection. *The American Naturalist*.

Other Publications

**Vignieri SN** (2006) *Rattus spp.* in Boersma, P. D., S. H. Reichard, and A. van Buren editors. *Invasive species in the Pacific Northwest*, Seattle and London, University of Washington Press.

**Vignieri SN** (2006) *Sus spp.* in Boersma, P. D., S. H. Reichard, and A. van Buren editors. *Invasive species in the Pacific Northwest*. Seattle and London, University of Washington Press.