

STEPHEN R. PROULX

Curriculum Vitae

Postdoctoral Research Associate

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EDUCATION

Ph.D. University of Utah, Department of Biology, May 2000
Thesis advisor: Frederick R. Adler

B.A. University of California, Santa Cruz, 1993
Majors in Mathematics and Biology
Thesis advisors: Burney LeBoeuf and Marshall Sylan

PROFESSIONAL EXPERIENCE

2001- Postdoctoral Associate, University of Oregon
Center for Ecology and Evolutionary Biology and
NSF IGERT program in Evolution, Development, and Genomics

2000-01 Toronto Postdoctoral Fellowship in Evolutionary Ecology

HONORS

1993 Honors in Mathematics, University of California, Santa Cruz

1993 Honors in Biology, University of California, Santa Cruz

GRANTS AND AWARDS

2003 NIH NRSA Postdoctoral Fellowship—Robustness and Genetic
Variation in Gene Networks. \$98,000.

1999 University of Utah Graduate School Travel Award

1996 Sigma Xi Grant in Aid

1993 Department of Biology Undergraduate Research Award

POPULAR PRESS COVERAGE

Discover Magazine, *The Observer* (London), *The Scotsman* (Edinburgh),
BBC Wildlife Magazine, and *The Todd Mundt Show*

INVITED SEMINARS AND PRESENTATIONS

- 2004 Gulbenkian Institute, Lisbon, Portugal
- 2004 Indiana/Oregon IGERT Symposium:
The Evolution of Gene Regulation
- 2004 Dept of Genome Sciences, University of Washington
- 2004 Dept of Biology, Texas A&M University
- 2003 Institute of Biomedical and Life Sciences, University of Glasgow
- 2002 School of Biology, University of St. Andrews
- 2002 Dept of Biology, Colorado State University
- 2001 Dept of Biology, University of South Florida
- 2000 Ecology and Evolutionary Biology, University of Tennessee
- 2000 Connectivity of Migratory Birds Workshop

WORKSHOPS AND SPECIALIZED COURSES

- 2002 Gordon Conference on Bioinformatics and Theoretical Biology,
Tilton, New Hampshire
- 1999 European Science Foundation Workshop–Selection in Genetically
and Spatially Structured Populations, Edinburgh, UK
- 1995 Special Year in Mathematical Biology, Salt Lake City, Utah

TEACHING EXPERIENCE

- Instructor** Evolutionary Biology
- Guest Lecturer** Modeling for Biologists, Mathematical Biology,
Evolution of Infectious Disease, Evolution of Development
- Teaching Assistant** Statistics for Biologists, Mathematics for Life Scientists
- Lab Manager** Statistics for Biologists, Advanced Ecology
- Tutor** AP Calculus, Physics, Biology

PROFESSIONAL SERVICE

- Manuscript referee for *American Naturalist*; *Evolution*; *Genetics*; *Oikos*; *Behavioral Ecology*; *The Journal of Theoretical Biology*; *Organisms, Diversity, and Evolution*; *Behavioral Ecology and Sociobiology*; *Proceedings: Biological Sciences*; Princeton University Press. External reviewer for UK NERC Grants and Fellowships.
- 2002-3 Seminar Series Coordinator, Center for Ecology and Evolutionary Biology
 - 1994-9 Graduate Student Representative–Biology Computing Committee
 - 1995 Graduate Student Representative–Faculty Committee
 - 1992-3 Undergraduate Student Representative–Academic Freedom Committee

PUBLICATIONS IN REVIEW

18. **Proulx, S. R.**, Phillips, P. C. Gene families are born before duplication. Submitted to *PNAS*.
17. Teotónio, H., Rose, M. R., **Proulx, S. R.** Phenotypic plasticity and evolvability: an empirical test with experimental evolution. To appear in *Phenotypic Plasticity in Insects*. D. Whitman and T. N. Ananthakrishnan, Eds. Science Publishers, Inc. Plymouth, UK.

PUBLICATIONS

16. **Proulx, S. R.**, Phillips, P. C. 2005. The opportunity for canalization and the evolution of genetic networks. In press, *The American Naturalist*.
15. **Proulx, S. R.** 2005. Box: Gene interaction networks and their evolution. To appear in *Evolutionary Genetics: Concepts and Case Studies*. Fox, C. W. and Wolf, J. B. Eds.
14. Force, A., Cresko, W., Pickett, B., **Proulx, S. R.**, Amemiya, C., Lynch, M. 2004 The origin of subfunctions and modular gene regulation. In press, *Genetics*.
13. Day, T., **Proulx, S. R.** 2004. A general theory for the evolutionary dynamics of virulence. *The American Naturalist* 163(4):E40-E63
<http://www.journals.uchicago.edu/AN/journal/issues/v163n4/30057/30057.html>.
12. **Proulx, S. R.** 2004. Does sex age you? Science's Aging Knowledge Environment 2004(14) pp. pe14. <http://sageke.sciencemag.org/cgi/content/full/2004/14/pe14>.
11. **Proulx, S. R.** 2004. Sources of stochasticity in models of sex allocation in spatially structured populations. *The Journal of Evolutionary Biology* 17:924-930.
10. **Proulx, S.** 2003. Book Review—Sex Ratios: concepts and research methods, Edited by Ian C. W. Hardy. *American Journal of Human Biology* 15(2):236-237.
9. Lorch, P. **Proulx, S.** , Day, T. and Rowe, L. 2003. Condition dependent sexual selection accelerates adaptation by natural selection. *Evolutionary Ecology Research* 5(6):867-881.
8. **Proulx, S. R.**, Day, T. and Rowe, L. 2002. Older males signal more reliably. *Proceedings: Biological Sciences* 269:2291-2299.

7. **Proulx, S. R.** 2002. Niche shifts and expansion due to sexual selection. *Evolutionary Ecology Research* 4:351-369.
6. **Proulx, S. R.** and Day, T. 2001. What can invasion analyses tell us about evolution under stochasticity in finite populations? *Selection: Molecules, Genes, and Memes* 2:2-15.
5. **Proulx, S. R.** 2001. Female choice via indicator traits easily evolves in the face of recombination and migration. *Evolution* 55(12):2401-2411.
4. **Proulx, S. R.** 2001. Can behavioural constraints alter the stability of signalling equilibria? *Proceedings of the Royal Society of London, B* 268:2307-2313.
3. Yook, K., **Proulx, S. R.**, Jorgenson, E. 2001, Rules of nonallelic noncomplementation at the synapse in *Caenorhabditis elegans*. *Genetics* 158(1):209-220.
2. **Proulx, S. R.** 2000. The ESS under spatial variation with applications to sex allocation. *Theoretical Population Biology* 58(1):33-47.
1. **Proulx, S. R.** 1999. Matings systems and the evolution of niche breadth. *The American Naturalist* 154(1):89-98.

PUBLICATIONS IN PREPARATION

- **Proulx, S. R.**, Phillips, P. C., Otto, S. P., Promislow, D. E. L. Networks in ecology and evolution: Connecting theory across scales. Invited review for *TREE*.
- **Proulx, S. R.**, Servedio, M. R. Reinforcement and adaptive divergence under heterogeneous selection. To be submitted to *Evolution*.

REFERENCES

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