

## STEPHEN R. PROULX

### Curriculum Vitae

Postdoctoral Research Associate

University of Oregon

Center for Ecology and Evolutionary Biology

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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 Sylvan

### 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– \$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

- 2003** University of Glasgow
- 2002** University of St. Andrews
- 2002** Colorado State University
- 2001** University of South Florida
- 2000** University of Tennessee, Knoxville
- 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** Seminar in Evolutionary Biology
- Guest Lecturer** Modeling for Biologists, Mathematical Biology, Evolution of Infectious Disease
- 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*, *Oikos*, *Behavioral Ecology*, *The Journal of Theoretical Biology*, *Organisms, Diversity, and Evolution*, *Behavioral Ecology and Sociobiology*, *Proceedings: Biological Sciences*, and 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

**PEER REVIEWED PUBLICATIONS**

1. Day, T., **Proulx, S. R.**, 2003. A general theory for the evolutionary dynamics of virulence. In press *The American Naturalist*.
2. 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.
3. **Proulx, S. R.**, Day, T. and Rowe, L., 2002. Older males signal more reliably. *Proceedings: Biological Sciences* 269:2291-2299.
4. **Proulx, S. R.**, 2002. Niche shifts and expansion due to sexual selection. *Evolutionary Ecology Research* 4:351-369.
5. **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.
6. **Proulx, S. R.**, 2001. Female choice via indicator traits easily evolves in the face of recombination and migration. *Evolution* 55(12):2401-2411.
7. **Proulx, S. R.**, 2001. Can behavioural constraints alter the stability of signalling equilibria? *Proceedings of the Royal Society of London, B* 268:2307-2313.
8. Yook, K., **Proulx, S. R.**, Jorgenson, E. 2001, Rules of nonallelic noncomplementation at the synapse in *Caenorhabditis elegans*. *Genetics* 158(1):209-220.
9. **Proulx, S. R.** 2000 . The ESS under spatial variation with applications to sex allocation. *Theoretical Population Biology* 58(1):33-47.
10. **Proulx, S. R.** 1999. Matings systems and the evolution of niche breadth. *The American Naturalist* 154(1):89-98.

**BOOK REVIEWS**

11. **Proulx, S. R.** 2003. Sex Ratios: concepts and research methods, Edited by Ian C. W. Hardy. *American Journal of Human Biology* 15(2):236-237.

## PUBLICATIONS IN REVIEW

12. **Proulx, S. R.**, Phillips, P. C. The opportunity for canalization and the evolution of genetic networks. Submitted to *The American Naturalist*.
13. **Proulx, S. R.** Sources of stochasticity in models of sex allocation in spatially structured populations. Submitted to *The Journal of Evolutionary Biology*.

## PUBLICATIONS IN PREPARATION

14. **Proulx, S. R.**, Thornton, J. W., Phillips, P. C. Gene families created by evolutionary branching before duplication.
15. **Proulx, S. R.**, Phillips, P. C. The microevolutionary build up of gene regulation: Negative regulation evolves more easily than positive regulation.
16. Force, A., Cresko, W., Pickett, B., Amemiya, C., **Proulx, S. R.**, Lynch, M. The origin of gene subfunctions and modular gene regulation.
17. **Proulx, S. R.**, Adler, F. R. The evolution of mutation repair.
18. **Proulx, S. R.**, Day, T. Mutational meltdown or virulence supernova: Within host mutation and the evolution of highly virulent diseases.

## REFERENCES

Patrick C. Phillips

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5289 University of Oregon, Eugene, OR 97403-5289.

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