

Curriculum Vitae
CATHERINE RAMSAY LINNEN

Address: Museum of Comparative Zoology Labs
26 Oxford Street
Cambridge, MA 02138
Tel: (617) 970-7717
Fax: (617) 495-5667
Email: clinnen@oeb.harvard.edu

Education:

2000-2007 Ph.D. in Organismic and Evolutionary Biology
Harvard University; Cambridge, MA
Advisor: Dr. Brian Farrell

1996-2000 B.S. in Ecology (*Summa Cum Laude*, Highest Honors, GPA: 4.0)
University of Georgia; Athens, GA
Advisors: Dr. Mark Hunter and Dr. Daniel Promislow

Professional Experience:

2007- Postdoctoral Fellow, National Institutes of Health NRSA
Organismic & Evolutionary Biology, Harvard University

2005-2006 Teaching Assistant, General Biology
Harvard University Summer School (2 summer sessions)

2005-2006 Teaching Assistant, General Biology
Harvard University Extension School (fall and spring sessions)

2001-2002 Teaching Fellow, Animal Behavior, Harvard University

2001 Teaching Fellow, Ecology, Harvard University

2000-2001 Teaching Fellow, Organismal Biology, Harvard University

1999-2000 Research Assistant, University of Georgia, Institute of Ecology
Studied the effect of canopy herbivory on nutrient cycling in a forest ecosystem, as well as the influence of herbivore saliva on plant growth under the direction of Dr. Mark Hunter.

1997-1999 Research Assistant, University of Georgia, Department of Genetics
Studied the genetics of aging in *Drosophila melanogaster* under the direction of Dr. Daniel Promislow.

Grants:

2004 Putnam Expedition Grant (Museum of Comparative Zoology, Harvard University), "Proposal for an expedition to collect the *Neodiprion* (Hymenoptera, Diprionidae) of the southeastern United States" (\$3,056)

2003-2004 National Science Foundation, "Dissertation Research: Phylogenesis of hostshifts and specialization in *Neodiprion* sawflies" (\$10,570) (Co-PI Brian Farrell)

- 2003 AMNH Theodore Roosevelt Memorial Fund, “Systematics of the genus *Neodiprion* Rohwer (Hymenoptera: Diprionidae)” (\$1,241)
- 2003 Putnam Expedition Grant (Museum of Comparative Zoology, Harvard University), “Proposal for an expedition to collect the *Neodiprion* (Hymenoptera, Diprionidae) of the western United States” (\$3,687)
- 2002 Putnam Expedition Grant (Museum of Comparative Zoology, Harvard University), “Proposal for an expedition to collect the *Neodiprion* (Hymenoptera, Diprionidae) of the southwestern United States” (\$2,500)
- 2002 AMNH Theodore Roosevelt Memorial Fund, “Systematics of the genus *Neodiprion* Rohwer (Hymenoptera: Diprionidae)” (\$1,800)
- 2002 Putnam Expedition Grant (Museum of Comparative Zoology, Harvard University), “Proposal for an expedition to collect the *Neodiprion* (Hymenoptera, Diprionidae) of eastern Canada” (\$2,748)
- 2001 Putnam Expedition Grant (Museum of Comparative Zoology, Harvard University), “Proposal for an expedition to collect the *Neodiprion* (Hymenoptera, Diprionidae) of the northeastern United States” (\$1,500)

Fellowships:

- 2007-2010 National Institutes of Health NRSA Postdoctoral Fellowship
- 2004-2007 Environmental Protection Agency STAR (Science to Achieve Results) Graduate Fellowship
- 2004 Graduate School of Arts and Sciences Merit Fellowship (John Parker Scholarship), Harvard University
- 2000-2004 National Science Foundation Graduate Research Fellowship
- 1998 Howard Hughes Fellowship for Undergraduate Research

Awards:

- 2006 Ernst Mayr Award for Best Student Research Presentation
Society of Systematic Biologists
- 2003 President’s Prize for Student Paper Competition (Honorable Mention)
Entomological Society of America
- 2001 Derek Bok Award for Excellence in Teaching, Harvard University
- 2000 Derek Bok Award for Excellence in Teaching, Harvard University
- 2000 Josh Laerm Memorial Outstanding Ecology Undergraduate Award
Institute of Ecology, University of Georgia
- 2000 First Honor Graduate (4.0 GPA), University of Georgia
- 2000 Phi Beta Kappa Honor Society, University of Georgia

Scientific Memberships:

American Association for the Advancement of Science
 American Society of Naturalists
 Entomological Society of America
 Society for the Study of Evolution

Society of Systematic Biologists
Symphytos

Service:

2007 Reviewer for *Molecular Ecology*
2006 Cape Cod Evaluation Bioblitz volunteer (E. O. Wilson Biodiversity Foundation)
2005-2006 Mentor for undergraduate women in science, Harvard University
2004-2006 Teaching assistant for Harvard ExperiMentors' Day
2003-2006 Teaching assistant for the Life Sciences-HHMI High School Outreach Program
2003-2004 OEB Graduate Student Representative
2002-2003 Co-organizer of the OEB Graduate Student Seminar Series

Publications:

Linnen, C.R. and B.D. Farrell. In prep. A test of the sympatric host race formation hypothesis in *Neodiprion (lecontei)* group).

Linnen, C.R. and B.D. Farrell. In prep. *Neodiprion* phylogeny and comparison of methods for species tree inference.

Linnen, C.R. and B. D. Farrell. In prep. Phylogenetic analysis of nuclear and mitochondrial genes reveals mitochondrial introgression and evolutionary relationships in the *Sertifer* species group of *Neodiprion* (Hymenoptera: Diprionidae).

Patten, M.M. and **C.R. Linnen**. In prep. Haldane's rule, genetic sex determination, and differential introgression of mitochondrial and nuclear genes.

Linnen, C.R. 2007. Adaptation, speciation, and hybridization in the genus *Neodiprion* (Hymenoptera: Diprionidae). PhD Thesis, Harvard University.

Linnen, C.R. and B.D. Farrell. 2007. Mito-nuclear discordance is caused by rampant mitochondrial introgression in *Neodiprion* (Hymenoptera: Diprionidae) sawflies. *Evolution* 61(6): 1417-1438

Hunter, M.D., **C.R. Linnen**, and B.C. Reynolds. 2003. Effects of endemic densities of canopy herbivores on soil processes along a gradient in elevation in the southern Appalachians. *Pedobiologia* 47(3): 231-244.

Linnen, C.R., M. Tatar, and D.E.L. Promislow. 2001. Cultural artifacts: A comparison of senescence in natural, laboratory, and artificially selected lines of *Drosophila melanogaster*. *Evolutionary Ecology Research* 3: 877-888.

Invited Presentations:

2005 University of Massachusetts Amherst, Department of Entomology
 "Speciation in *Neodiprion* sawflies"

2000 11th Annual Student convention in Gerontology and Geriatrics
 "Effects of laboratory culture on aging patterns in *Drosophila melanogaster*."
 (Co-authors M. Tatar and D.E.L. Promislow)

Presentations at Meetings:

- 2006 EPA STAR Fellows Conference (Washington, D.C.) “Dueling datasets: Why do mitochondrial and nuclear gene trees disagree on *Neodiprion* phylogeny?” (poster; Co-author B.D. Farrell)
- 2006 Genetics of Speciation meeting (Vancouver, BC) “Dueling datasets: Why do mitochondrial and nuclear gene trees disagree on *Neodiprion* phylogeny?” (poster; Co-author B.D. Farrell)
- 2006 Evolution meeting (Stonybrook, NY) “Dueling datasets: Why do mitochondrial and nuclear gene trees disagree on *Neodiprion* phylogeny?” (Co-author B.D. Farrell)
- 2005 Evolution meeting (Fairbanks, AK) “How do *Neodiprion* sawflies speciate?” (Co-author B.D. Farrell)
- 2004 Evolution meeting (Fort Collins, CO) “The role of host shifts and specialization in the speciation of *Neodiprion* sawflies” (co-author B.D. Farrell)
- 2003 Entomological Society of America meeting (Cincinnati, OH) “The role of host shifts and specialization in the speciation of *Neodiprion* sawflies” (co-author B.D. Farrell)
- 1999 Southeastern Population Ecology and Genetics Group (Mountain Lake, VA) “Effects of laboratory culture on aging patterns in *Drosophila melanogaster*” (co-authors M. Tatar and D.E.L. Promislow)