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EDUCATION

- 2005 – present** **Colorado State University**, Ph.D. Candidate
Graduate Degree Program in Ecology
NSF-IGERT Program for Interdisciplinary Mathematics, Ecology, and Statistics
- 2000 – 2004** **University of North Carolina Asheville**, B.S.
Double major in Biology and Environmental Studies (concentration in Ecology)
Summa Cum Laude

PROFESSIONAL EXPERIENCE

Teaching Assistant, Colorado State University, Fall 2007 to present

Animal Behavior (BZ 300), Summer 2010, Summer 2011

Molecular & General Genetics (BZ 350), Spring 2011, Summer 2011

Introduction to Evolution (BZ 200), Fall 2010

Attributes of Living Systems (LIFE 102), Summer 2010

Systems Ecology (NR 575), Spring 2008

Getting Control of Your Data (ECOL 592), Fall 2007

Undergraduate Research Experience Mentor, Colorado State University, Summer 2006 to Spring 2011

Research Assistant, Colorado State University, July 2005 to August 2005

Michael Antolin, Department of Biology

Research Assistant, Emory University, July 2004 to July 2005

Sonia Altizer, Department of Environmental Studies (now at Univ of Georgia Odum School of Ecology)

Research Assistant, Tulula Wetlands Restoration Project, February 2001 to June 2004

Jim Petranka, Department of Biology, University of North Carolina Asheville

Research Assistant, Cerulean Warbler Inventory Project, Great Smoky Mountains N. P., Summer 2003

Trevor Rundle (PI), Southwestern Community College; Paul Super (Co-PI), Great Smoky Mountains N.P.

Volunteer Research Intern, Appalachian Highlands Science Learning Center at Purchase Knob,

Great Smoky Mountains National Park, Summer 2002, *Paul Super, Science Coordinator*

CURRENT RESEARCH

Functional genetics and parasite community ecology in a keystone species

My primary dissertation research integrates parasitology, evolutionary biology, and ecological genetics to investigate parasite community ecology and the immunogenetic basis for differential susceptibility in black-tailed prairie dogs. Prairie dogs are an important component of North American grasslands, but have declined throughout their range, in part because of the introduced pathogen *Yersinia pestis*, the causative agent of plague. There are five prairie dog species, two of which are currently listed under the Endangered Species Act. The black-tailed prairie dog, while much reduced in abundance, is the most widespread of the five species. Immunogenetic information about black-tailed prairie dogs could inform conservation decisions for all five species, and will contribute to our limited but growing knowledge of functional genetic markers and their usefulness in wildlife conservation and management.

PUBLICATIONS

Miller-Rushing, A. J. and **E. M. Harp** (2007) Fresh perspectives on timeless questions. *Frontiers in Ecology and the Environment*. 5:334-335

Petranka, J. W., **E. M. Harp**, C. T. Holbrook, and J. A. Hamel (2007) Long-term persistence of amphibian populations in a restored wetland complex. *Biological Conservation*. 138:371-380

Harp, E. M. and J. W. Petranka (2006) Ranavirus in wood frogs (*Rana sylvatica*): Potential sources of transmission within and between ponds. *Journal of Wildlife Diseases*. 42:307-318

Harp, E. M. (2004) Allozyme analysis of *Eriocaulon decangulare* (ten-angled pipewort) in western North Carolina. *Proceedings of the National Conference on Undergraduate Research*.

GRANTS, FELLOWSHIPS, AND SCHOLARSHIPS

2009	National Science Foundation Doctoral Dissertation Improvement Grant	\$14,476
2008	American Society of Veterinary Parasitologists Travel Grant	\$500
2008	American Society of Mammalogists Grant-in-Aid of Research	\$1000
2007	Sigma Xi Grant-in-Aid of Research	\$1500
2007	National Science Foundation Graduate Research Fellowship	\$121,500
2005	National Science Foundation Integrative Graduate Education and Research Traineeship, Program for Interdisciplinary Mathematics, Ecology, and Statistics	\$60,000+
2005	Colorado State University Graduate Research Fellowship in Ecology	\$2500
2003	“North Carolina Beautiful” Undergraduate Research Scholar Fellowship	\$3000
2003	University of North Carolina Asheville Undergraduate Research Grant	\$2000
2003	UNCA Chancellor’s Staff Advisory Committee Scholarship (Spring & Fall)	\$1500
2001	Elisha Mitchell Audubon Society Environmental Studies Scholarship	\$250

AWARDS AND HONORS

- 2008** Colorado State University Dept of Biology Award for Mentoring Undergraduate Research
- 2007** Graduate Degree Program in Ecology Good Citizen Award
Awarded each year to students and faculty who make extraordinary contributions to the Graduate Degree Program in Ecology at Colorado State University
- 2006** National Science Foundation Graduate Research Fellowship Honorable Mention
- 2004** Manley E. Wright Award
Awarded to the graduating UNCA student first in academics and scholarship
- 2004** Harry Henry Johnston Award for Excellence in Biology
Awarded each year to one graduating UNCA biology student
- 2004** University of North Carolina Asheville Undergraduate Research Scholar
- 2002** Goldwater Scholarship Nominee
- 2001** Univ of North Carolina Asheville Environmental Studies Dept Award for Academic Excellence

RESEARCH PRESENTED

Does exclusion of random error alter model inference? A case study using grizzly bears (*Ursus arctos*) of the Greater Yellowstone Ecosystem.

National Science Foundation Integrative Graduate Education and Research Traineeship (IGERT) Project Meeting, **May 2007** (poster)

Ranavirus in wood frogs (*Rana sylvatica*): Potential sources of transmission within and between ponds.

Ecological Society of America Annual Meeting, **August 2006** (poster)

Allozyme analysis of *Eriocaulon decangulare* (ten-angled pipewort) in western North Carolina.

National Conference on Undergraduate Research, **April 2004** (talk)

Allozyme analysis of *Eriocaulon decangulare* (ten-angled pipewort) in western North Carolina.

University of North Carolina at Asheville Undergraduate Research Symposium, **April 2004** (talk)

Ranavirus transmission in wood frogs (*Rana sylvatica*): Are researchers spreading a deadly virus?

University of North Carolina Asheville Undergraduate Research Symposium, **May 2003** (talk)

Ranavirus transmission in wood frogs (*Rana sylvatica*): Are researchers spreading a deadly virus?

Sigma Xi University of North Carolina Asheville Spring Meeting, **May 2003** (talk)

SYMPOSIA, SESSIONS, AND WORKSHOPS ORGANIZED

Communicating Science to the Public

Principal organizer. Workshop, Ecological Society of America Annual Meeting, **August 2007**

What editors want: do's and don'ts for preparing your manuscript

Co-organizer. Evening session, Ecological Society of America Annual Meeting, **August 2006**

Introduction to Geographic Information Systems

Principal organizer. Workshop, Colorado State University, **May 2006**

How to succeed in ecology: advice from senior ecologists and rising stars

Principal organizer. Evening session, Ecological Society of America Annual Meeting, **August 2005**

What editors want: do's and don'ts for preparing your manuscript

Principal organizer. Evening session, Ecological Society of America Annual Meeting, **August 2005**

ESA Student Section and Student LTER lunch chat with established ecologists

Co-organizer. Lunch session, Ecological Society of America Annual Meeting, **August 2005**

How to succeed in ecology: advice from aspiring and eminent ecologists

Co-organizer. Evening session, Ecological Society of America Annual Meeting, **August 2004**

Disease ecology and declining populations: analyzing and predicting disease in sensitive populations

Sole organizer. Symposium, Ecological Society of America Annual Meeting, **August 2004**

PROFESSIONAL SERVICE

Ecological Society of America

2008 – 2010 'Fresh Perspectives' Guest Editor, *Frontiers in Ecology and the Environment*

2007 – 2010 Public Affairs Committee

2006 – 2008 'Fresh Perspectives' Assistant Guest Editor, *Frontiers in Ecology and the Environment*

2005 – 2006 Website Redesign Committee

2004 – 2006 Student Section Chair

2004 – 2006 ESA Council

2004 – 2006 Meetings Committee

2003 – 2004 Student Section Co-chair

Reviewer for the following journals

Diseases of Aquatic Organisms

Ecological Applications

Frontiers in Ecology and the Environment

COLORADO STATE UNIVERSITY SERVICE

- 2009 – 2010** CSU Student Chapter of the Wildlife Disease Association, Webmaster
- 2009 – 2010** CSU Student Chapter of the Wildlife Disease Association, Treasurer
- 2006 – 2009** Colloquium in the Life Sciences, Webmaster
- 2006 – 2007** Graduate Degree Program in Ecology (GDPE) Executive Committee, Student Representative
- 2006 – 2007** Front Range Student Ecology Symposium, Program Chair
- 2005 – 2006** Front Range Student Ecology Symposium, Webmaster

PROFESSIONAL SOCIETY MEMBERSHIPS

- Ecological Society of America (since 2003)
- Sigma Xi (since 2003)
- Wildlife Disease Association (since 2004)
- American Institute of Biological Sciences (since 2004)
- American Society of Mammalogists (since 2007)
- International Association for Ecology and Health (since 2007)
- American Association of Veterinary Parasitologists (since 2008)

OTHER SIGNIFICANT WORK EXPERIENCE

- Website Designer** (freelance, >10yrs)
- Biology Tutor** (8yrs)
- Bartender/Waitress** (>10yrs)