

CURRICULUM VITAE

(March 2005)

Michael F. Antolin

B. 2/1/1959, Toronto, Canada (U.S. citizen)

Department of Biology
Colorado State University
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PRESENT POSITION

Professor and Assistant Chair, Department of Biology, Colorado State University

RESEARCH INTERESTS

Population genetics and ecology, metapopulation biology of prairie dogs and plague, conservation genetics, sex ratios and mating systems in parasitic Hymenoptera, evolution of host use in insects

EDUCATION

Florida State University Department of Biological Science	1985-1990	Ph.D., August 1990, Dissertation: "A Quantitative Genetic Study of Sex Ratio Variation in a Parasitic Wasp"
University of Alberta Department of Zoology	1981-1984	M.Sc., April 1985, Thesis: "Host Selection by Two Aphid Species"
Museum of Northern Arizona	summer 1981	Fern Mountain Field Ecology
University of Pennsylvania	1977-1981	B.A., August 1981, Cum Laude Major: Biology Minor: English

EMPLOYMENT HISTORY

2004-present	Professor, Department of Biology, Colorado State University
1998-2004	Associate Professor, Department of Biology, Colorado State University
1992-1998	Assistant Professor, Department of Biology, Colorado State University
1991-1992	Assistant Professor, Department of Entomology, University of California, Riverside
1990-1991	Post-doctoral Research Associate with Michael Strand, Department of Entomology, University of Wisconsin - Madison

- 1986-1990 Teaching Assistant, Florida State University (Animal Diversity: lab coordinator and lecturer; General Biology, Animal Diversity, Experimental Biology: lab instructor)
- 1985 Research Assistant to D.R. Strong, Florida State University
- 1984 Research Assistant to J.F. Addicott, Rocky Mountain Biological Laboratory, Gothic, Colorado, and the University of Alberta
- 1981-1984 Teaching Assistant, University of Alberta (Environmental Biology, Man and the Environment, Animal Ecology (field course), Principles of Ecology, Experimental Zoology (Biometry))

PUBLICATIONS (Peer-reviewed)

* denotes senior corresponding author when not first author

45. Bayard de Volo, S., R. Reynolds, and **M.F. Antolin**. Population genetic structure and the utility of multi-locus genotyping for mark-recapture studies of northern goshawks (*Accipiter gentilis*). *Journal of Raptor Research*, *in press*.
44. Lowell, J.L., D.M. Wagner, B. Atshabar, **M. Antolin**, A.J. Vogler, P. Keim, M.C. Chu, and K. L. Gage. 2005. Identifying sources of human exposure to plague. *J. Clin. Microbiol.* 43: 650–656
43. Weiser, L.A., **M.F. Antolin**, Z. Wu and G.E. Heimpel. Does temperature affect diploid male production in *Habrobracon hebetor* (Say) (Hymenoptera: Braconidae)? *Journal of Hymenopteran Research*, *in press*.
42. Richards, C.M., A. Reilley, D. Touchell, **M.F. Antolin**, and C. Walters. 2004. Microsatellite primers for Texas wild rice (*Zizania texana*), and a preliminary test of the impact of cryogenic storage on allele frequency at these loci. *Conservation Genetics* 5: 853–859.
- 41.* Baer, C.F., D.W. Tripp, T.A. Bjorksten, and **M. F. Antolin**. 2004. Phylogeography of a parasitoid wasp (*Diaeretiella rapae*): no evidence of host-associated lineages. *Molecular Ecology* 13: 1859-1869. [PMID: 15189209]
40. Stapp, P., **M.F. Antolin**, and M. Ball. 2004. Patterns of extinction in prairie dog metapopulations: plague outbreaks follow El Niño events. *Frontiers in Ecology and the Environment* 2: 235-240.
39. Avashia, SB, Petersen JM, Lindley C, Schriefer ME, Gage KL, Cetron M, Thomas A. Demarcus TA, Kim DK, Buck J, Monteneiri JA, Lowell JL, **Antolin MF**, Kosoy MY, Carter LG, Chu MC, Hendricks K, David T. Dennis DL, and Kool JL. 2004. First reported prairie dog-to-human tularemia transmission, Texas, 2002. *Emerging Infectious Diseases* 10: 483-486. [PMID: 15109417]
38. **Antolin, M.F.** P. J. Ode, G. E. Heimpel, R. B. O’Hara, and M. R. Strand. 2003. Mating system, population structure, and sex-determining allele diversity of the parasitoid wasp *Habrobracon hebetor*. *Heredity* 91: 373–381. [PMID: 14512952]
37. Walters, C. W., D.H. Touchell, P. Power, J. Wesley-Smith, and **M.F. Antolin**. 2002. A cryopreservation protocol for embryos of the endangered species *Zizania texana*. *Cryoletters* 23: 291-208. [PMID: 12447488]
36. **Antolin, M.F.** and J.H. Herbers. 2001. Perspective: Evolution’s struggle for existence in America’s public schools. *Evolution* 55: 2379-2388. [PMID: 11831654]
35. **Antolin, M.F.**, B.H. Van Horne, M.D. Berger, A.K Holloway, J.R. Roach, and R.D. Weeks. 2001. Effective size and genetic structure of a Piute ground squirrel population (*Spermophilus mollis*). *Canadian Journal of Zoology* 79: 26-34.

- 34.* Roach, J.L., B. van Horne, P. Stapp, and **M.F. Antolin**. 2001. Genetic structure of a black-tailed prairie dog metapopulation. *Journal of Mammalogy* 82: 946-959.
33. Black, W.C. IV, C.F. Baer, **M.F. Antolin**, and N.M. DuTeau. 2001. Population genomics: genome-wide sampling of insect populations. *Annual Review of Entomology* 46: 441-469. [PMID: 11112176]
- 32.* Holloway, A.K., M.R. Strand, W.C. Black IV, and **M.F. Antolin**. 2000. Linkage analysis of sex determination in *Bracon sp. near hebetor* (Hymenoptera: Braconidae). *Genetics* 154: 205-212. [PMID: 10628981]
31. **Antolin, M.F.** 1999. A genetic perspective on mating systems and sex ratios of parasitoid wasps. *Researches on Population Ecology* 41: 29-37.
30. Heimpel, G.E., **M.F. Antolin**, and M.R. Strand. 1999. Diversity of sex alleles in *Bracon hebetor*. *Heredity* 82: 282-291. [PMID: 10336703]
- 29.* Holloway, A.K., G.E. Heimpel, M.R. Strand, and **M.F. Antolin**. 1999. Survival of diploid males in *Bracon sp. near hebetor* (Hymenoptera: Braconidae). *Annals of the Entomological Society of America* 92: 110-116.
28. Ode, P.J., **M.F. Antolin**, and M.R. Strand. 1998. Differential dispersal and female-biased sex allocation in a parasitic wasp. *Ecological Entomology* 23: 314-318.
27. Dowton, M., A.D. Austin, and **M.F. Antolin**. 1998. Evolutionary relationships among the Braconidae (Hymenoptera: Ichneumonoidea) inferred from partial 16S rDNA gene sequences. *Insect Molecular Biology* 7: 129-150. [PMID: 9535159]
26. Fauvergue, X., K.R. Hopper, **M.F. Antolin**, and D.J. Kazmer. 1998. Does time until mating affect progeny sex ratio? A manipulation experiment with the parasitoid wasp *Aphelinus asychis*. *Journal of Evolutionary Biology* 11: 611-622.
25. Vaughn, T.T. and **M.F. Antolin**. 1998. Population genetics of an opportunistic parasitoid in an agricultural landscape. *Heredity* 80: 152-162.
24. Takasu, K., P.J. Ode, M.F. Antolin, and M.R. Strand. 1997. Environmental and genetic determinants of ovicide in the parasitic wasp *Bracon hebetor*. *Behavioral Ecology* 8: 647-654
23. Heimpel, G.E., **M.F. Antolin**, R.A. Franqui, and M.R. Strand. 1997. Reproductive isolation and genetic variation between two "strains" of *Bracon hebetor* (Hymenoptera: Braconidae). *Biological Control* 9: 149-156.
22. Ode, P.J., **M.F. Antolin**, and M.R. Strand. 1997. Constrained oviposition and female-biased sex allocation in a parasitic wasp. *Oecologia* 109: 547-555.
21. **Antolin, M.F.**, C.F. Bosio, J. Cotton, W. Sweeney, M.R. Strand, and W.C. Black IV. 1996. Intensive linkage mapping in a wasp (*Bracon hebetor*) and a mosquito (*Aedes aegypti*) with SSCP analysis of RAPD markers. *Genetics* 143: 1727-1738. [PMID: 8844159]
20. **Antolin, M.F.**, D.S. Guertin, and J.J. Petersen. 1996. The origin of gregarious *Muscidifurax* (Hymenoptera: Pteromalidae) in North America: an analysis using molecular markers. *Biological Control*, 6: 76-82.
- 19.* Guertin, D.S., P.J. Ode, M.R. Strand, and **M.F. Antolin**. 1996. Host-searching and mating in an outbreeding parasitoid wasp. *Ecological Entomology*, 21: 27-33.
18. Hunter, M.S., **M.F. Antolin**, and M. Rose. 1996. Courtship behavior, reproductive relationships, and allozyme patterns of three North American populations of *Eretmocerus nr. californicus* (Hymenoptera: Aphelinidae) parasitizing the whitefly *Bemisia sp. tabasci complex*. *Proceedings of the Entomological Society of Washington*, 98: 126-137.
17. Ode, P.J., **M.F. Antolin**, and M.R. Strand. 1996. Sex allocation and sexual asymmetries in intra-brood competition in the parasitic wasp *Bracon hebetor*. *J. Anim. Ecol.* 65: 690-700.
16. Vaughn, T.T., **M.F. Antolin**, and L.B. Bjostad. 1996. Physiological and behavioral effects of

- semiochemicals on the aphid parasitoid *Diaeretiella rapae*. *Entomologia experimentalis et applicata*, 78: 187-196.
15. **Antolin, M.F.**, P.J. Ode, and M.R. Strand. 1995. Variable sex ratios and ovicide in an outbreeding parasitic wasp. *Animal Behaviour*, 49: 589-600.
 - 14.* Fauvergue, X., K.R. Hopper, and **M.F. Antolin**. 1995. Mate-finding via a trail sex pheromone by a parasitoid wasp. *Proceedings of the National Academy of Science*, 92: 900-904. [PMID: 7846075]
 13. Ode, P.J., **M.F. Antolin**, and M.R. Strand. 1995. Brood-mate avoidance in the parasitic wasp *Bracon hebetor* Say (Hymenoptera: Braconidae). *Animal Behaviour*, 49: 1239-1248.
 12. Hiss, R.H., D.E. Norris, C.H. Dietrich, R.F. Whitcomb, D.F. West, C.F. Bosio, S. Kambhampati, J. Piesman, **M.F. Antolin**, and W.C. Black IV. 1994. Molecular taxonomy using single-strand conformational polymorphism (SSCP) analysis of mitochondrial DNA genes. *Insect Molecular Biology*, 3: 171-182. [PMID: 7894749]
 11. **Antolin, M.F.** 1993. Genetics of biased sex ratios in subdivided populations: assumptions, models, and evidence. *Oxford Surveys in Evolutionary Biology* 9, 239-281.
 10. **Antolin, M.F.** 1992. Sex ratio variation in a parasitic wasp. I. Reaction norms. *Evolution*, 46: 1496-1510.
 9. **Antolin, M.F.** 1992. Sex ratio variation in a parasitic wasp. II. Diallel cross. *Evolution*, 46: 1511-1524.
 8. **Antolin, M.F.** and M.R. Strand. 1992. Mating system of *Bracon hebetor*. *Ecological Entomology*, 17: 1-7.
 7. **Antolin, M.F.**, and J.F. Addicott. 1991. Colonization, among shoot movement, and local population neighborhoods of two aphid species. *Oikos*, 61: 45-53.
 6. **Antolin, M.F.** 1989. Genetic considerations in the study of attack behavior of parasitoids, with reference to *Muscidifurax raptor* (Hymenoptera: Pteromalidae). *Florida Entomologist*, 72: 15-32
 5. **Antolin, M.F.** and R.L. Williams. 1989. Host-feeding and egg production in *Muscidifurax zaraptor* (Hymenoptera: Pteromalidae). *Florida Entomologist*, 72: 129-134.
 4. **Antolin, M.F.**, and J.F. Addicott. 1988. Habitat selection and colony survival of *Macrosiphum valeriani* Clarke (Homoptera: Aphididae). *Annals of the Entomological Society of America*, 81: 245-251.
 3. **Antolin, M.F.**, and D.R. Strong. 1987. Long distance dispersal by a parasitoid (*Anagrus delicatus*, Mymaridae) and its host. *Oecologia*, 73: 288-292.
 2. Addicott, J.F., J. Aho, **M.F. Antolin**, D.K. Padilla, J.S. Richardson, and D.Soluk. 1987. Ecological neighborhoods: scaling environmental patterns. *Oikos*, 49: 340-346.
 1. **Antolin, M.F.**, and C. Strobeck. 1985. The population genetics of somatic mutation in plants. *American Naturalist*, 126: 52-62.

OTHER PUBLICATIONS (all invited)

8. **Antolin, M.F.** and A. Henk. 2003. Sex determination. Pp 1029-1032 in V.H. Resh, and R.T. Carde, eds, *Encyclopedia of Insects*. Academic Press, San Diego.
7. **Antolin, M.F.**, P. Gober, B. Luce, D. E. Biggins, W.E. Van Pelt, D.B. Seery, M. Lockhart, and M. Ball. 2002. The influence of sylvatic plague on North American wildlife at the landscape level, with special emphasis on black-footed ferret and prairie dog conservation. *Transactions North American Wildlife and Natural Resources Conference*, 67: 104-127.
6. **Antolin, M.F.**, and A. W. Schoettle. 2001. Fragments, extinction, and recolonization: the genetics of metapopulations. Pp 37-46 in D. Joyce and J.D. Simpson, eds, *Proceedings of the*

27th Biennial Conference of the Canadian Tree Improvement Association. Part 2. *Genetic Resource Management: Building Strategies for the New Millennium*.

5. **Antolin, M.F.** and W.C. Black IV. 2001. Genes, description of. Pp. 183-193 in S. Levin, ed., *Encyclopedia of Biodiversity*, Volume 3. Academic Press, San Diego.
4. Walters, C.T., and **M.F. Antolin**. 2000. The Agricultural Paradox: Review of Tuxill, J. 1999. *Nature's Cornucopia: Our Stake in Plant Diversity*. World Watch Paper 148. Conservation Biology 14: 912-914.
3. **Antolin, M.F.** 1998. Genetic assessment of strains, varieties, and ecotypes. Pp 62-70 in T. Gass, W. Podyma, J. Puchalski and S.A. Eberhart, eds, *Challenges in Rye Germplasm* International Plant Genetic Resources Institute, Rome, Italy.
2. **Antolin, M.F.**, T.T. Vaughn, and B.T. Bestelmeyer. 1994. Review of *Evolution and Diversity of Sex Ratio in Insects and Mites*. Edited by D.L. Wrensch and M.A. Ebbert. New York: Chapman and Hall (1993). Animal Behaviour, 48: 1241-1243.
1. Strong, D.R., **M.F. Antolin**, and S. Rathbun. 1990. Variance and patchiness in rates of population change: a planthopper's case history. Pp. 75-90 in B. Shorrocks and I. Swingland, eds, *Living in a Patchy Environment*. Oxford University Press.

MANUSCRIPTS IN REVIEW

- Lehmer, E., L. Savage, and M.F. Antolin. **A rare incident of hibernation in free-ranging black-tailed prairie dogs.** *Oecologia*.
- Antolin, M.F., T.A. Bjorksten, and T. T. Vaughn. **Host-related fitness trade-offs in a presumed generalist parasitoid, *Diaeretiella rapae* (Hymenoptera: Aphidiidae).** *Ecological Entomology*.
- Richards, C.M., M.F. Antolin, A. Reilley, J. Poole, and C. Walters. **Genetic diversity and population structure of the endangered Texas Wildrice: sampling for *ex-situ* conservation.** *American Journal of Botany*

RESEARCH GRANTS

- 2003-2008 NSF Ecology of Infectious Disease, "Plague as a model for low prevalence/epizootic disease dynamics", (PI with Ken Gage, Paul Stapp, Colleen Webb), \$1,245,000.
- 2002-2004 Colorado Division of Wildlife. "Mapping of Prairie Dog Habitat", \$21,000.
- 2002-2008 NSF Long Term Ecological Research, "Shortgrass Steppe", (co-PI with Gene Kelly, Indy Burke, Bill Lauenroth, Jack Morgan, Susan Stafford), \$4,680,000.
- 2002-2004 Monsanto Corporation, "Population genetics of *Diabrotica*", \$52,000.
- 2002-2003 U.S. Geological Survey, "Plague Database for Wildlife in Western North America", (with Dean Biggins), \$10,000.
- 2001-2002 National Fish and Wildlife Foundation, "Ecology and genetics of plague in wildlife", (sabbatical), \$33,400.
- 1999-2002 USDA- NRI Competitive Grants, "Genetics of host use in an oligophagous parasitoid, *Diaeretiella rapae*", \$125,000.
- 1999-2002 Colorado Agricultural Experiment Station, "Variation in host use by a parasitoid wasp and its influence on biological control of the Russian wheat aphid", \$120,000.
- 1999-2003 U.S. Fish and Wildlife Service, "Collection & Genetic Analysis of Endangered Texas

- 1999 Wild Rice, *Zizania texana*", (with Christina Walters), \$50,000.
 Welder Wildlife Foundation, "Paternity analysis of prairie dogs", (with Bill Andelt), \$2,000.
- 1998-1999 City of Fort Collins, "Paternity analysis of prairie dogs", (with Bill Andelt), \$3,000.
- 1998 USDA-APHIS National Wildlife Research Center, "Paternity analysis of prairie dogs", (with Bill Andelt), \$11,500.
- 1996-1999 Colorado Agricultural Experiment Station, "Benefits of alternative cropping designs on biological control of Russian wheat aphid and cabbage aphid pests", \$120,000.
- 1996 Organic Farming Research Foundation, "Enhanced parasitization of aphids using an opportunistic parasitoid wasp", \$1,410.
- 1995 Colorado State University Career Enhancement Grant, "Identification of potential sex-determining genes in a parasitic wasp", \$5,000.
- 1994-1998 USDA Competitive Grants, "The influence of sex allele diversity on biological control by *Bracon hebetor*", \$210,000 (with M.R. Strand).
- 1993-1997 USDA-ARS Cooperative Agreement, "Population Biology and Impact of Natural Enemy Introduction for Control of Russian Wheat Aphids" (with F. Peairs and T. Holtzer), \$117,000.
- 1993-1996 Colorado Agricultural Experiment Station, "Effect of semiochemicals on the behavior of Russian Wheat Aphid parasitoids, \$64,000 (with L.B. Bjostad).
- 1992-94 USDA Competitive Grants, "Sex allocation in an outbreeding wasp", \$100,000 (with M.R. Strand).
- 1990 Center for Biology Education, University of Wisconsin - Madison, "Exercises in Biology Using Insects as Model Organisms" (with M. Strand), \$10,000.
- 1988 NSF Doctoral Dissertation Improvement Grant, "Quantitative Genetics of Sex Ratio Variation in a Parasitic Wasp", \$2,500.
- 1987, 1988 Florida Entomological Society Mini-grants.
- 1982, 1985, 1987 Sigma Xi Grants-in-aid of Research.

COURSES TAUGHT

Phenomenon of Life: Biology for the Liberal Arts (NS 181), Principles of Animal Biology (BZ 110), Zoology Laboratory (BZ 111), Introduction to Evolution (BZ 220); Population and Evolutionary Genetics (BZ 346), Genetics of Natural Populations (MB/BZ 578), Population Genetics Laboratory (MB/BZ 579), Graduate Seminars (reaction norms, conservation genetics, host-parasite coevolution, metapopulation biology, invasive organisms, ecology of wildlife diseases)

GRADUATE STUDENTS AND POST-DOCS

POST-DOCTORAL ASSOCIATES:

Chris Brooks, May 2004-present (co-advised by Colleen Webb)

Tracey Bjorksten, December 1999 to November 2001

Charles Baer, July 1998 - July 1999

Darren Touchell, April 1998 to September 2000 (co-advised by Dr. Christina Walters, USDA-ARS National Seed Storage Laboratory)

Alan Molumby, September 1997 - May 1998

David S. Guertin, June 1993 - June 1994

CURRENT GRADUATE STUDENTS:

Dan Tripp, M.S., January 2005-present
Aryn Wilder, M.S., January 2005-present
Reesa Conrey, Ph.D., August 2003-present
Jennifer Lowell, Ph.D., March 2002 - present
Shelley Bayard de Volo, Ph.D., August 2000 - present
Lisa Savage, Ph.D. (NSF Fellow), August 1999 - present.

CONFERRED GRADUATE DEGREES

Jeremy Bono, Ph.D. August 1999 – December 2004 (co-advised by J. Herbers)
Erin Lehmer Powell, Ph.D. December 2000 – May 2004 (co-advised by B. Van Horne)
Jen Roach, M.Sc., August 1996 - June 1999 (co-advised by B. Van Horne)
Dan Hopkins, M.Sc., August 1993 - May 1998
Mike Gray, M.Sc., August 1995 - May 1998
Alisha Holloway, M.Sc., August 1995 - December 1997
Ty Vaughn, Ph.D., January 1993 - May 1997
Michelle Marko, M.Sc., August 1993 - May 1996

VISITING GRADUATE STUDENTS:

Masaaki Sato, Visiting M.Sc. student from Kobe, Japan, February 1999 to May 1999.
Katarzyna Chwedorzewska, Visiting M.Sc. student from Warsaw, Poland, July 1997 -February 1998.
Xavier Fauvergue, Visiting Ph.D. student from Montpellier, France, March 1993 - August 1994

SABBATICAL VISITOR:

Mauricio Cotera Correa, Facultad de Ciencias Forestales, Universidad Autónoma de Nuevo León, Linares, Nuevo León, México. September 2004-August 2004.

MENTORING**GRADUATE COMMITTEES:**

Peggy Anderson, Biology
Amy Blair, Bioagricultural Science and Pest Management
Steve Bernhardt, Microbiology, Pathology, and Immunology
Chris Bosio, Entomology
James Carlson, Graduate Degree Program in Ecology
Steve Dinsmore, Fisheries and Wildlife Biology
Aaron Ellingson, Fisheries and Wildlife Biology
Joe Fontaine, Biology
Doug Graham, Microbiology
Barb Karl, Graduate Degree Program in Ecology
Chuck Lang, Entomology
Cassie Lloyd, Bioagricultural Science and Pest Management
Paul Lukacs, Fisheries and Wildlife Biology
Seth Magle, Fisheries and Wildlife Biology
Sara Oyler-McCance, Fisheries and Wildlife Biology
Steve Rauth, Bioagricultural Science and Pest Management

Emily Ruell, Fisheries and Wildlife Biology
Larry Satcowitz, Biology
John Sovell, Biology
Michelle Wendell, Microbiology
David West, Entomology
Yan Zhou, Microbiology

OTHERS (Hughes Scholars, NSF Research Experience for Undergraduates, Biology Undergraduate Research Fellows, Science Motivation Programs, etc.)

2003 Nicolas Stifani, Intern from Universite de Nice, Sofia Antipolis, France (June - September)
2002-2003 Michael Weltzer, Hughes Undergraduate Research Scholar
1999-2003 Andra Savage, Hughes Undergraduate Research Scholar, BURF Student, graduated May 2003
2002 Katie McAnelly, REU Student from Colorado State University
2001 Michael Fleming, REU Student from Colorado State University
2000-2001 Anne Welch, REU, BURF Student from Colorado State University
2000 Stephen Murray, High School Teacher, Fort Morgan, Colorado
1999 Cherie Wyatt, Junior High School Teacher, Burlington, Colorado
1999 Paula Murray, BURF, Biology Department, Colorado State
1997 Pearl Aragon, High School Student, Brighton, Colorado
1996 Mike Berger, Undergraduate, Biology Department, Colorado State
1995 Duane Moeller, High School Teacher, Ranglely, Colorado
1993 Kristie Kadash, Undergraduate, Biology Department, Colorado State
1993 Jon Christensen, High School Student, Colorado Springs, Colorado
1993-1995 Simone O'Donaghue, Undergraduate, Biology Department, Colorado State
1992-1994 Clint Pilcher, Undergraduate, Biology Department, Colorado State

AWARDS AND HONORS

2001-2004 Guest Researcher, Centers for Disease Control and Prevention, Fort Collins, CO.
1999 Visiting Scientist, Spatial Ecology Program, University of Helsinki, Finland
1995 Colorado State University Nominee to NSF Presidential Faculty Fellow Program
1987, 1988 Florida Entomological Society Scholarships
1981 Merck Scholarship, University of Pennsylvania
1979-80 University of Pennsylvania exchange with Edinburgh University, Scotland

INVITED LECTURES

UNIVERSITIES, GOVERNMENT LABORATORIES

April 2004, University of Maryland, Baltimore County
February 2004, Duquesne University, Pittsburgh PA (Darwin Day Speaker: "Only Outlaws Would Evolve: the Value of Evolution Education to Modern Society").
February 2004, University of Pittsburgh, Pittsburgh, PA

November 2002, Colorado State U. Natural Resources Ecology Laboratory
 November 2002, Colorado State U., Colloquium in the Life Sciences
 October, 2002, EPA, Environmental Technical Support Center, Cincinnati, OH
 March, 2002, Colorado State U., Department of Bioagricultural Sciences and Pest Management
 January, 2001, Northern Arizona University
 December, 2000, Western Michigan University, Kalamazoo, MI
 February, 2000, Cornell University, Ithaca, NY
 February, 2000, Colorado State U., Department of Bioagricultural Sciences and Pest Management
 September, 1999, University of Helsinki, Finland
 October 1998, Univ. of Wyoming
 June 1998, CNRS, Montpellier, France
 June 1998, INRA, Antibes, France
 June 1998, CNRS, Gif-sur-Yvette, France
 April 1998, Univ. of Texas, Austin, TX
 April 1998, Southwest Texas State Univ., San Marcos, TX
 March 1998, Univ. of Georgia
 October 1997, Simon Fraser Univ., Burnaby, B.C., Canada
 February 1997, Univ. of California, Davis
 January 1995, University of Wisconsin
 April 1992, Univ. of California, Irvine
 February 1992, California State Univ., Hayward
 November 1991, Univ. of California, Davis
 October 1991, Colorado State Univ.
 March 1991, Univ. of Chicago
 September 1990, Univ. of Wisconsin
 May 1990, Univ. of California, Riverside
 October 1989, Univ. of Wisconsin
 March 1989, Univ. of Florida
 February 1987, Univ. of Rochester

NATIONAL AND INTERNATIONAL CONFERENCES

(since 1992, † invited speaker, * contributed paper or poster)

- 2004 †* National Science Foundation: Ecology of Infectious Diseases Principal Investigators.
Washington, DC
- 2004 * Society for the Study of Evolution, Fort Collins, CO
- 2004 * Ecological Society of America, Portland, OR
- 2004 † Commission for Environmental Cooperation, Grassland North American Conservation Action
Plan Workshop, Calgary Alberta.
- 2004 † Long Term Ecological Research Network Mini-Symposium: Application of LTER Science to
Ecosystem Management, National Science Foundation, Arlington, VA
- 2003 † Society of Vector Ecologists, Couer d'Alene, Idaho.
- 2003 * Long Term Ecological Research Network All-Scientists Meeting (workshop leader), Seattle,
WA
- 2003 † Disease Invasions, Pennsylvania State University, May 22-23 (Hosted by O. Bjornstad, P.
Hudson).
- 2003 Meeting the Challenges: Education Across the Biological, Mathematical, and Computer

- Sciences. Sponsored by Mathematics Association of America, NIH, NSF, Feb 27-Mar 1, Bethesda, MD.
- 2003 † Colorado Front Range Prairie Dog Technical Workshop, February 25-26, Fort Collins, CO
- 2003 Epidemiology and Ecology of Q Fever, Tularemia, and Plague, February 12-13, Sponsored by Fogarty International Center, NIH, and CDC, Bethesda, MD.
- 2003 † National Park Service Workshop: Invasive/native microbes in the NPS, Fort Collins, CO
- 2002 † North American Biology Teachers Convention, Cincinnati, OH
- 2003 * Society for the Study of Evolution, Chico, CA
- 2002 *† Society for the Study of Evolution, Urbana, IL
- 2002 * 67th North American Wildlife and Natural Resources Conference, Dallas, TX
- 2002 † W-185 Biological Control and Integrated Pest Management Systems, USDA, Boulder, CO
- 2002 † Evolution of Infectious Disease, NIH/NIGMS, Bethesda, MD (invited as discussion leader)
- 2002 † Black-tailed Prairie Dog Interstate Conservation Team Meeting (Jan 7-8), Las Cruces, NM.
- 2001 † Genetic Analysis of Populations - Importance of Population Dynamics and Demography, Tvärminne Zoological Station, University of Helsinki, Finland
- 2001 † Colorado Front Range Prairie Dog Technical Workshop, Fort Collins, CO
- 2001 * Guild of Rocky Mountain Population Biologists, Abiqui, NM
- 2001 * Society for the Study of Evolution, Knoxville, TN
- 2001 * Conservation Genetics in the Age of Genomics, American Museum of Natural History, NY
- 2000 Black-tailed Prairie Dog Interstate Conservation Team Meeting (Oct 17-19), Rapid City SD.
- 2000 Genetics Society of America, Genetics Society of Canada, Vancouver, B.C. Canada.
- 2000 † Canadian Tree Improvement Association, Sault Ste. Marie, ON, Canada
- 1999 Project Kaleidoscope National Conference, Washington, D.C.
- 1999 * Habitat Loss: Ecological, Evolutionary and Genetic Consequences, Helsinki, Finland
- 1999 * Society for the Study of Evolution, Madison, WI
- 1998 † Greenbug Research Consortium and WRC-66, Stillwater, OK
- 1997 * International Entomophagous Insects Workshop, Madison, WI
- 1997 * Society for the Study of Evolution, Boulder, CO
- 1996 † XX International Congress of Entomology, Florence, Italy
- 1996 † International Conference on Crop Germplasm Conservation, Warsaw, Poland
- 1996 * Society for the Study of Evolution, St. Louis, MO
- 1995 † Entomological Society of America, Las Vegas, NV
- 1995 * Society for the Study of Evolution, Montreal, Quebec, Canada
- 1994 * Guild of Rocky Mountain Population Biologists, Pingree Park, CO
- 1994 * Society for the Study of Evolution, Athens, GA.
- 1994 † International Entomophagous Insects Workshop, Whistler, B.C., Canada
- 1993 * Guild of Rocky Mountain Population Biologists, Abuqui, NM
- 1993 Gordon Research Conference in Quantitative Genetics, Ventura, CA
- 1992 * Guild of Rocky Mountain Population Biologists, Nederland, CO
- 1992 * International Entomophagous Insects Workshop, Duck Key, FL

PROFESSIONAL AFFILIATIONS

AAAS, Genetics Society of America, National Center for Science Education, Rocky Mountain Biological Laboratory, Society for the Study of Evolution

SERVICE

COLORADO STATE UNIVERSITY:

Search Committee: Department of Psychology (2004-2005)
University Physical Development Committee (2002-2005)
Art Selection Committee, CSU Chemistry-Biology Building, Colorado Council on the Arts, State of Colorado (January-March 2001)
6th and 7th All-University Undergraduate Research and Creativity Symposium, Chair of Organizing Committee (1999-2001)
3rd, 4th and 5th All-University Undergraduate Research Symposium, College of Natural Sciences Representative, (1997-1999)
Graduate Degree Program in Ecology, Executive Committee (elected 1995-1999; 2002-2004)
Faculty advisor to Colloquium in the Life Sciences (grad student seminar series) (1994-95)
Graduate Degree Program in Ecology, Graduate Research Grant Review Committee (1994-95)
College of Natural Sciences Undergraduate Scholarship Committee (1993-95)
Colorado Agric. Exper. Station Director's Advisory Committee (1992-93)

BIOLOGY DEPARTMENT:

Assistant Chair (2004 to present)
Chair, Search Committee for Theoretical Ecologist, 2003-2004
Search Committee for Department of Biology Chair, 2002-2003
Chair, Graduate Committee, 2002-2004
Search Committee for Senior Ecologist, 2002-2003
Chair, Search Committee for Theoretical Evolutionary Biologist, 2000-2001
Executive Committee, 1999-2001
Search Committee for Molecular Plant Systematist, 2000-2001
Search Committee for Evolutionary Biologist, 1997-98
Awards Committee 1996-99
Search Committee for Molecular Plant Systematist 1994-95
Graduate Committee 1993-95, 1998-99
Curriculum Committee 1993-94

JOURNALS REFEREED:

American Entomologist, American Naturalist, Animal Behaviour, Annals of the Entomological Society of America, Behavioral Ecology and Sociobiology, Biological Conservation, Biological Control, Ecological Entomology, Ecology, Ecology Letters, Evolution, Florida Entomologist, Great Basin Naturalist, Genetics, Insect Molecular Biology, Journal of Biogeography, Journal of Entomological Science, Journal of Evolutionary Biology, Journal of Heredity, Journal of Insect Behavior, Journal of Molecular Evolution, Journal of Parasitology, Oecologia, Oikos, Proc. of the Royal Society (Series B), Public Library of Science – Biology, Researches on Population Ecology

AD HOC GRANT REVIEWS:

National Science Foundation 1994-1998, 2000-2001, 2004

US Civilian Research and Development Foundation 2004
USDA Competitive Grants 1992-1997, 1999-2000, 2003
Australian Research Council, 1994, 1996-1997, 1999
National Research Council of the U.K. 2000
National Research Council of the U.S. 2002

OTHER AD HOC REVIEWS:

National Research Council: Bio 2010 Transforming Undergraduate Education for Future Research Biologists.

SCIENTIFIC SOCIETIES:

Organizer and local host, "Evolution04", Annual Meeting of the American Society of Naturalists, Society for the Study of Evolution, and Society of Systematic Biologists, Fort Collins, CO, June 25-30, 2004.
Science Education Committee, Society for the Study of Evolution, 2001- present
Co-organizer and host for meetings of the Guild of Rocky Mountain Population Biologists, Sept. 30 - Oct. 2, 1994.

NATIONAL, STATE:

Division of Wildlife, State of Colorado, Black-tailed Prairie Dog Conservation Working Group, 2001-2002
Science-education Listserv Moderator (American Institute of Biological Sciences Creation/Evolution Project), 2000 to present
US Fish and Wildlife Service, Black-tailed Prairie Dog Population Viability Group 1999-2000

COMMUNITY:

Lecture to Colorado Science Convention, Denver, CO, "New Bottles for Old Wine: the "New" Intelligent Design and the Same Old Creationism", November 19, 2004.
Demonstration on "Insects", 2nd Grade Class, Dunn Elementary School, Ft. Collins, May 25, 2004.
Lecture to the Foothills Unitarian Church, Fort Collins, CO: "Creationism, Evolution, and the Politics of Religion", Aug. 4, 2002
"Prairie Dog Conservation", Audubon Society, Fort Collins, January 9, 2002
Demonstration on Endangered Species, 6th Grade Class, Dunn Elementary School, Fort Collins, Oct. 18, 2001
Lecture to Colorado Science Convention, Denver, CO, "Evolution and the Nature of Science", September 29, 2000.
Center for Life Sciences, CSU, Evolution Teaching Workshops for PSD Science Teachers: "Evolution and the Nature of Science": April 4, October 21, 2000; June 22, 2001.
Lecture to Fort Collins Forum: "Fire, light, heat and brimstone", March 15, 2000
Lecture to the Foothills Unitarian Church, Fort Collins, CO: "Evolution, Natural Selection, and YOU", July 26, 1998
Demonstration on "Parasitic wasps", 5th Grade Class, Dunn Elementary School, Ft. Collins, May 18, 1998.
Demonstration of microscopic life: 6th Grade Class, St. Joseph's Elementary School, Ft. Collins, 1997
Science Fair Judge, St. Joseph's Elementary School, Ft. Collins, 1996

Presentation to Kindergarten Classes on "Insect Life", May 12 (Washington School), May 17
(Rivendell School), 1996
Coach for girls' soccer teams (ages 6-9), 1996-1999, 2002-2004