

DONALD G. MILLER III**Curriculum vitae (November 2010)**

Birthplace: Esbjerg, Denmark
Citizenship: United States

Address:

Department of Biological Sciences, California State University, Chico; Chico, CA 95929
phone: (530) 898-6153 FAX: (530) 898-4363 e-mail: dgmiller@csuchico.edu

Education:

Ph.D. 1997 Environmental Science, Policy and Management, University of California, Berkeley.
Advisor: Professor Wayne M. Getz. "The Manzanita Leaf-gall Aphid, *Tamalia coweni* (Cockerell) (Homoptera: Aphididae) as a Model System for Studies in Elementary Social Behavior, Sex Allocation and Life History Evolution."
M.Sc. 1990 Biological Anthropology, University of Oxford. Tutor: Dr. Anthony J. Boyce.
"Health and Work-loads in Nepalese Villagers."
B.S. 1986 Biology. State University of New York, College of Environmental Science and Forestry at Syracuse, Syracuse, NY. Mentor: Dr. William Shields. Senior thesis: "Inter-patch Dispersal in the Cabbage Butterfly, *Pieris rapae*."

Professional positions:

2008-- Associate Professor of Biological Sciences, California State University, Chico
2002–2008 Assistant Professor of Biological Sciences, California State University, Chico
1999–2002 Assistant Professor of Biology, Trinity University, San Antonio, Texas
1997-1998 National Institute of Health Postdoctoral Research Fellow at the Center for Insect Science, University of Arizona

Grants and awards:

2010 Center for Ecosystem Research, CSU, Chico: *Towards Designation of the Lake Hargy Caldera, West New Britain, as a Special Conservation Area in Papua New Guinea* (collaboration with Randy Senock and John Lane). \$3000
2010 National Science Foundation Research Opportunity Award: *Adaptive Radiation of a Gall-Midge-Fungus Mutualism in a Multi-Trophic Context* (Collaboration with Patrick Abbot, Vanderbilt University). \$25,000
2010 CSU, Chico Research Foundation: *The effects of parasitism and population structure on biological diversification in a galling aphid model system*. \$1000
2009 Consultation services for NSF EAGER Award Recipient, Dr. Ed Connor, San Francisco State University: *The Mechanism of Induction of Plant Galls*. \$2000
2009 Center for Ecosystem Research, CSU, Chico: *The Effects of Non-trophic Interactions and Population Structure on Host Race Formation in a Galling Aphid System* \$6000
2008 CSU, Chico Research Foundation: *Migratory Eurasian wigeon as a potential vector of highly pathogenic H5N1 avian influenza virus* \$4689
2008 U.S. Fish and Wildlife Service: *Effects of host plant quality, soil composition and vegetation on colonization rates of the VELB* (Co-PI) \$29,000
2007 Student Research Grant, CSU, Chico Graduate School (with Master's student, Brian Taylor): *Relatedness among galling aphids as determined through PCR-AFLP analysis* \$500
2007 Travel Grant, CSU, Chico Graduate School: *Testing the microenvironment hypothesis for adaptive value of gall induction in the California Gallfly, Andricus californicus (Hymenoptera: Cynipidae)* \$300
2007 Big Chico Creek Ecological Reserve Student Research Grant (with Master's student, Brian Taylor): *Relatedness among communal galling aphids as determined by AFLP analysis* \$1335

2006 CSU, Chico Research Foundation: *The effects of host plant quality and associated vegetation on colonization rates of the Valley Elderberry Longhorn Beetle* \$5000

2006 U.S. Fish and Wildlife Service: *The effects of host plant quality, soil composition and associated vegetation on colonization rates by the Valley Elderberry Longhorn Beetle* (Co-PI) \$57,477

2006 Society of Systematic Biologists: Award to Enhance Transfer of Taxonomic Knowledge \$3000

2006 AWTU release time, College of Natural Sciences: *Bioinventory of Sutter Buttes State Park*

2004 California Deer Association habitat grant \$8396

2004 Entomological Society of America/NSF Travel Grant \$2300

2003 Center for Excellence in Learning and Teaching grant—Class field trip \$1535

2003 California State University Research Foundation Award \$4205

2002 NSF-RUI Image Acquisition and Analysis Facility for Faculty-Student Research 0200148 (Major User) \$102,142

2002 Associated Colleges of the South *Campus as a Laboratory for Sustainability Alliance* Action/Research Grant \$1400

2002 Council on Undergraduate Research Summer Fellowship \$3500

2001 Associated Colleges of the South Rasmussen Environmental Fellowship \$2500

2001 Texas Core Knowledge Content Conference Award \$500

2000 Trinity University Summer Research Stipend \$7000

1998 NSF/IUSSI Travel Grant \$1450

1997 National Research Service Award \$20,320

1997 Julius H. Freitag Memorial Award \$400

1996 Graduate Division Travel Grant \$300

1996 Entomology Students' Club Travel Grant \$100

1995 Sigma Xi Grant-in-Aid \$500

1994 Sigma Xi Grant-in-Aid \$450

1993 Sigma Xi Chapter Fund \$225

1992 Du Pont Travel Fund \$300

1991-1994 Research Assistantship, Department of Entomology, University of California, Berkeley

1990 INTECOL Travel Fund \$300

1990 Redcliffe-Maud Travel Fund \$250

1989 Syracuse Sports Corporation Travel Fund \$200

1986 Alpha Xi Sigma award

Teaching experience:

2006-2010 Biological Principles Laboratory, California State University, Chico

2003-2010: General Entomology, California State University, Chico

2002-2009: General Ecology, California State University, Chico

2008: Introduction to Living Systems, California State University, Chico

2007-2009 Animal Behavior, California State University, Chico

2007-2008 Science and Human Values (co-Instructor), California State University, Chico

2005 (summer) Field Ecology of the Eagle Lake Area, Eagle Lake Field Station; California State University, Chico

2004-2005: Graduate student seminar, California State University, Chico

2003-2007: Concepts of Biology, California State University, Chico

2004: Biological literature and writing, California State University, Chico

2003 Summer: Field Ecology of the Western Great Basin Desert, Eagle Lake Field Station; California State University, Chico

2000-2002: Invertebrate Zoology, Trinity University

2000: Animal Behavior, Trinity University
1999-2001: Evolution, Ecology and Diversity of Life, (Co-instructor) Trinity University
1999, 2001: Evolution, Ecology and Diversity of Life Laboratory, Trinity University
1999 Spring: Part-time Instructor in Comparative Anatomy, University of Kentucky
1997 Spring: Teaching Assistant in Parasitology, University of Kentucky
1996 Fall: Teaching Assistant in Human Ecology, University of Kentucky
1995-1997 Guest lecturer in Evolutionary Biology, Transylvania University
1995-1996 Teaching Assistant in Invertebrate Zoology, University of Kentucky
1995 Spring: Team-taught Field Methods in Ecology, University of Kentucky
1994-1995 Part-time Instructor in General Biology for Science Majors, University of Kentucky
1992 Guest lecturer in biology at El Cerrito High School, El Cerrito, California

Student Trainees:

Current graduate students: Katie Duffield (ecology of communal roosting in White-tailed kites), Michelle Ocken (local migratory behaviors of burrowing owls), Stephanie Foster (pintail duck mating systems), Jeremy Ashe (migration and ecology of Eurasian wigeon), Brian Taylor (role of kinship in communal aphids)

Former graduate students:

Sheila Whitmore (Master's Thesis: population biology of spotted owls), Rick Wittsell (thesis: seasonal home range size variation in female Columbian black-tailed deer (*Odocoileus hemionus columbianus*)), Colin Purdy (thesis: sex allocation in galling aphids), Jessa Guisse (thesis: Agricultural potential of native and non-native *Osmia* bees), John Campbell (social behavior of galling aphids)

Service on the committees of the following graduate students: Andy Simpson (fruit size and effects of latitude and altitude in *Arctostaphylos*), Jackson Shedd (morphological asymmetry in fence lizards), Eric Hansen (conservation ecology of Giant Garter Snakes), Mariah Garr (aquatic invertebrate communities), Meghan Gilbert (ecology and conservation of Valley Elderberry Longhorn Beetle), Briony Gniechwitz (physiological ecology of California poppies), Kyle Hartwigsen (conservation ecology of frogs), John Hunt (riparian restoration), Glen Lubcke (turtle ecology and population biology), Al Kannely (ecology of *Calochortus* lilies), David Kelly (population biology of Western Pond Turtles), Gary Lechner (ecology of turtle foraging), Eric Olson (herpetofauna of Sutter Buttes), Alan Raetz (DEET sensitivity in *Drosophila*), Alicia Seesholtz (larval fish ecology), Ryan Brosius (aquatic assessment).

Undergraduate students: La Khang, Deb Rojas.

Former undergraduate students: Melissa Ng, Johnny Ratcliff, Dan Shipman, Maria Corrales, Jon Budhram, Brooke Bentley, Jesse Yang, Mandi McKay, Kelly Pool, Stephen Manifor, Erin Ditlove, Andrew Tuccillo, Rachel Rados, Anthony Rudick, Melissa Taylor, Nicholas Farmer, Cheryl O'Brien, Chris Edwards, Steven Manifor, Shandin Rudesill, Karen Tandy, Kevin Marr, Michelle Sopoliga, Robby Hoffman, Marirose Dunbar, Camille Jacoby, Darren Rocheleau.

Volunteers:

Tim Camuti, Scott Gregory, Jessa Guisse

Student Accomplishments:

Stevie Foster

2010 Internship: Raptor surveys on the Yukon Delta NWR, Alaska

Megan Fischer

2009 Dortha Powers Scholarship recipient

Brian Taylor

2007 Student Research Grant, CSU, Chico Graduate School: *Relatedness among communal galling aphids as determined by AFLP analysis* \$500

2007 Big Chico Creek Ecological Reserve Student Research Grant: *Relatedness among communal galling aphids as determined by AFLP analysis* \$1335

Jessa Guisse

2008 Hired as California Pollinator Outreach Coordinator for the Xerces Society for Invertebrate Conservation

2007 founded own pollination service company, "Pollination Solutions"

Robby Hoffman

2006 Omicron Theta Epsilon Research Scholarship \$487

Kevin Marr

2009 Hired as Environmental Scientist with California Department of Water Resources

Colin Purdy

2009 Hired as Lead Fisheries Biologist on the Yuba River, CA Department of Water Resources

2006 Presented (with co-author Don Miller) "Examining sex allocation in *Tamalia coweni* (Hemiptera: Aphididae) in response to nutrient variability in *Arctostaphylos patula*" at CSU, Chico's College of Natural Sciences' Second Annual Poster Session

2006 Winner, Graduate Student Research Competition. Presented "Examining sex allocation in *Tamalia coweni* (Hemiptera: Aphididae) in response to nutrient variability in *Arctostaphylos patula*" at the 20th annual California State University system-wide student research competition at CSU, Channel Islands (all expenses paid).

2005 Presented "Examining sex allocation in *Tamalia coweni* (Hemiptera: Aphididae) in response to nutrient variability in *Arctostaphylos patula*" at Annual Meeting of the Entomological Society of America, Fort Lauderdale, Florida

2005 Parry Environmental Scholarship Award \$1000

Anthony Rudick

2005 Admission to UC Berkeley School of Optometry

Rick Wittsell

2004 California Deer Association habitat grant \$8396

Publications (*peer-reviewed; † student co-author):

*Miller III, D. G., Lane, J. and Senock, R. (submitted). Butterflies as bioindicators of primary rain forest and oil palm plantation habitats on New Britain, Papua New Guinea. Pacific Conservation Biology.

* † Guisse, J. K. and D. G. Miller III (submitted). Distribution and habitat preferences of *Osmia lignaria* (Hymenoptera: Megachilidae) and associated cavity-nesting insects in California's Sacramento Valley and Sierra Nevada foothills. Pan-Pacific Entomologist.

*Pike, K.S., Graf, G., Footitt, R.G., Maw, H.E.L., Starý, P., Hammon, R. and D.G. Miller (2009). New species of *Braggia* (Hemiptera: Aphididae) on desert buckwheat in the western United States. Canadian Entomologist **141**: 561-581.

* † Donald G. Miller III, Christopher T. Ivey & Jackson D. Shedd (2009). Support for the microenvironment hypothesis for adaptive value of gall induction in the California gall wasp, *Andricus quercuscalifornicus* (Hymenoptera: Cynipidae). Entomologia Experimentalis et Applicata **132**: 126-133.

*Tanaka, Y., Hayashi, T., Miller III, D.G., Tainaka, K., and J. Yoshimura (2009). Breeding Games and Dimorphism in Male Salmon. Animal Behaviour **77**: 1409-1413.

Miller, D.G. (2007, 2008, 2009) North American Butterfly Association Annual Reports on diversity and abundance of North American Lepidoptera (compiler).

Miller, D. (2007). The Honeybee Mystery: Entomologist Discusses Colony Collapse Disorder. *Solicited article in Inside Chico State*, May 10, 2007.

*Miller III, D. G. (2005). Ecology and radiation of galling aphids (*Tamalia*; Hemiptera: Aphididae) on their host plants (Ericaceae). Basic and Applied Ecology **6**: 463-469 (*Special feature: Gall-inducing insects - nature's most sophisticated herbivores*)

Miller, Donald G. (2005). Review of Evolution of Ecological and Behavioural Diversity: Australian Acacia Thrips as Model Organisms. Systematic Entomology **30** (1): 177-178.

Miller III, D. G. (2005). Review of The Triumph of Sociobiology, by John Alcock. Sociobiology **45**: 205-208.

* Miller III, D. G. (2004). The ecology of inquilinism in communally parasitic *Tamalia* aphids (Hemiptera: Aphididae). Annals of the Entomological Society of America **97**: 1233-1241.

* † Farmer, N.A., Ribble, D.O. and D.G. Miller III (2004). Influence of familiarity on shoaling behaviour in Texas shiner (*Notropis amabilis*) Girard and blacktail shiner (*Cyprinella venusta*) Girard. Journal of Fish Biology **64**: 776-782.

*Miller III, D. G. and B. Crespi (2003). The evolution of inquilinism, host-plant use, and mitochondrial substitution rates in *Tamalia* gall aphids. Journal of Evolutionary Biology **16**: 731-743.

*Miller III, D. G. and F. L. W. Ratnieks (2001). The timing of worker reproduction and breakdown of policing behaviour in queenless honey bee (*Apis mellifera* L.) societies. Insectes Sociaux **48**: 178-184.

*Miller III, D. G. and L. Avilés (2000). Sex ratio and brood size in a monophagous outcrossing gall aphid, *Tamalia coweni* (Homoptera: Aphididae). Evolutionary Ecology Research **2**: 745-759.

*Miller III, D. G. and M. J. Sharkey (2000). An inquiline species of *Tamalia* co-occurring with *Tamalia coweni* (Homoptera: Aphididae). Pan-Pacific Entomologist **76**: 77-86.

*Miller III, D. G. (1998). Consequences of communal gall occupation and a test for kin discrimination in the aphid *Tamalia coweni* (Cockerell) (Homoptera: Aphididae). Behavioral Ecology and Sociobiology **43**: 95-103.

*Miller III, D. G. (1998). Life history, ecology and communal behaviour of the Manzanita Leaf-gall Aphid, *Tamalia coweni* (Cockerell) (Homoptera: Aphididae). Journal of Natural History **32**: 351-366.

*Lauer, M. J., Krupa, J. J., Haskins, K. E., and D. G. Miller III (1996). New county records for the West Virginia White (Lepidoptera: Pieridae: *Pieris virginiensis*) in Kentucky. Transactions of the Kentucky Academy of Science **57**: 128-129.

*Miller III, D. G. (1995). An isolated population of the Bog Elfin (*Incisalia lanoraieensis*) (Lepidoptera: Lycaenidae) in central New York. Journal of the New York Entomological Society **103**(1): 121-122.

*Ratnieks, F. L. W. and D. G. Miller (1993). Division of honey bees during swarming. Animal Behaviour **46**: 803-805.

*Ratnieks, F. L. W. and D. G. Miller (1993). Two polygyne overwintered nests of *Vespa vulgaris* from California. Psyche **100**: 43-50.

Miller, D. G. and F. L. W. Ratnieks (1992) Onset of worker reproduction in queenless honey bee colonies. Proceedings of the American Bee Research Conference. American Bee Journal **132**: 812.

*Panter-brick, C., Miller, D. G., and M. Eggerman (1992). Hemoglobin levels and step test performance of men and women in Nepal. American Journal of Human Biology **4**: 481-491.

Invited seminars (all of the following were delivered orally):

2010 Expedition Papua New Guinea 2006-2010 (with John Lane and Randy Senock). Sierra Nevada Brewery Big Room, Chico, CA.

2010 Gall induction by *Tamalia* aphids lowers seed set in *Arctostaphylos patula*. Northern California Botanists 2010 Symposium, January 11.

2009 The Role of Dispersal in the Exploitation of Communal Galling. AAAS Pacific Division Annual Meeting, California Academy of Sciences and San Francisco State University, San Francisco.

2008 Expedition Papua New Guinea 2007: Focus on Butterfly Biodiversity (with John Lane). Northern California Natural History Museum's "Lectures Without Walls" series. Chico, CA.

2007 Butterflies, Biskets, and Betel Nuts: Don Miller's Adventures in Papua New Guinea. Department of Biological Sciences, California State University, Chico.

2007 Primitive social behavior and its exploitation in *Tamalia* galling aphids. Department of Entomology, University of Illinois at Urbana-Champaign.

2006 The importance of Medical Entomology in relationship to invertebrates other than mosquitoes. Butte County Mosquito and Vector Control District Annual Training Session, Oroville, CA.

2005 From the showy to the secretive: Bidwell Park's insects and the plants they need. Northern California Natural History Museum's "Lectures Without Walls" series. Chico, CA.

2004 Social behavior and its exploitation in gall-dwelling aphids. Department of Biology, San Francisco State University.

- 2004 The ecology of inquilinism in communally parasitic *Tamalia* gall aphids. XXII International Congress of Entomology, Brisbane, Australia.
- 2004 Social behavior and its exploitation in gall-dwelling aphids. Department of Entomology, University of California, Davis.
- 2003 The secret lives of aphids in manzanita galls. California Native Plant Society, Mount Lassen Chapter, Chico, CA.
- 2003 Foundresses and squatters: communal living in gall-dwelling aphids. Department of Science, Shasta College, Redding, CA.
- 2002 Origins of congeneric inquilines in *Tamalia* galling aphids. XIV International Congress of the International Union for the Study of Social Insects. Hokkaido University, Japan. Co-presenter: Bernard J. Crespi, Simon Fraser University.
- 2000 Foundresses and squatters: communal living in gall-dwelling aphids. Department of Biology, Southwest Texas State University, San Marcos, TX.
- 2000 An inquiline aphid, *Tamalia inquilinus*, n. sp., co-occupying galls of the communal aphid *Tamalia coweni* (Homoptera: Aphididae). XXI International Congress of Entomology, Iguassu Falls, Brazil.
- 1999 Kinship and communal gall occupation in the aphid *Tamalia coweni*. XIII International Congress of the International Union for the Study of Social Insects. University of Adelaide, Australia.
- 1998 Founders, squatters and the exploitation of communal behavior in galling aphids. University of Arizona, Tucson, AZ.
- 1997 Life history, ecology and communal gall occupation in the Manzanita Leaf-gall Aphid, *Tamalia coweni*. University of Kentucky, Lexington, KY.
- 1996 Life history, ecology and communal behavior of the Manzanita Leaf-gall Aphid, *Tamalia coweni*. The Ohio State University, Columbus, OH.
- 1996 Factors affecting communal gall occupation in the aphid *Tamalia coweni*. XX International Congress of Entomology, Florence, Italy.
- 1996 Life history, ecology and communal gall occupation in the Manzanita Leaf-gall Aphid, *Tamalia coweni*. Imperial College at Silwood Park, Ascot, U.K.
- Submitted presentations** (the following were delivered orally, except *poster presentations) (†student co-author):
- 2010 Brood parasitism of neighbors by inquilines in *Tamalia* galling aphids. XVI International Congress of the International Union for the Study of Social Insects, Copenhagen.
- *†2010 Using GPS to track relative rates of dispersal in gall-inducing aphids and inquilines from source to sink host plants at the Big Chico Creek Ecological Reserve (with Johnny Ratcliff and Colleen Hatfield). CSU, Chico College of Natural Sciences 6th Annual Poster Session.

*†2009 Support for the microenvironment hypothesis for adaptive value of gall induction in the California Gallfly, *Andricus californicus* (Hymenoptera: Cynipidae) (with Chris Ivey and Jackson Shedd). CSU, Chico College of Natural Sciences 5th Annual Poster Session.

*2008 Support for the microenvironment hypothesis for adaptive value of gall induction in the California Gallfly, *Andricus californicus* (Hymenoptera: Cynipidae) (with Chris Ivey and Jackson Shedd). Entomological Society of America Annual Meeting, Reno, NV.

2007 Testing the microenvironment hypothesis for adaptive value of gall induction in the California Gallfly, *Andricus californicus* (Hymenoptera: Cynipidae). Entomological Society of America Annual Meeting, San Diego, CA.

*2007 The Effects of Host Plant Quality, Soil Composition and Associated Vegetation on Colonization Rates by the Valley Elderberry Longhorn Beetle (with Joe Silveira, Colleen Hatfield, Meghan Gilbert and Marcel Holyoak). Sacramento River Restoration Science Conference, Chico, CA

2006 The Effects of Host Plant Quality, Soil Composition and Associated Vegetation on Colonization Rates by the Valley Elderberry Longhorn Beetle (with Joe Silveira, Colleen Hatfield, Meghan Gilbert and Marcel Holyoak). Bureau of Reclamation, Sacramento, CA.

*2006 Differential rates of inter-gall dispersal in *Tamalia* gall-inducers and inquilines (Aphididae). XV International Congress of the International Union for the Study of Social Insects, Washington, DC.

2005 Implications of Reproductive Mode and Dispersal for Social Behavior in *Tamalia* Gallling Aphids. Entomological Society of America Annual Meeting, Fort Lauderdale FL.

2004 Ecology of inquilinism in communally parasitic *Tamalia* aphids (Hemiptera: Aphididae). Entomological Society of America Annual Meeting, Salt Lake City, Utah.

2003 Evolution of congeneric inquilines in *Tamalia* galling aphids. Entomological Society of America Annual Meeting, Cincinnati, Ohio.

2003 Evolution of inquilinism and host-plant use in *Tamalia* galling aphids. Joint Meeting of the Society for the Study of Evolution, Society of Systematic Biologists, and American Society of Naturalists, California State University, Chico.

2001 A preliminary phylogeny of *Tamalia* galling aphids and their congeneric parasites. Eighth Congress of the European Society for Evolutionary Biology, Aarhus, Denmark.

*2001 A preliminary phylogeny of social galling aphids on manzanita and madrone. Blodgett Forest Research Symposium, Blodgett Forest Research Station, Georgetown, California.

2000 Squatters in Gall Aphid Societies. Annual Meeting of the Southwestern Association of Naturalists, University of North Texas, Denton, Texas.

*1998 Does kinship mediate communal gall occupation in the aphid *Tamalia coweni*? Third International Symposium on Molecular Insect Science, Snowbird, Utah.

1997 Morph investment strategies within and among populations of a gall aphid. University of Kentucky Conference on Behavior, Ecology, Evolution and the Environment, Lexington, KY.

1996 Kinship and communal gall occupation in the Manzanita Leaf-gall Aphid, *Tamalia coweni*. Midwest Animal Behavior Conference, Indiana University, Bloomington, IN.

1996 The role of kinship during communal gall formation in the aphid *Tamalia coweni*. Entomological Society of America Annual Meeting, Louisville, Kentucky.

1996 Thomas Hunt Morgan and the Biology of the Manzanita Leaf-gall Aphid. University of Kentucky Conference on Behavior, Ecology, Evolution and the Environment, Lexington, KY.

1995 Does the communally galling aphid *Tamalia coweni* tend to associate according to kin? Midwest Ecology and Evolution Conference, Bowling Green State University, Bowling Green, Ohio.

1995 Fitness consequences of communal galling in *Tamalia coweni*. Entomological Society of America Annual Meeting, Las Vegas, Nevada.

1994 Reproductive strategies of a cloning gall-maker: are *Tamalia* aphids making the best of a bad job? University of Kentucky, Center for Evolutionary Ecology conference: Behavior, Ecology, Evolution and the Environment.

1994 Does the communally galling Manzanita Leaf-gall Aphid tend to associate according to kinship? University of Kentucky, Center for Evolution, Ecology and Behavior Conference on Male-Female Sexual Conflict, Lexington, KY.

1994 Conflict over the onset of worker reproduction in queenless honey bee societies. Midwest Animal Behavior Conference, Southern Illinois University at Carbondale.

*1993 Breakdown of mutual prevention of worker male-production in queenless honey bee societies. Animal Behaviour Society meeting, Davis, CA.

1993 The social biology of Manzanita Leaf-gall Aphids. Sagehen Creek Field Station Annual Research Review, Truckee, CA.

1992 Onset of worker reproduction in queenless honey bee colonies. American Bee Research Conference, College Station, TX.

1991 Onset of worker reproduction in queenless honey bee colonies. Social Insect Conference, Stanford University, CA.

*1990 Health and work loads in a Nepalese village. IV International Congress of Ecology, Yokohama, Japan.

Continuing Education:

2010 Participant in post-symposium workshop: Restoring riparian habitats on the Sacramento River Floodplain, Northern California Botanists 2010 Symposium, January 13

2007, 2009 Participant in CSUC-sponsored research expedition to Papua New Guinea, to survey primary rain forest habitats using butterflies as indicators of biodiversity

2007 Summer training fellowship on enhancing technical skills in applied aphid taxonomy, with Dr. David Voegtlin, University of Illinois at Urbana-Champaign
2007 Participant, “The Interface between Research and Management in Northern California Botany,” conference, CSU, Chico
2006 Participant, “This Way to Sustainability” Conference, CSU, Chico
2006 Participant, Butte Environmental Council conference “Vernal Pool Complexes of the Northstate: Biology, Conservation and Management.”
2006 Participant, CSU, Chico Western Regional Conference and Expo “Towards Sustainability”
2005 Participant, National Science Foundation Day workshop on grant-writing, Sacramento State University.
2004 Participant, Friends of the Jepson Herbarium workshop on *Arctostaphylos*, Hastings Reservation, Carmel Valley, CA
2003 Participant, Friends of the Biological Sciences Herbarium workshop on *Arctostaphylos*, CSU, Chico
2001 Participant, Associated Colleges of the South Workshop on Alliances to Monitor the Environment, Trinity University.
2001 Participant, Associated Colleges of the South Environmental Initiative Workshop, Stone Mountain, Georgia
2001 Participant, The Sierra Club's conference on Water for People and the Environment, Trinity University.
2001 Participant, Texas Core Knowledge Content Conference, Trinity University.
2000 Participant, Associated Colleges of the South (ACS) Science Education for Non-science Majors Workshop, Trinity University
1999 Participant, Research Link 2000 Institute Workshop (sponsored by Council on Undergraduate Research), Ferris State University, Big Rapids, Michigan

Society memberships:

California Faculty Association, California Teachers Association, Entomological Society of America, Friends of the Biological Sciences Herbarium (California State University, Chico), International Union for the Study of Social Insects, National Education Association, Sigma Xi, Pacific Coast Entomological Society.

Conservation and Community memberships:

The Nature Conservancy, Sierra Club, Union of Concerned Scientists.

Referee activities:

Grant proposals

National Science Foundation, Program in Animal Behavior; NSF, Behavioral Systems Cluster, Research Initiation Grant

Journals

Annals of the Entomological Society of America (Mar 2010), Biodiversity and Conservation (Oct 2010), Biological Journal of the Linnean Society (at least 2), Behavioral Ecology and Sociobiology; Ecological Entomology; Behavioral Ecology; Insectes Sociaux; Journal of Tropical Forest Science; Journal of Apicultural Research; Naturwissenschaften; Journal of Insect Behavior; Animal Behaviour; Oriental Insects

Book reviews

A Brief Guide to Biology, with Physiology, 1st edition (D. Krogh, Pearson Prentice-Hall)
Biology of the Invertebrates, 5th edition (J.A. Pechenik, McGraw-Hill Higher Education)

Faculty 1000—brief commentaries recommending outstanding articles

Merckx & Bidartondo, Proc. Roy. Soc. B **275**: 1029-1035 (2008), with Wayne Getz, U.C. Berkeley

Book review in brief

Essentials of Ecology, 2nd edition (C.R. Townsend, M. Begon and J. L. Harper, Blackwell)

Chapter reviews

The Other Insect Societies (J.A. Costa, Harvard University Press)

Plant Galls of California (Ron Russo, University of California Press)

Arthropods of Canadian Grasslands: Ecology and Interactions in Grassland Habitats,
(eds Joseph D. Shorthouse, Kevin D. Floate and Rosemarie DeClerck-Floate)

Service to the Profession:

2010 Served on Project Review Team of proposal on pest management submitted to Washington State University's Irrigated Agriculture Research and Extension Center

2010 Served as Outside Reviewer of Shasta College Life Sciences Program

2006 Served as Outside Examiner in oral examination of Nate Hardy, doctoral candidate with Dr. Penny Gullan in the Department of Entomology, UC Davis

2005 Co-organized and moderated symposium, "The Other Social Arthropods," at 2005 Entomological Society of America Annual Meeting, Fort Lauderdale FL.

2004 Moderated Panel at 2004 Entomological Society of America Annual Meeting, Salt Lake City: "Apiculture and Social Insects."

Service to the Department, the College and the University:

2010 Honors Program Curriculum Committee

2009 Department of Biological Sciences Personnel Committee

2005-2009 College of Natural Sciences Technical Advisory Committee for Big Chico Creek Ecological Reserve

2008, 2009 Interviewed by the Chico News & Review about conducting North American Butterfly Association-sponsored surveys of butterflies in Chico

2008 Facilitated forum following presentation of the film "*Garden Insects*" at Greendance Film Festival, CSU, Chico

2007 Academic Senate: A.S. Environmental Affairs Council

2007 Was interviewed by the campus newspaper "Orion" for article on honey bees

2007 Represented Biological Sciences Department at meeting with WASC reviewer Dr. Andrew Grosovsky during his campus visit

2006 Examined entomological forensic evidence for Dr. P. Willey, of the Human Identification Laboratory at CSU, Chico

2006-2009 Conducted survey on species richness and abundance of butterflies at the Big Chico Creek Ecological Reserve (BCCER)

2003-2009 Guest lecturer in Biology 101 and Biology 600

2006 General Education Advisory Committee (Subcommittee)

2008 Curriculum Committee (Chair)

2005-2008 Service on BCCER Technical Advisory Committee

2005 *Ad hoc* General Education Science Committee

2004-2005 Administered internship program on Chronic Wasting Disease in Mule Deer

2004-2008 Academic Funding Committee

2003-2008 Development and Outreach Committee (have served as Chair)

2003-2007 Graduate Advisory Committee

2003-2006 *Ad hoc* Hiring Committees, Biological Sciences

2003-2008 Thesis Committees for fifteen Master's Degree Candidates

2003 Participated in Elder Hostel program

2003 Vesta Holt Scholarship Committee

2003 Eagle Lake Field Station Advisory Board

Community service:

- 2010 Presented “The Secret Life of Bees” at Chico Museum, Aug 22.
- 2010 Interviewed for “The Secret Life of Bees” on “I-5 Live” radio talk show, KCHO, Chico, July 19.
- 2010 Presented part of University Entomology Collection (together with General Entomology Zach Baroni and Kurtis Westbrook) to Maria Ramirez’s second-grade class at Rosedale Elementary School, Chico, CA
- 2010 Expedition Papua New Guinea 2007, 2009. St. John’s Episcopal Church Adult Forum, Chico, CA.
- 2009-2010 Served as Judge in Chico Science Fair
- 2010 Hosted Demonstration Lab at Gateway Science Museum’s Open House, March 27
- 2010 Helped host “Darwin Day” open house at Gateway Museum, Chico, CA, February 19
- 2009 Hosted Demonstration Lab at Gateway Science Museum’s Open House, December 12
- 2009 Helped design exhibit based on material from the CSU, Chico Entomology Collection for the Chico Creek Nature Center’s new building, with student Melissa Ng
- 2009 Presented part of University Entomology Collection (together with General Entomology students Anastacia Allen, Nicholas Giannecchini, and Debra Rojas) to Leticia Kinslow’s first-grade class, and to Ulises Tellechea’s sixth-grade class at Rosedale Elementary School, Chico, CA
- 2009 Moderated public forum (with Chris Ivey) as part of “Darwin Day” events commemorating Charles Darwin’s 200th birthday, at Barnes & Noble bookstore, Chico, CA
- 2005-2008 Presented at Family Safari event at Big Chico Creek Ecological Reserve, sponsored by Northern California Natural History Museum, Chico, CA
- 2008 Presented insects to the public at the Chico and Paradise Branches of the Butte County Library
- 2008 Presented part of University insect collection (together with General Entomology student Melissa Ng) to Lisa Dauwalder’s kindergarten class at Nord Country School, and to Montessori Elementary School, Chico, CA
- 2008 Moderated public forum (with Chris Ivey) on David Quammen’s book The Reluctant Mr. Darwin at Barnes & Noble bookstore, Chico, CA
- 2008 Presented butterfly specimens from expedition to Papua New Guinea as part of public presentation, Sierra Nevada Brewery, Chico, CA
- 2007 Presented part of University insect collection (together with General Entomology students Brooke Bentley and Iris Ott) to pre-school children at Chico Montessori Children’s House, and to Rachel Tadeo’s 4th-grade class at Parkview Elementary School, Chico, CA
- 2006 Presented part of University insect collection (together with General Entomology students Stephen Manifor and Karen Tandy) to pre-school children at Chico Montessori Children’s House, and to Peter Hollingsworth’s 3rd-grade class at Parkview Elementary School, Chico, CA
- 2005 Presented part of University insect collection (together with General Entomology student Dawn White) to Don Kinslow’s 2nd-grade class at Parkview Elementary School, Chico, CA
- 2005 Helped design exhibit based on material from the CSU, Chico Entomology Collection for the Bidwell Park Centennial: “100 Years of Gratitude,” opened in February at the Chico Museum
- 2004 Presented at Family Day event at Big Chico Creek Ecological Reserve, sponsored by Northern California Natural History Museum, Chico, CA
- 2004 Presented part of University insect collection (together with General Entomology student Meredith Lowe) to two 1st-grade classes at Parkview Elementary School, Chico, CA
- 2003 Hosted CSU, Chico Economic Entomology class for tour of University insect collection
- 2003 Presented part of University insect collection to Susan Kirk’s 5th- and 6th-grade classes at Hooker Oak School, Chico, CA
- 2003 Helped lead tour of Big Chico Creek Ecological Reserve for Evolution Meeting conferees, Chico, CA

2003 Presented part of University insect collection to Priscilla Montgomery's kindergarten class at Citrus Elementary School, Chico, CA
2003 Presented to The Exchange Club of Durham, CA
2002 Invitation to the Core Knowledge National Conference, Nashville, Tennessee.
1999 Examiner in mock interview for Rhodes Scholarship candidate, Trinity University.
1999 Participant in conservation workshop for campus arboretum, Trinity University.
1998 Organizer and participant on panel on community service, University of Arizona .
1996-1997 Judge, Glendover School science fair, Lexington, KY.
1994-1997 Participant in educational outreach program at University of Kentucky.
1993 Student Representative, Graduate Admissions Committee, U.C. Berkeley.
1992-1993 Volunteer, U.C. Berkeley outreach program for local high schools.
1992 Steward, Association of Graduate Student Employees, U.C. Berkeley.

Conservation Biology:

1991-2010 Organized and participated in Annual North American Butterfly Association Fourth of July Butterfly Counts in California, Kentucky and Arizona.
2000-2002 Surveyed invertebrates of Salado Creek, San Antonio, Texas for contribution to Salado Creek Foundation watershed data-base.
1990 Contributor to survey of British butterflies, published in Butterflies of Berkshire, Buckinghamshire and Oxfordshire, by James Asher (1994).

References:

Professor Wayne M. Getz
Chancellor's Professor
Department of Environmental Science, Policy and Management
201 Wellman Hall, University of California, Berkeley, CA 94720
tel. (510) 642-8745
fax (510) 642-7428
e-mail: getz@nature.berkeley.edu

Professor Nancy A. Moran
Department of Ecology and Evolutionary Biology
310 Biosciences West
University of Arizona, Tucson, AZ 85721
tel. (520) 621-3581
fax (520) 621-9791
e-mail: nmoran@email.arizona.edu

Professor Andrew Sih
Department of Environmental Science and Policy
University of California
Davis, CA 95616
tel. (530) 754-7243
fax: (530) 752-3350
e-mail: asih@ucdavis.edu

Professor Francis L. W. Ratnieks
Biology and Environmental Science
University of Sussex

Brighton,
BN1 9RH
United Kingdom
tel. +44 1273 872954
e-mail: F.Ratnieks@sussex.ac.uk