

Audrey McCombs

PhD Candidate: Co-Major PhD in Statistics and Ecology
Department of Statistics
Ecology and Evolutionary Biology Interdepartmental Program
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Education

Master of Fine Arts, Creative Writing and Environment (May 2016)

- Iowa State University (Ames, IA)
- Thesis: *Servants of the Rice*. Historical fiction, ~ 500pp

Master of Arts, Philosophy (May 1997)

- Johns Hopkins University (Baltimore, MD)

Bachelor of Arts, Philosophy (May 1994)

- University of California (Berkeley, CA)
- *Summa cum laude*
- Department citation for excellence

Associate of Arts, Mathematics (December 1991)

- Mission College (Santa Clara, CA)
- Mary Le Memorial Scholarship

Publications

Refereed

- Middleton, T. E., McCombs, A. L., Gailans, S. R., Carlson, S., Karlen, D. L., Moore, K. J., Liebman, M. Z., Kaspar, T. C., al-Kaisi, M. M., Laird D. A., Wiedenhoeft, M. H., Delate, K., Cambardella, C. A., Thompson, M. L., Heaton, E. A., McDaniel, M. D. 2021. Assessing biological soil health through decomposition of inexpensive household items. *Applied Soil Ecology* 168, p.104099.
- Thompson, G.L., McCombs, A. L., and Jansen, M. 2021. Relationships between consultant discipline and specified tree diversity: A case study of two Iowa (USA) communities. *Urban Forestry & Urban Greening*, p.127183.
- Kadel-Harder, I.M., Spry, P.G., McCombs, A.L. and Zhang, H. 2021. Identifying pathfinder elements for gold in bulk-rock geochemical data from the Cripple Creek Au–Te deposit: a statistical approach. *Geochemistry: Exploration, Environment, Analysis* 21(1).

- McCombs, A. L., and Kadelka, C. 2020. A model-based evaluation of the efficacy of COVID-19 social distancing, testing and hospital triage policies. *PLoS Computational Biology*, 16(10), p.e1008388.
- Kadel-Harder, I.M., Spry, P.G., Layton-Matthews, D., Voinot, A., von der Handt, A. and McCombs, A.L. 2020. Paragenetic relationships between low and high-grade gold mineralization in the Cripple Creek Au-Te deposit, Colorado: trace element studies of pyrite. *Ore Geology Reviews* p.103847.
- Pfeiffer, V.W., Ford, B.M., Housset, J., McCombs, A. L., Blanco - Pastor, J.L., Gouin, N., Manel, S. and Bertin, A., 2018. Partitioning genetic and species diversity refines our understanding of species - genetic diversity relationships. *Ecology and Evolution*, 8(24), pp.12351-12364.
- Ball, E. E., D. M. Adams, J. N. Dupuie, Jr., M. M. Jones, P. G. McGovern, R. M. Ruden, S. R. Schmidt, G. J. Vaziri, J. S. Eeling, B. D. Kirk, A. L. McCombs, A. B. Rabinowitz, K. M. Thompson, Z. J. Hudson, R. W. Klaver. 2017. Serendipity: An Ecologist's Quest to Understand Nature [Book review]. *Journal of Mammalogy* 98(5), 1509–1510.
- McCombs, A. L., Albertsen, A. J, Cox, M. M, Ernst, E. E, Haley, H. J, Loney, D. A, Mackert, M. M, Piatscheck, F, Pocius, V.M, Stein, D. S, Altrichter, E. A, Almond, A. J, Dale, J. M, Dupuie, J. N, McGovern, P. G, Nixon, B. A, Swanson, J. E, and Klaver, R. W. 2016. Large Carnivore Conservation: Integrating Science and Policy in the North American West [Book review]. *Journal of Mammalogy* 97.4: 1256-258.

Non-refereed

- McCombs, A. L., and Irvine, K. 2018. Final Report, State-Transition Model project, United States Geological Survey.
- Debinski, D.M. and McCombs, A.L. 2016. Investigating movement and population genetic structure of *Parnassius clodius* butterflies in Grand Teton National Park. The UW National Parks Service Research Station Annual Reports, 39, pp.28-31.
- McCombs, A. L. and Debinski, D., 2015. Summary of an Ongoing Population Study of *Parnassius Clodius* Butterflies. The UW National Parks Service Research Station Annual Reports, 38, pp.71-74.
- McCombs, A. L. 2006. Final Adopted Findings, CDP Application #E-06-003, Coast Seafoods Company. California Coastal Commission.
- McCombs, A. L. 2005. Final Adopted Findings of Consistency Determinations, Consistency Determination #s CD-047-05, CD-048-05, CD-049-05, US Department of the Interior, Minerals Management Service. California Coastal Commission.
- McCombs, A. L. 2005. Final Adopted Findings, CDP Application #E-05-010, Plains Exploration Company/Arguello, Inc. California Coastal Commission.
- McCombs, A. L. 2004. Final Adopted Findings, CDP Application #E-04-010, Atlantic Richfield

Company (ARCO). California Coastal Commission.

In press

Islam, M. D. R, Oraby, T., McCombs, A. L., Chowdhury, M. M., Al-Mamun, M. A., Tyshenko, M. G., Kadelka, C. Evaluation of the United States COVID-19 vaccine allocation strategy. *PLOS One*.

Wassendorf, C., McCombs, A. L., Boury, N. Where to sit? Exploring the role of student seating preference and performance in a large introductory STEM course. *Journal of College Science Teaching*.

In submission/review

Cuddington, K., K. C. Abbott, F. R. Adler, M. Aydeniz, R. Dale, L. J. Gross, A. Hasitings, E. A. Hobson, V. Karatayev, A. Killion, A. Madamanchi, M. Marraffini, A. McCombs, W. Samyono, S. Shiu, K. H. Watanabe, E. R. White. Challenges and opportunities to build quantitative self-confidence in biologists. *BioScience*.

Kadelka, C. and McCombs, A. Effects of clustering and correlation of belief systems on infectious disease outbreaks. *PLoS One*.

Osterhaus, D. M., Leberg, S. S., Pierce, C. L., Stewart, T. W., McCombs, A. L. Topeka shiner and fish communities in oxbows: Are they predictable. *Aquatic Conservation: Marine and Freshwater Ecosystems*.

Osterhaus, D. M., Leberg, S. S., Pierce, C. L., Stewart, T. W., McCombs, A. L. Comparison of sampling methods for small oxbow wetland fish communities. *North American Journal of Fisheries Management*.

Zaman, K., McCombs, A., Debinski D., and Schoville, S. Combining multiscale replication in network and landscape genetic analyses to assess functional connectivity and population resilience in *Parnassius clodius* butterflies. *Biological Conservation*.

In preparation

McCombs, A., D. Debinski, M. Germino, K. Reinhardt, and P. Caragea. Warming temperatures affect meadow-wide nectar resources, with implications for plant-pollinator communities. *EcoSphere*.

Chloe Wasendorf, Joshua W. Reid, Rebecca Seipelt-Thiemann, Zachary T. Grimes, Brock Couch, Nick T. Peters, Julia Massimelli Sewall, Audrey L. McCombs, Patrick Armstrong, Nancy Boury. The Development and Validation of the Mutation Concept Inventory (MuCRA). *International Journal of Science Education*.

Grimes, Z. T., N. M. Boury, C. Wasendorf, A. L. McCombs, J. W. Reid, O. James, P. I. Armstrong, R. L. Seipelt-Thiemann. An assessment to investigate student conceptions of pedigree analysis. *American Biology Teacher*.

Hornbuckle, B., E. Griffin, A. L. McCombs. Classroom personal response systems improve learning, but it depends on the student.

Presentations

- Wassendorf, C., and McCombs, A. July 16, 2020. Congruence testing to validate narrow-band concept inventories in genetics. Presentation to the Society for the Advancement of Biology Education Research (SABER), Annual Meeting 2021.
- McCombs, A., Wacker, S., & Irvine, K. May 20, 2021. Analyzing Ordinal Plant Cover Class Data from the Greater Yellowstone Ecosystem. Presentation to the Conference on Applied Statistics in Agriculture and Natural Resources. University of Florida.
- McCombs, A., and Kadelka, C. April 23, 2021. Network topology and disease dynamics. Presentation to the Department of Statistics, University of Texas Rio Grand Valley.
- McCombs, A., Kadelka, C. March 24, 2021. Network topology and disease dynamics. Presentation to the Iowa State University Research Days Conference. Ames, Iowa.
- McCombs, A., Kadelka, C. February 24, 2021. Network topology and disease dynamics. Presentation to the Iowa State University Mathematical Biology Seminar. Ames, Iowa.
- Debinski, D.M., A. McCombs, K. Reinhardt and M. Germino. August 9, 2018. Contrasting the responses of two montane meadow forbs to experimental warming. Presentation to the Ecological Society of America, New Orleans, LA.
- Debinski, D.M., A. McCombs, K. Reinhardt and M. Germino. July 27, 2018. Contrasting the responses of two montane meadow forbs to experimental warming. Presentation to the International Association for Vegetation Science, Bozeman, MT.
- McCombs, A. L., D. M. Debinski, K. Szcodronski, T. Proescholdt, M. Germino, and K. Reinhardt. November 16, 2015. Anticipating climate change effects on floral resources for pollinators. Presentation to the Entomological Society of America. Minneapolis, MN.
- McCombs, A. L., Debinski, D.M., K. Szcodronski, T. Proescholdt, M. Germino, and K. Reinhardt. October 10, 2015. Climate change effects on floral resources for pollinators. Presentation to the Iowa Climate Science Educators Forum. Des Moines, IA.
- McCombs, A., D. Debinski, M. Germino, K. Reinhardt, and P. Caragea. October 5, 2016. Simulating expected changes in pollinator resources as a function of climate change. Presentation to the 13th Biennial Scientific Conference of the Greater Yellowstone Ecosystem. Jackson, WY.
- McCombs, A. L. August 27, 2008. Climate Change for the Next Phase of the Environmental Improvement Program (EIP). Presentation to the Tahoe Regional Planning Agency Governing Board, Stateline, NV.

Research Experience

Iowa State University, Iowa State Assessment of RCR Training

Co-PI, NSF grant #1736990

August 2018-present

Develop a validated assessment (ISART) to measure the effectiveness of Responsible Conduct of Research (RCR) instruction. Use the ISART to compare the effectiveness of face-to-face versus online training, determine the endurance of learning gains, and guide course development on a national and international scale. Primarily responsible for:

- Drafting short vignettes with RCR-related ethical content (creative writing component)
- Statistical analysis of psychometric data (in collaboration with faculty psychometrician, statistical component)
- Articulation of ethical concepts relevant to RCR training (in collaboration with faculty ethicist, philosophy component)

Sandia National Labs

Student Intern

September 2021-present

Assist with the development and implementation of inverse-prediction statistical models on functional data for nuclear material forensics investigations.

Iowa State University, Department of Statistics

Statistics Consulting Team, Graduate Research Assistant

January 2019-August 2021

Assist clients from the Colleges of Agriculture, Engineering, Letters and Sciences, and Veterinary Medicine with statistical analysis of research data.

- Parametric and non-parametric hypothesis testing
- Simple linear regression, Generalized linear models, Mixed (random) effects models, Generalized linear mixed effects models
- Bayesian hierarchical models
- Multivariate analysis: ordination and modeling
- Experimental design
- Power analysis
- Longitudinal data analysis
- Social network analysis
- Ordinal data analysis
- Compositional data analysis
- Dose-response curves
- Before-after-control-impact models
- Mediation models

Disciplines include ecology, entomology, kinesiology, geology, educational research, second-language learners research, primatology, horticulture, and library studies. Computation tools:

- R: Advanced user
- Python: Intermediate user
- SAS: Intermediate user
- JMP: Intermediate user
- UNIX: Advanced beginner

Iowa State University, Department of Mathematics

Iowa State Math Research Teams (ISMaRT program)

Graduate Research Assistant

- Spring 2021: Optimal vaccination strategies accounting for ethnicity. Faculty advisor: Claus Kadelka
- Spring 2020: Modeling food webs. Faculty advisor: Rana Parshad

DataONE, National Center for Ecological Analysis and Synthesis

Summer Intern

May 2019-August 2019

Reproducible network analysis of the DataONE linked open data graph investigating the relational structure of datasets in member repositories.

United States Geological Survey

Student Contractor

Supervising statistician: Kathi Irvine, USGS

- Summer 2019: Ordinal data analysis of National Parks Service vegetation cover class data for the NPS Sagebrush Steppe Vegetation Monitoring program
- Summer 2018: State and Transition Model for US Fish and Wildlife Service, quantifying changes in submerged and emergent wetland vegetation cover at 21 management units across eight National Wildlife Refuges

Iowa State University, Debinski Lab

Graduate Student Researcher

Grand Teton National Park, WY

Summer 2015, Summer 2016

Montane meadow systems: Landscape genetics and metapopulation dynamics of *Parnassius clodius* butterfly; responses of plant species to climate change treatments.

- Mark-recapture surveys
- Occupancy surveys
- Genetic sampling
- Vegetation surveys under climate change treatment plots
- Nectar sampling under climate change treatment plots

Field Technician

Grand River Grasslands, IA and MO

Summer 2014

Prairie and grassland systems: Effects of landscape configuration, landscape context, and landscape management on local and regional species patterns.

- Diversity transect surveys for tall-grass prairie butterfly species
- Vegetation transect surveys, species-level (for nectar sources)

Professional Experience

United States Peace Corps

Protected Areas Management Volunteer

Anjahankely and Andapa, Madagascar

March 2010 to March 2012

Work with environmental organizations WWF and FANAMBY preparing community-based management plans for existing and new Special Protected Areas in Andrafiamena and Bealanana, and prepare a programmatic management plan for the Northern Highlands area.

- Integrate into Malagasy culture, including fluency in Malagasy language and customs
- Work with local communities to develop management guidelines for resources in protected areas
- Build tree nurseries for reforestation and community development projects
- Develop management plans for submission to federal government as part of the process to establish new protected areas
- Coordinate with botanists, primatologists, and other local and international technical specialists
- Work with local communities to enforce management regulations
- Instruct Malagasy NGO workers on principles of programmatic management plans

Tahoe Regional Planning Agency

Senior Planner, Environmental Improvement Branch

Lake Tahoe, Nevada

September 2007 to January 2009

Manage permitting and environmental review of environmental improvement projects; coordinate and contribute to inter- and intra-agency policy-making efforts; supervise and mentor junior staff.

- Environmental improvement projects:
 - Water quality improvement
 - Stream restoration
 - Erosion control
 - Multi-use trails
- Technical advisory committees and policy-level working groups:
 - Environmental Improvement Program Strategic Planning Group
 - Lake Tahoe Total Maximum Daily Load Working Group
 - Stormwater Quality Improvement Committee
- Policy development:
 - Agency climate change policy
 - 10-year Environmental Improvement Program Update

North Fork Associates

Senior Planner

Auburn, CA

January 2007 to August 2007

Manage the preparation of planning documents and environmental review documents at both program and project levels; supervise junior staff.

- Manage complex environmental review projects, including scheduling and budgets
- Coordinate with local governments, stakeholders, and other government agencies
- Manage technical subconsultants

California Coastal Commission

Coastal Program Analyst II, Energy and Ocean Resources Unit

San Francisco, CA

May 2004 to December 2006

Analyze proposed energy and ocean resources projects for consistency with the environmental resource policies of the California Coastal Act.

- Projects:
 - Offshore oil drilling
 - Liquefied natural gas terminals
 - Marine aquaculture
 - Artificial reefs
 - Fiber optic cables
 - Wave-powered energy devices
- Manage environmental review of projects, prepare staff recommendation and environmental review document
- Manage contact with the press and the public
- Contribute to the development of State policy on aquaculture and ocean-based renewable energy
- Coordinate with technical staff, legal division, representatives from other agencies at the local, State and federal levels, private consultants
- Present at public hearings of the California Coastal Commission

Enforcement Staff

Eureka, California

June 2002 to October 2003

Receive reports of, investigate, and resolve alleged violations of the California Coastal Act in three Northern California counties: Mendocino, Humboldt, and Del Norte.

Design, Community & Environment

Planner

Berkeley, California

October 2003 to April 2004

Prepare comprehensive planning and environmental review documents including master

plans, specific plans, local coastal plans, and NEPA and CEQA documents; coordinate with representatives from local, State, and federal agencies; manage technical subconsultants.

Workshops, Outreach, and Professional Development

Introduction to Data Science, Machine Learning, and Deep Learning (in R and Python). Nevada Chapter of the American Statistical Association, 6 contact hours, online. Instructors: Hui Lin and Ming Li. July 23-24, 2021.

Quantitative Education in Life Science Graduate Programs. NIMBioS/SCMB Investigative Workshop, 20 contact hours, online. December 1-3, 2020

Bayesian Analysis Using SAS. SAS Training Workshop, 16 contact hours, online. Instructor: Jacqueline Johnson. June 1-2, 2020

Longitudinal Data Analysis Using SAS. SAS Training Workshop, 16 contact hours, online. Instructor: Jacqueline Johnson. April 9-10, 2020

Network Modeling Tutorial. National Institute for Mathematical and Biological Sciences (NIMBioS), Nashville, TN, 24 contact hours. Instructors: Nina Fefferman, Lazaro Gallos, Gonzalo Suarez. February 4-6, 2019.

Network analysis for ecologists using R. PR Statistics, Galsgow, Scotland, 45 contact hours. Instructor: Marco Scotti. April 9-13, 2018.

Fractals and Scaling. Santa Fe Institute, 9-week online course. Instructor: David Feldman. March, 2019.

Introduction to Complexity. Santa Fe Institute, 9-week online course. Instructor: Santiago Ortolano Guisasola. December, 2018

Women in Science: Expanding Your Horizons. April 18, 2017. Pierre, SD. "Math: The Super-Secret Language the Universe Uses to Talk to Itself." Lead a workshop with middle- and high school girls teaching graph theory and social network concepts. Organized by the South Dakota Discovery Center; approximately 250 girls attending.

Professional development training (pre-2010) in global climate change and greenhouse gas emissions, managing collaborative processes, stormwater management systems, CEQA updates, environmental and planning law, and negotiating for coastal resources.

Significant Professional Projects

Crystal Bay Phase I Water Quality Improvement Project. Pilot project involving the

installation of water quality and erosion control measures, including pervious pavement, porous ECO-blocks, and technically challenging revegetation techniques.

Rosewood Creek Area F Stream Environment Zone Restoration Project. Stream restoration, erosion control, and revegetation project involving close coordination with adjacent property owners and cultural resources preservation challenges.

Bijou Water Quality Improvement Project. Water quality improvement project involving stream discharge to Lake Tahoe through a heavily-developed commercial area, relocation of a golf course in a sensitive meadow environment, installation of recreation trails, and retrofitting existing residential areas with water quality improvement measures. CEQA EIR and TRPA EIS joint document.

Kings Beach Water Quality Improvement Project. Water quality improvement project involving stream enhancements for fish passage and habitat enhancement, as well as stream bank and bed erosion control, and retrofitting most existing residential areas in the town of Kings Beach with water quality improvement measures. CEQA Mitigated Negative Declaration and TRPA Initial Environmental Checklist joint document.

Greenway Multi-Use Trail Project. Nine-mile long Class I bicycle and multi-use trail from Meyers to Stateline in South Lake Tahoe. Challenges included critical habitat for endangered species, crossing stream environment zones and wetlands, easement restrictions, neighborhood opposition, and scenic corridor degradation. CEQA EIR, TRPA EIS, NEPA EIS joint document.

Dyer Mountain Resort EIR, Lassen. A four-season resort project including 4,000 dwelling units, 600,000 square feet of retail/commercial land uses, a ski area with capacity for 9,500 visitors, and three golf courses on approximately 7,200 acres of land. Resource issues associated with the project site included the presence of special-status species (including a nesting pair of bald eagles), extensive and high-quality cultural resource sites, ongoing timber harvesting operations, and compatibility of the proposed resort with the rural character of the area. CEQA EIR and Mitigation Monitoring and Reporting Plan; litigation under CEQA was anticipated.

BHP Billiton Liquefied Natural Gas Terminal. Construction and operation of a liquefied natural gas receiving terminal, involving a Floating Storage and Regasification Unit and associated off-shore and on-shore pipelines and miscellaneous facilities, 14 miles offshore Malibu. Significant issues included public safety, marine resources, air resources, environmentally sensitive habitat areas, geology, underwater noise, and consolidation of off-shore industrial facilities. The project involved a team of technical experts, including in-house specialists and outside consultants. Public interest in this project was extremely high with extensive press coverage. In April 2007, the State

Lands Commission and the California Coastal Commission both voted to reject the project. Governor Schwarzenegger vetoed the project on May 18, 2007.

Coast Seafoods Company, enforcement case. After-the-fact approval of oyster culture activities on 300 acres in Humboldt Bay. Issues included the applicant's claim of a vested right, California Coastal Commission staff's on-going enforcement investigation, and potentially significant adverse impacts to marine resources in Humboldt Bay, including eelgrass, critical habitat for listed salmonid species, and essential fish habitat. The Commission approved the permit per staff's recommendation in May 2006.

Offshore Oil Lease Review: Bonito, Rocky Point and Sword Units. Under court order and in the context of complex legal proceedings, federal consistency determination for extending the life of 13 offshore oil leases in the Bonito, Rocky Point and Sword Units, offshore Point Arguello, CA, by the federal Minerals Management Service (MMS). Review of broad and long-term coastal effects (i.e., post-suspension exploration, development and production activities) that would be reasonably foreseeable if the lease suspensions were granted. MMS refused Coastal Commission staff's request for access to environmental information known to be in the possession of either the federal government or the oil companies, or both. In August 2005, the Commission, per staff's recommendation, objected to the lease suspensions based on lack of information. This high-profile project was monitored by the press, environmental groups including the National Resources Defense Council, State and federal legislators, other State agencies and local governments, and members of the public.

PRC-421 Pier "Bird Island" Removal and Replacement. Atlantic Richfield Company (ARCO) removal of remnant pier structures associated with an abandoned oil pier offshore the City of Goleta, CA. California Department of Fish and Game expressed serious concerns about removing the derelict structure because it was serving as a prime roosting site for the California brown pelican, a federal- and State-listed endangered species and a State fully protected species. In response to DFG's concerns and recommendations, and in coordination with the Coastal Commission and other State agencies, ARCO developed an alternative project that included the removal of most of the remnant pier, the installation of four bird platforms, and the placement of quarry rock to form an artificial reef. Issues addressed during environmental review included potential adverse effects to marine resources such as fish and marine mammals (due to explosives use during decommissioning) and kelp and natural hard substrate (due to vessel anchoring).

Aquaculture Legislation. Review and comment on State (SB 201) and federal (S. 1195, "National Open Ocean Aquaculture Act of 2005") bills regarding marine aquaculture. Issues included environmental effects of near-shore and open-ocean aquaculture projects, and the Coastal Commission's regulatory authority over same.

North Coast Area Plan and EIR for San Luis Obispo County. Update San Luis Obispo County's existing Area Plan, for the towns of Cambria and San Simeon Acres, CA, in the North Coast Planning Area. EIR under CEQA for the Area Plan. Environmentally sensitive Monterey pine forest habitat and substandard lots, traffic, visual quality, water supply, flooding, and preservation of historic downtown structures and community character.

Pacific Shores Comprehensive Enforcement Investigation. Approximately 30 Coastal Act violations at the Pacific Shores subdivision in Del Norte County, CA. Pacific Shores is a 1960's-era "paper subdivision" of approximately 1500 lots, with severe environmental restrictions on development including pervasive wetlands and environmentally sensitive habitat areas. Approximately fifteen illegal residential encampments had been established throughout the subdivision. Coastal Commission district enforcement staff led a team of local, State and federal regulatory agencies working together to develop and implement a long-range plan to resolve the environmental and social justice issues raised by the violations.

Niles Enforcement Case. Represent the Coastal Commission in a special task force including Humboldt County Departments of Environmental Services, Hazardous Waste, Planning, and Code Enforcement, the CA Department of Fish and Game, and the CA Air Resources Control Board. Over several months, task force members investigated allegations of large-scale dumping of waste, including abandoned cars and dead cattle, in sensitive coastal dune habitat. Task force members obtained a criminal search warrant and conducted a search involving excavation of the subject property. Evidence collected during the search allowed the Coastal Commission to issue a Cease and Desist and Restoration Order against the violator, requiring that he clean up and restore the site.

Teaching Experience

Iowa State University

Graduate Student Instructor

Ames, IA. September 2012 to December 2017

Teach semester-long courses in ecology, freshman biology, freshman composition, creative writing, and business communication. Responsible for all aspects of instruction, from developing syllabi (consistent with program requirements) to assigning final student grades.

- Fall 2017: Sky's the Limit Learning Community, Health Care Careers section
- Spring 2017: Introduction to Biology Lab
- Spring 2017: Honors Seminar in Microfiction (co-taught with Karen Bovenmeyer)
- Fall 2016: Ecology Lab
- Spring 2013, Spring 2014: Creative Writing
- Summer and Fall 2013, Spring and Fall 2014, Spring 2015: Business Communication

- Spring 2013: Written, Oral, Visual and Electronic Communication
- Fall 2012: Critical Thinking and Communication

Lake Tahoe Community College

Adjunct Faculty

South Lake Tahoe, CA. September 2008 to January 2009

Teach quarter-long courses in Critical Thinking and Introduction to Philosophy. Responsible for all aspects of instruction, from developing syllabi (consistent with requirements of philosophy department) to assigning final student grades.

- Fall 2008: Critical Thinking, Introduction to Philosophy
- Winter 2009: Introduction to Philosophy

College of the Redwoods

Adjunct Faculty

Eureka, CA. January 2002 to August 2003

Teach semester-long courses in Critical Thinking and Introduction to Philosophy. Responsible for all aspects of instruction, from developing syllabi (consistent with requirements of philosophy department) to assigning final student grades.

- Spring and Fall 2002, Spring 2003: Introduction to Philosophy
- Summer 2003: Critical Thinking

Various Positions in Taipei, Taiwan

August 1998 to July 2001

Teach Western Philosophy and English as a Second Language to a variety of students in Taipei, Taiwan. Learning environments ranged from informal tutoring to formal instruction in grammar school and high school settings. Students ranged from preschool level to adult professionals.

University of California at Berkeley

Graduate Student Instructor

Berkeley, CA. September 1997 to June 1998

Assist in teaching semester-long courses to university undergraduates in the philosophy department. Responsible for teaching discussion sections twice a week, grading papers and exams, coordinating with other TA's and the professor for the course, and assigning final grades (subject to approval by professor).

- Spring 1998: Metaphysics and the Philosophy of Science

Online Course Development – Writing Component

Micro 302: The Biology of Microorganisms. June 2017 - March 2018. PI: Dr. Nancy Boury.

Develop and write a fictional narrative to frame online microbiology course material.

Narrative totaled approximately 50,000 words over approximately 100 web pages.

Course materials such as lecture videos, study guides, online practice quizzes, etc., integrated into each page throughout the narrative text.

Creative Publications and Editorial Work

Publications

“Prologue: Servants of the Rice” 2018. Novel excerpt. *Writing Language, Culture, and Development Volume I, Africa and Asia*. May 2018. Published in the original English and translated Igbo (translator: Gabriele Egboluche).

“The Legend of Bruce Lee” 2017. Essay. She Kicks She Throws. <http://www.she-kicks-she-throws.com/>

“I am already a black belt” 2015. Poem. She Kicks She Throws. 2015. <http://www.she-kicks-she-throws.com/>

“Fady” 2014. Fiction. *The Missing Slate*. First-place winner, New Voices Writing Competition. <http://themissingplate.com/2014/08/18/fady/>

“Spaced Out on Sensation” 2014. Fiction. *Sequestrum*. Summer 2014 issue. <http://www.sequestrum.org/spaced-out-on-sensation>

“Icehouse” 2014. Fiction. *The Mountain*. Outrider Press. *Pithead Chapel*. Volume 3, Issue 4. <http://pitheadchapel.com/icehouse/>

“On our walk back from the rice field” 2011. Prose-poem. *Pay Attention: A River of Stones*. Lulu Press.

“Rara Avis” 2010. Fiction. *Earthspeak Magazine*. Issue 6: Winter 2010.

“The Chumash Indians” 2007. Non-fiction. *Beaches and Parks from Monterey to Ventura*. University of California Press.

“Oil Development at Santa Barbara” 2007. Non-fiction. *Beaches and Parks from Monterey to Ventura*. University of California Press.

Editorial

Social Media Coordinator
Leopold Center for Sustainable Agriculture
September 2015 – May 2016

Creative Director
Blog Editor
Flyway: Journal of Writing and Environment (flyway.org)
June 2013 – May 2014