MES Core Faculty Biographies, 2025-2026

**Frederica Bowcutt, M.S., Ph.D.**

Frederica teaches American environmental history, botany, ecological restoration, field plant taxonomy, intersectional ecofeminism, and cultural history of plants in interdisciplinary teams of faculty and solo at undergraduate and graduate level. She has co-taught with 24 different colleagues, including an American historian, art historian, European historian, feminist economist, folklorist, and multiple artists, historians of science, geographers, as well as other scientists. Frederica serves as Director of the Biodiversity Center at Evergreen. Her books include The Tanoak Tree: An Environmental History of a Pacific Coast Hardwood, published by University of Washington Press. She is a contributor to A Cultural History of Plants from Bloomsbury and The Cultural Value of Trees: Folk Value and Biocultural Conservation from Routledge. Frederica holds a Ph.D., Ecology, University of California-Davis, 1996, an M.S., in Botany, University of California-Davis, 1989 and a B.A., Botany, University of California-Berkeley, 1981.

**Kevin Francis, Ph.D.**

Kevin is a historian and philosopher of science, with particular interest in the development of the environmental sciences. Kevin studied biology and philosophy at Reed College. After graduating, he spent several years working as a wildlife biologist for Mt. Hood National Forest. His graduate studies at the University of Minnesota focused on history of science and medicine. His historical research concerns scientific efforts to understand the mass extinction of North American megafauna (e.g. mammoth, mastodon, giant ground sloth) around 12,000 years ago, especially the way that various disciplines approach this problem.

**Shangrila Joshi, M.A., Ph.D.**

Dr. Joshi is a Member of the Faculty in Climate Justice at The Evergreen State College. She has a doctoral degree in Environmental Sciences, Studies, and Policy, with Geography as the focal discipline, from the University of Oregon; a Master’s degree in International Affairs from Ohio University; and a Bachelor’s of Science degree in Environmental Sciences from St. Xavier’s College, Kathmandu University. Her dissertation 'Justice, Development, and India's Claim to Environmental Space: A Postcolonial Political Ecology of the Atmospheric Commons' examined North-South climate politics leading up to the Copenhagen Climate Conference, focused on the position of India on debates and negotiations to create a fair burden-sharing agreement for global climate mitigation. Her post-Ph.D. research has critically examined the Clean Development Mechanism and REDD+ (Reducing Emissions from Deforestation and Forest Degradation) as they have been implemented within Nepal, with an eye towards understanding how they are transforming social relations in the local context, particularly as they relate to the forest commons. Shangrila is a Newar from Lalitpur, Nepal, and spent her formative years there, as well as in Dhaka, Bangladesh, and Kabul, Afghanistan. She is fluent in Nepali, Nepal Bhasa (Newa Bhaye), Hindi, and English. She is the proud mother of a delightful young man who has cheerfully accompanied her on most research journeys; and who amazes her everyday with his thoughtfulness, intelligence, creativity, and self-discipline.

**Carri LeRoy, MLS, Ph.D. / MES Director**

Carri LeRoy has been a member of the faculty at [The Evergreen State College](http://www.evergreen.edu/) since 2006. She completed her Ph.D. in Biology (Freshwater Ecology) in 2005 at Northern Arizona University in Flagstaff, AZ and a Masters in Liberal Studies (Environmental Education) in 2001. Carri is a freshwater ecologist and her research focuses on how riparian forests interact with streams and provide energy through leaf litterfall. Her research has shown that both the species diversity and genetic diversity of these litter inputs can affect in-stream leaf litter decomposition rates, aquatic fungi and aquatic macroinvertebrates. Her current research focuses on how leaf litter and salmon carcass inputs interact, what drives global patterns of leaf litter decomposition, how streams have developed in the 41 years since the eruption of Mt St Helens, and how endophyte infections can alter phytochemistry and leaf litter dynamics. Other topics she is interested in include: ecological genetics, sustainable practices, sci-art linkages, and issues of women and underrepresented groups in the sciences.

**Anthony Levenda, M.S., Ph.D.**

Anthony is the Director of the Center for Climate Action and Sustainability and member of the faculty here at Evergreen. His work focuses on building a community for climate action and learning through the CCAS and the programs that he teaches. Over the last year, he developed and taught the Climate Policy and Action Certificate Program in PACE to help students learn about climate science, the policy process, and different approaches to climate advocacy. He recently co-edited a book, *Urban Climate Justice* (UGA Press 2023), and has written about energy transitions, urban political ecology, critical theory, and more. His current research focuses on energy justice, electricity infrastructure, and net-zero energy strategies in the Pacific Northwest. Anthony has a Ph.D., Urban Studies and Planning, Portland State University, 2016, an M.S., Environmental Engineering, University of Illinois Urbana-Champaign, 2010 and a B.S., Mechanical Engineering, University of Illinois Urbana-Champaign, 2009.

**Erin Martin, M.S., Ph.D.**

Erin Martin is an aquatic biogeochemist whose research focuses on examining the role of rivers in the global carbon cycle. Rivers are large sources of carbon to both the atmosphere and the ocean and are consequently critical to our understanding of the global carbon cycle. While working in the Amazon Basin, her research demonstrated that bacteria living in the river produce high levels of carbon dioxide through respiration, and this carbon dioxide is subsequently lost to the atmosphere. Her current research in the Mekong Basin (i.e. Cambodia) focuses on characterizing the type of organic carbon that is exported by large rivers to the ocean. Specifically, she uses molecular tracers to determine where in the watershed the carbon originates from and uses radiocarbon analyses to determine the age of this material. Such information is necessary in order to understand the preservation of terrestrial carbon in the ocean, which can affect atmospheric carbon dioxide levels over long time scales. Through her training (Erin received her masters and doctoral degree from the School of Oceanography at the University of Washington), Erin has research experience working in streams, rivers, lakes, and the ocean. Additional interests include ocean acidification, estuarine ecology, evaluating the impacts of dams on downstream processes, and microbial ecology. Her past and present research has been conducted through collaborations with colleagues in Brazil, Cambodia, and the Pacific Northwest.

**John Withey, M.S., Ph.D.,**

John is a terrestrial ecologist with extensive field experience studying birds in temperate (Pacific Northwest) and tropical (Panama and South Florida) environments. After examining crow population dynamics and behavior for his Ph.D. at the University of Washington, he completed postdoctoral research at the Smithsonian Tropical Research Institute in Panama, and was an Assistant Professor in the Department of Biological Sciences at Florida International University for 4 years. John currently conducts interdisciplinary research at large (regional to continental) scales, including estimating phenological shifts in migratory songbirds, optimizing land use choices to benefit sage grouse and other wildlife, and using evolutionary distinctiveness in conservation planning. He welcomes student involvement in his research, which has recently focused on the effects of land-use and/or climate change on native wildlife. He enjoys using a combination of field-based empirical data, ecological modeling, climate and land-use change data and projections, and spatial and quantitative analyses in his work. He currently teaches classes on landscape conservation and management, urban ecology, research design, and quantitative analyses of environmental data.

MES Elective Faculty Biographies, 2025-2026

**Richard Bigley, Ph.D.**

*Richard Bigley, Ph.D.,* is a forest ecologist who teaches sustainable forestry and on occasion a forest ecology class. His current work focuses on the restoration of riparian forests to older forest conditions in western Washington, and the ecology and management of headwater streams and wetlands. He works for the Washington State Department of Natural Resources (DNR). Over the last 21 years with DNR, he has served as the team leader for the Forest Ecology, Wildlife Science and the Habitat Conservation Plan Monitoring and Adaptive Management Teams. He also advises other organizations on the development of conservation plans. Before DNR, he worked as an ecologist for the Forest Service PNW Experiment Station and private industry. Richard earned a Ph.D. in Forest Ecology and Silviculture and a M.Sc. in Botany from the University of British Columbia. He has been an Assistant Professor at the University of Washington, College of the Environment, School of Forestry since 1994. As member of the Northern Spotted owl “5-year review” panel in 2004, Richard was a contributor to the first comprehensive evaluation of the scientific information on the Northern Spotted owl since the time of its listing as threatened under the Endangered Species Act in 1990. After his family, his passions are the science of natural resources management and conservation, and boating.

**Sarah Hamman, Ph.D.**

**Sarah is the Director of Science for Ecostudies Institute, a non-profit organization focused on conservation of native species and their habitats. Her work is aimed at improving the restoration process through rigorous science, careful conservation planning and inclusive partnerships. Sarah holds a B.A. in Biology from Wittenberg University and a Ph.D. in Ecology from Colorado State University, where she studied the effects of fire season and severity on soil nitrogen availability and microbial community dynamics in Colorado and California. After finishing her dissertation, she completed a post-doctoral position at the University of Texas, where she studied the legacy effects of invasive grasses on soil biogeochemistry and microbial ecology in central Florida rangelands. Some of her current projects include conservation rotational grazing impacts on the ecological and economic status of working lands, inoculation of mycorrhizal fungi on native plant growth, integrated treatment effects on invasive grass removal, and effects of indigenous harvesting practices on prairie community resilience. Sarah is also the Vice Chair of the Board for the Olympia Coalition for Ecosystems Preservation and the Chair of the Research and Plant Inventory Committee for the Washington Native Plant Society. At Evergreen, Sarah teaches courses in fire science, restoration ecology and soil ecology.**

**Erik Neatherlin, M.S.**

Erik is the director of the Governor’s Salmon Recovery Office which coordinates salmon and Southern Resident orca recovery for the state. Erik previously was the fish program science director and policy lead for salmon recovery with the Department of Fish and Wildlife. In that role, he represented the agency on the Salmon Recovery Funding Board and the North Pacific Anadromous Fish Commission. Before joining the Department of Fish and Wildlife in 2003, he worked as the conservation program director for Sustainable Ecosystems Institute in Portland. He has bachelor and master degrees in science from Florida State University and the University of Washington, respectively.

**Sarah O’Neal, M.S.**

Sarah O’Neal has 20 years of international experience in freshwater ecology in salmon ecosystems ranging in latitude from Tierra del Fuego to the Yukon River watershed. Her expertise includes water quality, aquatic plants, zooplankton, macroinvertebrates, resident and anadromous fishes, and interactions between them in both lakes and streams. She has worked in private, public, and non-governmental sectors. She has a Bachelor’s Degree in Ecology, Evolution, and Conservation Biology from the University of Washington, a Master’s Degree in freshwater ecology from the University of Montana’s Flathead Lake Biological Station, and is currently pursuing a Ph.D. with the School of Aquatic and Fisheries Sciences at the University of Washington with research specific to toxicity of metals to salmonid fishes resulting from hard rock mining, assessment of sublethal and indirect ecological effects of mine waste, and methodological approaches to identifying salmon habitat in remote environments. Sarah helps lead an eleven-consecutive year freshwater habitat monitoring program on and around the proposed Pebble Mine site in Bristol Bay, Alaska and nearby drainages in the Nushagak and Kvichak watersheds. Since beginning her work in Bristol Bay, Sarah has conducted outreach regarding the potential risks of mining to habitat for community stakeholders, policymakers, media, and legal experts. In addition to her scientific expertise, Sarah has fished commercially and recreationally.

**Timothy Quinn, M.S., Ph.D.**

Tim Quinn has served as chief scientist of the Washington Department of Fish and Wildlife’s habitat program since 1999. Quinn recently served on the Science Working Group that came up with scientific underpinnings and a technical framework for the development of the Puget Sound Partnership. He has a B.S. in Biology from Western Washington University (1979), an M.S. in Physiological Ecology of Marine Fish from Western Washington University (1987), and a Ph.D. in Wildlife Ecology from University of Washington (1993).

**Michael Ruth, M.Sc.**

Mike is a professional GIS practitioner for Esri (Environmental Systems Research Institute, Inc). Mike has been a project manager and consultant for Esri, helping a wide variety of agencies learn and exploit geographic information systems. His clients have included major non-governmental organizations, tribal and state governments, and US federal agencies. Mike studied Environmental Science in college, later specializing in Geology at George Washington University.  For his Master’s degree, Mike completing a field mapping project studying the geology of the western Dominican Republic along the Haiti border area.  After completing his Master of Science degree, Mike worked for the Spot Image Corporation, developing GeoTIFF and other satellite imagery methods for GIS integration. Now at Esri, Mike has focused on Africa projects for non-profit organizations over the past few years.  Recent projects address the applications of GIS technology for improving polio vaccination success in Nigeria, agricultural improvement for small holder farmers in Tanzania, and participatory community conservation activities in the western Serengeti, among other projects.