MES Core Faculty Biographies

Peter Dorman, Ph.D.
Peter is an economist with a background in environmental and public health policy, data analysis, and political economy. He completed a doctoral thesis at the University of Massachusetts, Amherst, where he examined the use of occupational safety and health data to impute monetary values for risk of death in cost-benefit analysis; this work was eventually published as a book by Cambridge University Press, *Markets and Mortality: Economics, Dangerous Work and the Value of Human Life.* Over the following two decades he has continued research into the economics of occupational health, focusing especially on child laborers in both the US and developing countries. Much of this work was supported by the International Labor Organization, for whom he has also recently completed a study on the global economics of AIDS. He has worked as a consultant on carbon policy for environmental advocacy groups and has written and spoken widely on strategies to mitigate climate change. He has also written on various aspects of economic theory, including welfare economics, the theory of the firm, and international political economy. In Summer 2014, his introductory economics textbooks in macro- and microeconomics were published by Springer.

Erin Martin, Ph.D.
Erin 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 (master's and doctoral degrees 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.

Kevin Francis, Ph.D., MES Director
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 Wynn, Ph.D.
Shangrila is a political ecologist with a particular focus on questions of justice and development in the context of climate change policy and politics. Recent research (Dissertation: *Justice, Development and India's Climate Politics: A Postcolonial Political Ecology of the Atmospheric Commons*) has examined climate politics from a North-South environmental justice perspective. Her current research extends this focus by examining climate policy implementation as it intersects with development policy and practice in South Asia, most recently in the form of the Clean Development Mechanism. She is also interested in questions of diversity in higher education, and has conducted NSF-funded collaborative research on the experiences of US geographers of color. Shangrila is originally from Nepal, where she studied Environmental Sciences at St. Xavier's College in Kathmandu, followed by a year of full-time work as an environmental reporter for The Himalayan Times. She came to the US for graduate studies in International Affairs with a focus on environment and development studies at Ohio University. She continued these interests in an interdisciplinary doctoral program in Environmental Science, Studies and Policy at the University of Oregon with Geography as the focal discipline. While a doctoral student, she was awarded an OUS-SYLFF fellowship for international research and a Wayne Morse 'Climate Ethics and Equity' Dissertation Fellowship in support of her dissertation research and writing. Shangrila comes to the Graduate Program on the Environment with rich teaching experience at the private liberal arts college as well as the public research university educational environments.

Dina Roberts, Ph.D.
Dina is a conservation biologist with broad field experience as an ornithologist and wildlife biologist, as well as experience in species management and forest policy development. Her background in field research spans more than two decades and includes studies in temperate and tropical forests to understand the impacts of forest fragmentation and land use change on biodiversity. Dina completed her Master's research from University of Georgia in collaboration with Smithsonian Migratory Bird Center in Panama looking at the importance of shade coffee plantations for tropical ants and birds. Dina received an IGERT Fellowship from the NSF to complete interdisciplinary doctoral research in a team of researchers looking at the importance of sustainable development and biodiversity protection in Costa Rica. She has since worked as a Postdoctoral Researchers at Washington State University, as an Endangered Species Biologist with the Washington Department of Fish and Wildlife, and as a Staff Scientist working at the science/policy interface to increase understanding of the global importance and increase protection of boreal forest of North America.

Kathleen M. Saul, M.A., M.E.S.
Kathleen received her BA in French and BS in Chemical Engineering from the University of Notre Dame and MA in Management from the Wharton School of Business (University of Pennsylvania) before turning her attention to environmental issues and eventually joining the MES program at Evergreen. After completing her degree in 2009, she taught Statistics in the Evening and Weekend studies program and Qualitative Methods, an Energy elective and gCORE in the Graduate Program on the Environment. Kathleen then moved to the Center for Energy and Environmental Policy at the University of Delaware to pursue her PhD. Her dissertation research focuses on the displacement of people that results from large scale technology projects, with a focus those involving nuclear technology. While at Delaware, she participated in research projects looking into the energy policy implications of the Fukushima nuclear disaster as well as alternative administrative forms for organizations devoted to energy conservation, efficiency, and sustainable energy options. She also taught in the undergraduate Introduction to Energy Policy and Sustainable Energy Policy and Planning courses. Her engineering acumen, business sense, and environmental awareness all come together in understanding modern energy systems and the green energy economy.

MES Adjunct Faculty Biographies

Richard Bigley, Ph.D.
Richard Bigley 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.

Richard is teaching Tropical Ecology with Dina Roberts in the Winter.

Sarah Hamman, Ph.D.
Sarah is the Restoration Ecologist for the Center for Natural Lands Management. Her work is aimed at restoring rare species habitat in PNW prairies using rigorous science and careful conservation planning. Sarah holds a B.A. in Biology from Wittenberg University and a Ph.D. in Ecology from Colorado State University. Most of her training and experience has been in ecosystem ecology, with a focus on fire effects on forest and grassland soils. She has also studied climate change impacts on Minnesota tallgrass prairies, wolf behavior and demographics in Yellowstone, fire effects on invasive species in Sequoia National Park, and restoration techniques for endangered species in central Florida rangelands. At Evergreen, she teaches Fire Science and Society and Restoration Ecology for the Graduate Program on the Environment.

Sarah is teaching Restoration Ecology in the Fall.

Jean MacGregor, M.S.,
Jean is a Senior Scholar at the Washington Center for Improving the Quality of Undergraduate Education at The Evergreen State College. She directs the Curriculum for the Bioregion Initiative, a faculty and curriculum development initiative, whose mission is to prepare undergraduates to live in a world where the complex issues of environmental quality, community health and wellbeing, environmental justice, and sustainability are paramount. The Curriculum for the Bioregion initiative involves hundreds of faculty members at colleges and universities throughout Washington State. Prior to work at Evergreen, she helped develop the environmental studies program at Warren Wilson College near Asheville, North Carolina. Earlier in her career, she developed and/or evaluated environmental education programs for both youth and adults at nature centers and science museums, and in various outdoor and wilderness learning settings.

Jean is teaching Environmental Education in the Fall.

Paul Pickett, M.Eng.
Paul's career in water resources engineering spans over three decades. His career focus has been on water quality, hydrology, water supply, watershed functions, and climate change. He received a Bachelor of Science in Renewable Natural Resources from the University of California at Davis in 1984, and a Masters of Engineering in Environmental Civil Engineering from U.C. Davis in 1989. Since 1988 he's worked for the Washington Department of Ecology as an environmental engineer. From 2001 through 2012 he served as an elected Commissioner for the Thurston Public Utility District, a water utility with about 3,000 customers in five counties. He has taught at Evergreen since 2009, and also occasionally writes feature articles for local publications. He lives with his wife on acreage in rural Thurston County, along with cats, chickens, blueberries, fruit trees, noxious weeds, and mud.

Paul is teaching Water Management for Human and Environmental Systems in the Winter.

Timothy Quinn, Ph.D.
Timothy 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).

Timothy is teaching Conserving and Restoring Biodiversity in the Fall.

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.

Mike is teaching Advanced GIS in the Fall and Introduction to GIS in the Spring.