Faculty Members Engaged in Sustainability Research

Created by the Office of Sustainability at Towson University

Name	Department	Research Topic
Dr. Jeremy Tasch	Department of Geography and Environmental Planning	Nature Society Relationships: Specifically the human dimensions of climate change in the circumpolar north, civil society and energy resource development in Azerbaijan, and intensive vs. extensive development in the Russian Far East and Asian Pacific
Dr. Martin Roberge	Department of Geography and Environmental Planning	Hydrology and how urbanization affects flooding
Dr. Sya Kedzior	Department of Geography and Environmental Planning	Political Ecology and Human-Environment Relationship Studies; Specifically environmental movements and knowledge politics surrounding water quality and pollution abatement efforts in India and the US
Dr. Paporn Thebpanya	Department of Geography and Environmental Planning	Uses GIS technology to asses data collected for a variety of sustainability research projects in collaboration with other faculty members
Dr. Kent Barnes	Department of Geography and Environmental Planning	The changing extreme summer temperatures frequencies in the Baltimore Metro Area.
Dr. Natalia Fath	Department of Geography and Environmental Planning	Integrating community-service projects designed to expose students to new perspectives and ideas about cities and how to incorporate nature into cities. Understanding the network of food distribution in Baltimore. Food production and climate change. Urban farming.
Dr. Brian Fath	Department of Biological Sciences	Dr. Fath works to better understand Sustainability

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		Science using network analysis, integrated environmental assessment, and complex systems science. An example of this is understanding the overall health and behavior of an ecosystem and its response to perturbations and how ecosystems interact with human systems and vice versa.
Dr. Jay Nelson	Department of Biological Sciences	Anthropogenic changes to fish habitats across the globe, including: 1) How increasing temperatures as a result of climat change will effect fish populations 2) The ability of juvenile striped bass to survive in low oxygen environments such as areas of hypoxia in the Chesapeake Bay 3) Using the effects that urbanization and increase stormwater runoff has had on urban fish populations as a model for what we can expect to see in fish populations as a result of climate change.
Dr. Vanessa Beauchamp	Department of Biological Sciences	Research looks at efficacy of stream restoration techniques and the impact of invasive species on forest ecosystems.
Dr. Roland P. Roberts	Department of Biological Sciences	Assisting in the organization of the Towson University Biodiversity Center
Dr. John S. LaPolla	Department of Biological Sciences	Assisting in the organization of the Towson University Biodiversity Center

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Dr. Steven Kimble	Department of Biological Sciences	Conservation of threatened species, particularly reptiles and amphibians; Uses genetic tools to assess wildlife populations for threats such as disease or small population size.
Dr. Laura Gough	Department of Biological Sciences	Currently has two research projects in Northern Alaska working on understanding how arctic tundra is responding to climate change
Dr. Christopher Salice	Department of Biological Sciences	The impact of anthropogenic activities on ecological systems
Dr. Sarah Haines	Department of Biological Sciences	Integrating environmental education into K-12 schooling and teacher preparation programs to enhance both teaching and student learning
Dr. Richard Siegel	Department of Biological Sciences	Conservation biology of amphibians and reptiles
Dr. Mary Stapleton	Department of Biological Sciences	Works to educate k-12 students about Climate Change
Dr. Faith Weeks	Department of Biological Sciences	Using insects and related arthropods to teach sustainability and science concepts and illustrate the role that insects play in ecosystems
Dr. David Ownby	Department of Chemistry	Developing models to accurately predict the effects and fates of metals in aquatic and terrestrial ecosystems.
Dr. John Sivey	Department of Chemistry	Studies the chemistry of drinking water treatment as well as environmental organic chemistry
Dr. Clare Muhoro	Department of Chemistry	Studies the role of transition metals in organic

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		transformations such as the degradation of organic pesticides in tropical aqueous environments.
Dr. Ryan Casey	Department of Chemistry	Investigating the role of road salt and stormwater ponds in the long term salinization of surface waters in this region.
Dr. Kathryn Kautzman	Department of Chemistry	Studies the effects of atmospheric aerosols on climate change and human health.
Dr. Joel Moore	Department of Physics, Astronomy, and Geosciences	Research focuses on using geochemical tools to understand earth surface and atmospheric processes in natural and anthropogenically-impacted systems such as road salt and urban geochemistry
Dr. Amy Williams	Department of Physics, Astronomy, and Geosciences	The effects of urbanization on Towson University's waterways and improving on campus stream health through citizen education, cleanup, and improved storm water and road salt management practices
Dr. Michael McGuire	Department of Computer and Information Sciences	Machine learning, deep learning and big data integration focused on data in the climate, hydrological, and ecological sciences
Dr. Antonette Marzotto	Department of Political Science	Automobility and the environment
Dr. James Manley	Department of Economics	Researches the health impacts of air pollution and finding efficient policies to improve nutrition in developing countries and policies to improve the U.S.

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		government's agriculture programs
Dr. Timothy Sullivan	Department of Economics	Gender and economics and feminist economics; particularly interested in both the early stages of industrialization and the transition either to or away from an industrial society
Dr. Seth Gitter	Department of Economics	Researches how fair trade coffee farming impacts children's education in Latin America
Dr. Jin Dong Park	Department of Accounting	Researches the effect of environmental regulation on firms' environmental performance
Dr. Islam Elshahat	Department of Accounting	Studies environmental performance and firm profitability in the oil and gas industry
Dr. Andrew Schiff	Department of Accounting	Studies the challenges renewable energy policy makers face from consumers
Dr. Jorge Romero	Department of Accounting	Environmental Accounting and the impact of environmental penalties assessed to publicly traded firms
Dr. Martin Freedman	Department of Accounting	Environmental Accounting and Ethics; Climate change disclosures by corporations, voluntary emission reduction initiatives
Dr. Douglass Ross	Department of Management	Integrating sustainability into MBA/EMBA programs, specifically, the CEO-asserted critical need for sustainability in corporate strategy and MBA student perceptions of the extent to which their respective programs prepare them to

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		handle sustainability challenges successfully
Dr. Stephen Schroth	Department of Early Childhood Education	Using sustainability and environmental education in early childhood education settings to develop children's scientific thinking skills
Dr. Robert Blake	Department of Elementary Education	Environmental Education
Lynn Tomlinson	Department of Electronic Media and Film	Creates productions addressing environmental change and to advocate for more sustainable policies
Dr. Lingling Zhang	Department of Mass Communications and Communications Studies	How to effectively use green appeal in advertisements and how to frame messages to better promote the products that could be beneficial to our environment
Dr. Emily Formentin	Department of Mass Communications and Communications Studies	Examining corporate video sustainability reports
Dr. Hua Chang	Department of Marketing	Green Advertising; how to frame the messages in green product advertisements to influence consumer behaviors and encourage them to engage in more green product consumption.
Dr. W. Dana Phillips	Department of English	Ecocriticism and the environmental humanities
Dr. Nicole Dombrowski-Risser	Department of History	Organic farming, sustainable agriculture, rural women in France, modern farming techniques, sustainable fruit cultivation, farm-environment balance, wartime rural destruction, climate change and fruit farming
Dr. Karen Oslund	Department of History	Environmental History; Nature, culture, and

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		storytelling in the North Atlantic; Currently working on a study of current and traditional whaling in the Arctic
Dr. Makmiller Pedroso	Department of Philosophy and Religious studies	The evolution of cooperation: cooperation is essential to manage resources and build sustainable societies and this research gives insight into ways we could design social institutions to increase cooperation
Dr. Nicole Fabricant	Department of Sociology, Anthropology & Criminal Justice	Currently working on zero waste initiatives, community-owned community controlled solar projects, and land trusts in Curtis Bay. Also has a long-term participatory action research project in South Baltimore (at Benjamin Franklin High School Youth) documenting environmental injustice in their community
Dr. Emily Parker	Department of Women's and Gender Studies	The Anthropocene and elemental multiplicity and environmental trajectories. Her work is ultimately concerned with how we can live on the earth in a sustainable way, even after centuries of violence.
Dr. Esther Wangari	Department of Women's and Gender Studies	Research seeks the understanding of and interpretation of local experiences of marginalized communities in the context of global processes of environmental and economic change.

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Dr. Craig Rush	Department of Psychology	Rebuilding sustainable communities for children and families after disaster