

Instructor Directory

Erika Machtinger, PhD – Assistant Professor of Entomology

<https://www.machtingerlab.com/>

Dr. Machtinger is an Assistant Professor of Entomology at Pennsylvania State University and Principal Investigator of the Penn State Veterinary Entomology Laboratory. The mission of the Veterinary Entomology Laboratory is to investigate the ecological relationships between vertebrates and their ectoparasites and other arthropod pests to facilitate the development of control methods and integrated pest management strategies. Dr. Machtinger earned a Bachelor of Science in Wildlife Conservation and Ecology from the University of Delaware; Master of Science in Entomology from the University of Florida; and Doctorate in Entomology from the University of Florida. Her areas of expertise include veterinary entomology, tick ecology and control, filth fly management and behavior, wildlife entomology, and arthropod behavior.

Michael Skvarla, PhD – Assistant Research Professor of Arthropod Identification

<https://extension.psu.edu/michael-j-skvarla>

Michael Skvarla, PhD, is an Assistant Research Professor of Arthropod Identification and Director of the Insect Identification Laboratory at Pennsylvania State University. Skvarla earned his PhD from the University of Arkansas Department of Entomology in 2015 and conducted postdoctoral research at the Systematic Entomology Laboratory in Beltsville, Maryland from 2016-2017. He has expertise in arthropod identification; arthropod survey, collection, and biodiversity; soil arthropods, with particular emphasis on forest leaf litter; and acarology, with particular emphasis on Prostigmata and Cunaxidae. His duties at the Insect Identification Laboratory include identifying insects and other arthropods submitted by the public, writing and maintaining entomology fact sheets, presenting science-based information to the public via seminars and workshops, and conducting limited original research. Skvarla's current research focus centers on deer keds (*Lipoptena cervi*), including whether they are vectors of arthropod-borne pathogens.

Maria Luisa Tejada de Rivero Sawers, MD MScPH – Extension Educator, Food, Families & Health Division

Maria Luisa Tejada de Rivero Sawers, MD MScPH, is an Extension Educator with Pennsylvania State University Food, Families and Health Division. She has expertise in epidemiology, the control of communicable diseases, and health education. Dr. Tejada de Rivero Sawers earned a Master of Science in Public Health from the London School of Hygiene and Tropical Medicine in 2018. She also holds a Doctor of Medicine in Obstetrics-Gynecology from the University of Geneva. Dr. Tejada de Rivero Sawers co-led an informational seminar series on Ticks and Tick-Borne Diseases supported through Penn State Cooperative Extension in 2021.

Jamie Kopco, PhD BCE – Pesticide Education Specialist

Jamie Kopco, PhD BCE, is currently a Pesticide Education Specialist at Penn State University and a medical entomologist in the US Army Reserves. He is also a Board Certified Entomologist. Dr. Kopco double-majored in Entomology and Natural Resources at Cornell University (BSc) and studied Entomology at North Dakota State University (PhD). He worked as an entomologist and pest manager in hydroponic greenhouses at Walt Disney World and built expertise in structural pest management by serving as technical director for Guardian Pest Solutions. Dr. Kopco also has professional teaching experiences ranging from merit badge counselor at a Boy Scout camp to Conservation Educator at Disney's Animal Kingdom to earning a college teaching certificate at North Dakota State University. His combination of conservation and pest management experiences help him to maintain a balanced, science-based perspective on pesticides. Kopco has maintained pesticide applicator certification in Pennsylvania (ID 505498) for six years.

Emily Struckhoff, MS – Education Program Specialist

Emily Struckhoff is an Education Program Specialist on Penn State Extension's Vector-Borne Disease Team. She earned her Bachelor of Science in biology from Saint Louis University and Master of Science in Entomology from the University of Illinois at Urbana-Champaign. Struckhoff's past research includes conducting tick surveillance throughout the state of Illinois, developing tick identification tools, and testing vectors for diseases of medical and veterinary concern. At Penn State Extension, Struckhoff develops and delivers programming about vectors, such as ticks and mosquitoes, throughout the state, and she is passionate about helping the people of Pennsylvania protect themselves from vector-borne diseases.

Jessica Brown – Graduate Student, Department of Entomology

Jessica Brown is a Graduate Research Assistant working under Dr. Erika Machtinger at the Pennsylvania State University (PSU) Department of Entomology, Veterinary Entomology Lab. Brown earned a Bachelor of Science in Wildlife and Fisheries Science from PSU in 2019. She worked as a laboratory research technician in the Veterinary Entomology Lab prior to joining as a graduate research assistant. She has experience in tick control centered on deployment of tick tubes to measure their efficacy in reducing ticks found on rodents. Brown has developed and provided guest lectures to several university courses on topics including integrated pest management, wildlife disease, and history of plagues.

Jesse Evans – Graduate Student, Department of Entomology

Jesse Evans is a Research Assistant working within the Pennsylvania State University (PSU) Department of Entomology. Evans earned a Bachelor of Science in Wildlife and Fisheries Science from PSU in 2019. Her current efforts focus on research of arthropod pests of animals, including white-tailed deer ectoparasites and community outreach efforts. Prior to joining the PSU Department of Entomology, Evans worked as a habitat specialist with the US Fish and Wildlife Service and Habitat Forever in Pennsylvania.



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Pennsylvania Department of Environmental Protection

Christian Boyer – Manager, Tick Surveillance & Testing Program

Christian N. Boyer is the Manager of the Tick Surveillance and Testing Program for the Pennsylvania Department of Environmental Protection (PA-DEP) Division of Vector Management. He also serves as the President of the Pennsylvania Vector Control Association. Boyer earned a Bachelor of Science in Biology from Messiah College in 2002. After graduation he joined the West Nile virus program in Union County, PA, and joined the PA-DEP in 2006 as a Water Pollution Biologist and West Nile virus program coordinator, where he worked until the PA-DEP initiated the statewide active tick surveillance program in 2018. Boyer has extensive experience in tick and mosquito surveillance, control, and pesticide application. Boyer has maintained pesticide applicator certification in Pennsylvania (ID 602439) for 22 years.

Keith Price, PhD – Microbiologist, Vector Management

Keith Price, PhD, obtained a B.S. in biology from Jefferson University, M.S. in limnology from West Chester University, and Ph.D. in aquatic microbial ecology from Penn State University, where his dissertation work examined phosphorus uptake by algae in streams. After graduating from Penn State, he worked as an Aquatic Biologist for PA DEP Vector Management in the Black Fly Suppression Program where he researched relationships between diatom diversity and larval black fly diet. He joined DEP Bureau of Laboratories in 2014 where he worked on algal and cyanobacterial taxonomy and biomass. From 2017 to present he is working again in DEP Vector Management, this time in the Laboratory as a Microbiologist conducting arthropod-borne disease surveillance and Supervisor overseeing taxonomy and molecular biology operations.



Cornell University, **Cornell University**

Laura C. Harrington, PhD – Professor of Entomology

<https://blogs.cornell.edu/harrington/>

Dr. Harrington is a Professor of Entomology at Cornell University and Program Director for the Northeast Regional Center for Excellence in Vector-Borne Diseases. She earned a PhD in Entomology in 1999 from the University of Massachusetts and completed postdoctoral training at the University of California at Davis. Current research projects in her laboratory address the blood feeding and mating behavior of mosquito vectors of dengue fever, Zika, Chikungunya, West Nile virus, and malaria. She also studies human and animal-mosquito interactions and the role of climate changes and globalization on emerging vector-borne diseases. Dr. Harrington mentors undergraduate and graduate students in the areas of entomology, ecology, and society.

Amelia Greiner Safi, PhD – Professor of Practice, Public & Ecosystem Health

Dr. Amelia Greiner Safi is Professor of Practice in the Department of Public & Ecosystem Health at Cornell University. She is a social and behavioral scientist with expertise in multilevel influences on health, strategic public health communication, health disparities and intervention planning. A common thread in her work is translational work – linking research to practice and policy. For the past 15 years, Dr. Safi participated in and led collaborative, multidisciplinary, and engaged research. She has often served as a bridge across disciplines, professions to find common interests in order to advance health and environmental outcomes. Much of this work has a health disparities, vulnerability or equity focus. Dr. Safi earned a PhD in Social and Behavioral Sciences from Johns Hopkins University School of Public Health in 2011.

Lindsay Baxter, MS – Research Support Specialist

Lindsay Baxter, MS, is a Research Support Specialist in the Department of Entomology at Cornell University, and the Program Coordinator for the Northeast Regional Center for Excellence in Vector-Borne Diseases Pesticide Resistance Monitoring Program. Baxter earned a Bachelor of Science in Micro and Molecular Biology from Portland State University in 2012, and a Master of Science in Entomology from Cornell University in 2021. Prior to entering her current role, Baxter worked as a Research Technician in the Harrington Lab at Cornell University, with responsibilities centered on mosquito rearing and colony maintenance, and implementation of research protocols focused on mosquito mating and pesticide resistance monitoring. Her current efforts focus on resistance bioassays to detect pesticide resistance in mosquitoes of public health importance in the Northeast USA, as well as field efficacy trials for approaches to mosquito control.

Emily M. Mader, MPH MPP – Extension Associate

Emily Mader, MPH MPP, the Program Manager for the Northeast Regional Center for Excellence in Vector-Borne Diseases (NEVBD) and Extension Associate in the Cornell Department of Entomology. Mader earned her Master of Public Health and Master of Public Policy degrees from the University of Utah in 2013. She is a public health researcher trained in quantitative and qualitative research methods, with specialization in program management and evaluation, strategic planning, and survey research methods. In addition to her role in NEVBD program management, Mader regularly contributes to the development and implementation of NEVBD community of practice and training objectives designed to bolster the public health infrastructure and workforce capacity surrounding vector-borne disease prevention and control. Prior to joining Cornell University, she worked in chronic disease prevention and quality of care in the primary care setting.



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Centers for Disease Control and Prevention, Division of Vector-Borne Diseases

Roxanne Connelly, PhD – Chief Entomologist, Arboviral Diseases Branch

Dr. Connelly is the Chief Entomologist, Entomology and Ecology Team Lead for the Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases, Division of Vector-Borne Diseases, Arboviral Diseases Branch in Fort Collins, CO. She leads a team of experts focused on public health applied research, control, and response in the area of vector surveillance and control. Prior to moving to Fort Collins, Dr. Connelly spent 17 years on the faculty of the University of Florida working directly with mosquito control programs and county extension agents throughout Florida addressing mosquito research needs as well as training and extension programming centered on mosquito biology and control and medical entomology. She mentored graduate students and taught Mosquito Biology, Mosquito Control, Insecticide Resistance, Mosquito Morphology and Identification, and Integrated Mosquito Management. A native of Birmingham, Alabama, Dr. Connelly received her Master of Science and Doctorate in Medical Entomology at Louisiana State University in Baton Rouge, Louisiana.