Region 5 Harmful Algal Bloom Clean Water Act/Safe Drinking Water Act Workshop
SPEAKER BIOS
April 27-29, 2016
Chicago, IL

HEALTH AND ECOLOGICAL EFFECTS

Dr. Lesley D'Anglada is a Senior Microbiologist with the United States Environmental Protection Agency. For the past nine years, Lesley has served as the Harmful Algal Blooms lead for the Office of Science and Technology, Office of Water. Lesley is the manager of the EPA Drinking Water Health Advisories for Cyanotoxins and is the Office of Water representative on the Interagency Working Group for HABHRCA (Harmful Algal Blooms, Hypoxia, Research and Control Act). She is a member of the World Health Organization's Water Quality and Health Technical Advisory Group (WQTAG) since 2010, an ex-officio member of the National HABs Committee since 2013, and co-editor of special issues of *Toxins* on HABs and Public Health since 2014. Lesley is currently acting as the Branch Chief of the Threats Analysis, Prevention and Preparedness Branch in the Water Security Division, Office of Ground Water and Drinking Water. She received her Doctorate in Public Health, Masters on Environmental Health and Bachelor Degree in Industrial Microbiology from the University of Puerto Rico.

Pam Anderson is supervisor of the Water Quality Monitoring Unit at the Minnesota Pollution Control Agency. Pam has worked at the MPCA for the last 13 years, starting with coordinating volunteer monitoring programs, leading lake monitoring and assessment, and for the last 3 years supervising the unit. She has a bachelor's degree from Bemidji State University.

MONITORING, PREDICTION, AND WATER QUALITY TRENDS

Dr. Timothy Davis has spent the last 10 years studying the ecology of harmful algal blooms (HABs). Dr. Davis completed his Bachelor's of Science at Southampton College of Long Island University in 2004. He then moved to Stony Brook University where he conducted his dissertation research focusing on understanding the environmental drivers of HABs in the several lakes throughout the northeast USA including Lake Erie and Lake Champlain. After he completed his dissertation in 2009, Dr. Davis moved to Brisbane, Australia to continue his work at the Australian Rivers Institute. He spent the next two years studying the ecology of the toxic HABs that occur in drinking water reservoirs that serve the greater Brisbane population of almost two million people. In 2012, Dr. Davis moved to the Canadian Centre for Inland Waters in Burlington, Ontario. For the next year he investigated the water quality and harmful algal bloom issues in Lake Erie, Lake Ontario, Lake Huron and Lake Winnipeg. Dr. Davis currently works for NOAA Great Lakes Environmental Research Laboratory (GLERL) in Ann Arbor, MI. He leads GLER's HAB monitoring and research program, which supports critical NOAA HAB forecasting products and is also an adjunct research scientist at the University of Michigan.

Steve Ruberg leads the Observing Systems and Advanced Technology (OSAT) branch at NOAA's Great Lakes Environmental Research Lab in Ann Arbor, MI. OSAT is responsible for high time-series resolution buoy measurements of phosphorus, nitrogen and optical properties in

western Lake Erie and hypoxia buoy observations in Saginaw Bay and central Lake Erie. The OSAT branch is also working on satellite remote sensing and aircraft hyperspectral detection, mapping and classification of harmful algal blooms.

Dr. Keith Loftin has 15 years of experience focused on analytical methods development for mass spectrometry, spectroscopy, and assays to support his research on the occurrence, fate, effects, transport and treatment of natural and anthropogenic organic contaminants such as antibiotics, pesticides, endocrine disruptors, cyanobacteria and cyanotoxins. His work also includes chemical kinetics and identification of degradation products and compounds of environmental health significance. Dr. Loftin received the Rudolph Hering Medal in 2003 and the U.S. EPA Office of Water's Bronze Medal in 2011. He is a principle investigator for the USGS Toxic Substances Hydrology/Environmental Health Emerging Contaminant, Chemical Mixture, Unconventional Oil/Gas, and Storm Derived Change Event-Response teams. He was the lead researcher for the first ever national reconnaissance of cyanotoxins in the U.S. for the 2007 national lakes assessment and 2011 national wetlands condition assessment examining the occurrence of cyanotoxins and potential impacts on human and ecological health based on cyanotoxins, cyanobacteria, and chlorophyll. He is continuing to collaborate with U.S. EPA on the 2015 National Coastal Assessment and the 2016 National Wetland Condition Assessment. Currently, he is working as project chief on a range of projects including non-targeted/targeted analysis of hurricane impacts on coastal sediments for contaminants and is the lead USGS principle investigator for the interagency Cyanobacterial Assessment Network in collaboration with U.S. EPA, NASA, and NOAA focused on identification of harmful algal blooms using remote sensing for the United States.

PREVENTION, WATERBODY MANAGEMENT, AND SOURCE WATER PROTECTION

Mario R. Sengco is a Physical Scientist in the U.S. EPA's Office of Water, Office of Science and Technology in Washington, D.C. He received his Ph.D. in Biological Oceanography from the Joint Program in Oceanography at the Woods Hole Oceanographic Institution and Massachusetts Institute of Technology, and his B.S. in Marine Science from Long Island University (Southampton, NY). From 1994-95, he was a Fulbright Scholar at the University of Constance (Germany) studying viruses in marine macroalgae. From 2009-11, he was a Science and Technology Fellow at the American Association for the Advancement of Science (Washington, DC). Before coming to EPA, he conducted research at Woods Hole and the Smithsonian Environmental Research Center (Edgewater, MD) on marine harmful algal blooms (HABs) focusing on bloom ecology and dynamics, including strategies for controlling and mitigating HABs. Currently, he works in the water quality standards program and focuses on issues related to nutrient pollution.

Santina Wortman is a Physical Scientist for the U.S. Environmental Protection Agency with eight years of experience, primarily in the Nonpoint Source Control Program. Ms. Wortman currently assists the Water Division Director on matters relating to implementation of the Nutrients Annex of the 2012 Great Lakes Water Quality Agreement. In this role, she provides technical and project management support and facilitates binational coordination and

collaboration with local, state, and federal partners in the U.S. and Canada. Ms. Wortman has a master of science in Earth and Environmental Sciences from the University of Illinois.

Jon Bartholic is Director of the Institute of Water Research and Professor in the Departments of Community Sustainability, and Plant, Soil and Microbial Sciences at Michigan State University (MSU). The Institute team works directly with local, county, state, regional, and federal government agencies and organizations focusing on water quality and quantity, and appropriate land use practices. Dr. Bartholic has and continues to work closely with MSU colleagues on water quality and quantity issues, and land use and whole-farm planning from a watershed perspective. He works diligently with others to develop an accessible integrated environmental information web-based system including remote sensing and GIS technologies, to aid users in making sound environmental, resource, and land use decisions. This approach is utilized in the "Restoring Great Lakes Basin Water through the Use of Conservation Credits and Integrated Water Balance Analysis System" funded by the Great Lakes Protection Fund (GLPF).

Dr. Chris Winslow received his B.S. from Ohio University and both his M.S. and Ph.D. from Bowling Green State University (BGSU). For the past eleven years, Chris has been a fixture at Ohio State University's Stone Laboratory, first as an instructor and research supervisor, but now as the Interim Director of both the Lab and the Ohio Sea Grant College Program. Prior to joining OSU and Ohio Sea Grant, Chris was an Instructor at BGSU (2002-09) and an Assistant Professor at Kutztown University of Pennsylvania (2009-11). His research training has roots in fish ecology with an emphasis on the impact of invasive species. Chris continues to address invasive species impacts but his research and outreach efforts now include other issues critically important to Lake Erie. These issues include nutrient loading, harmful algal bloom causes and impacts, dredging activity, coastal community resilience and growth, and the impacts of climate change.

DRINKING WATER TREATMENT AND ANALYTICAL METHODS

Hannah Holsinger is an environmental scientist with the United States Environmental Protection Agency (EPA). She currently serves as the drinking water program's cyanotoxin team lead for the Office of Ground Water and Drinking Water (OGWDW). Prior to joining EPA, she was a public health fellow in OGWDW. Hannah has a B.S. in Biological Sciences and Food Science and Technology from Virginia Tech and a Master of Public Health, focusing on environmental health, from the University of Kentucky.

Katie Foreman is a physical scientist with the EPA's Office of Ground Water and Drinking Water with a primary focus on harmful algal bloom issues and evaluating the national primary drinking water regulations. Before joining the EPA in August 2015, Katie was a policy analyst for the Oregon Department of Environmental Quality, leading the development of new policy to ensure better funding options for Oregon's water infrastructure projects. Prior to her work with the State of Oregon, Katie served for five years as a scientific and technical expert on water quality issues in the Chesapeake Bay Watershed with the EPA Region 3's Chesapeake Bay Program Office, where she developed tools to assess the effectiveness of nutrient and sediment reduction strategies within the watershed. Prior to this work, Katie was a scientist for seven years

with the Iowa Department of Natural Resources focused on water quality monitoring and assessment including cyanotoxin, pesticide, and beach monitoring, TMDL development, and data and laboratory analysis. Katie has a bachelor's and a master's degree in geography from the University of Iowa.

Nick Dugan is an engineer with the U.S. Environmental Protection Agency's Water Supply and Water Resources Division in Cincinnati, Ohio, where he specializes in drinking water treatment. In addition to his work with cyanobacteria and cyanobacteria toxins, he has performed treatment studies to evaluate the control of cryptosporidium, nitrate, perchlorate, pesticides and disinfection by-product precursors.

Heather Raymond earned Master's degrees in Science and Public Administration from Ohio University. She has almost 20 years' experience in Ohio EPA's Division of Drinking and Ground Waters where she currently serves as the Harmful Algal Bloom Coordinator. She helped draft Ohio's Harmful Algal Bloom Monitoring and Reporting Rules and is a coauthor of the State of Ohio Recreation and Public Water System HAB Response Strategies and HAB-related guidance documents. She has been invited to speak on the topic of HABs at state, federal and international HAB panels and conferences.

REPORTING, MESSAGING, AND COMMUNICATION TO THE PUBLIC

Virginia Roberts is an Epidemiologist in the Waterborne Disease Prevention Branch, within the National Center for Emerging and Zoonotic Infectious Diseases at the CDC. She manages the waterborne disease outbreak component of the National Outbreak Reporting System (NORS) and coordinates a CDC Great Lakes Restoration Initiative project that focuses on building waterborne disease prevention capacity in Great Lakes states.

Cyndi Wagner is the Chief of the Targeted Monitoring Section in the Indiana Department of Environmental Management's (IDEM's) Office of Water Quality, Watershed Assessment and Planning Branch. In her prior experiences with IDEM, she oversaw the Combined Sewer Overflow and Storm Water programs. She also developed and implemented the Total Maximum Daily Load (TMDL) program, was the Chief of the Underground Storage Tank Compliance Section, wrote the Spill Reporting and Secondary Containment rules, and directed the activities related to the Emergency Planning and Community Right to Know Act. She has a B.S. in Entomology from Purdue University and began her environmental health related career at the Marion County Health Department.

Mr. Andrew Reich is the administrator of the Public Health Toxicology Section at Florida Department of Health. He has over 25 years of experience in public health addressing issues such as water quality, hazardous waste, toxicology, environmental contamination and disease outbreaks. Before this current position, Andy was acting chief of the Bureau of Environmental Health. During this time, he coordinated the Bureau's response to the Ebola threat. For the past 10 years, Mr. Reich has lead the Department's effort to address adverse health impacts from exposures to toxic algal blooms in fresh water and marine environments. His efforts have led to an integrated and collaborative approach to environmental health response in

Florida with federal, state, and local partners, including NOAA, CDC, Army Corps of Engineers and the U.S. Environmental Protection Agency. Mr. Reich has a Master's of Science degree in Public Health from the University of Alabama at Birmingham, as well as a Master's in Medical Science from Emory University in Atlanta, Georgia.