

U.S. EPA Office of Science and Technology Webinar

Preparing for HABs Season: Planning and Responding to HABs in Coastal Waters

DATE: Thursday, May 23rd, 2019

TIME: 11:00 – 1:00pm EST

AUDIO AND LOG-IN INFORMATION

Adobe Log-in: <https://epawebconferencing.acms.com/habscoastal/>

Audio: Computer audio (VoIP or Voice over Internet Protocol), or by phone 866-299-3188; 2025660412#

PRESENTATIONS AND RECORDING

<https://www.epa.gov/nutrient-policy-data/more-information-about-cyanohabs>

SUMMARY

This webinar will focus on issues related to biotoxins in coastal waters, including guidance and control in seafood, public health implications, and monitoring and mitigation for HABs.

AGENDA

| TIME | PRESENTATIONS | SPEAKERS |
|---------------|---|--|
| 11:00 - 11:05 | Welcome | Mario Sengco Office of Science and Technology, EPA |
| 11:05 - 11:30 | Guidance on the Control of Marine Biotoxins in Seafood Intended for Interstate Commerce | Stacey McLeroy Center for Food Safety and Applied Nutrition, FDA |
| 11:30 - 11:55 | Targeted Monitoring for HAB Early Warning | Vera Trainer NOAA Northwest Fisheries Science Center |
| 11:55 - 12:20 | Mitigation Options for Marine HABs | Kevin Sellner Hood College's Center for Coastal and Watershed Studies |
| 12:20 - 12:45 | Public Health Implications of Marine Harmful Algal Blooms in Florida | Andy Reich Bureau of Environmental Health Florida Department of Health |
| 12:45 - 1:00 | Q&A and Discussion | |
| 1:00pm | Adjourn | |

FOR MORE INFORMATION

Visit the [EPA's Cyanobacterial HABs Website](#)

PRESENTERS BIOGRAPHIES AND CONTACT INFORMATION

Stacey McLeroy

Dr. Stacey McLeroy is Science Advisor for the Division of Seafood Safety, Office of Food Safety at FDA's Center for Food Safety and Applied Nutrition. In this role she provides scientific advice on chemical and microbiological contaminants in seafood to enhance guidance, policy, and regulation aimed at ensuring the safety of seafood.

Prior to becoming Science Advisor, Stacey spent most of her career at FDA as a Research Biologist in the Division of Analytical Chemistry in the Office of Regulatory Science. Stacey was a principal investigator for seafood safety research, which included developing and validating detection methods for foodborne toxins, investigating traditional and emerging sources and vectors of marine biotoxins, and understanding the dynamics of toxin transfer to seafood.

Stacey also served as Acting Director of the Division of Seafood Safety and Acting Chief of both the Shellfish & Aquaculture Policy Branch and Seafood Processing & Technology Policy Branch.

Stacey has authored over 50 publications on harmful algal blooms, marine biotoxin detection, the transfer of toxins in seafood, and bio-optical detection of algal blooms. She has edited books and journals and authored reports to Congress on these topics. She has been FDA's representative on the U.S. Subcommittee on Ocean Science and Technology since 2013, chair of the Interstate Shellfish Sanitation Conference (ISSC) Laboratory Committee since 2014, and FDA's representative on the Gulf of Mexico Oil Spill and Ecosystem Science Conference Executive Committee since 2015.

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Vera Trainer

Dr. Vera Trainer is a supervisory oceanographer at NOAA's Northwest Fisheries Science Center in Seattle, Washington, USA. Her current research on harmful algal blooms focuses on the assessment of climatic factors that influence toxic bloom development and understanding susceptibility of shellfish and marine mammals to toxins in their environment. Her recent publications demonstrate the influence of climate change, particularly basin-wide elevations in temperature, on the increased intensity of harmful algal blooms caused by *Pseudo-nitzschia* in the Pacific Northwest. This work has led a comprehensive "ecological forecast" to alert tribal, state and federal managers to toxic events that threaten coastal shellfish harvest. She has led international comparative approaches to study the intensity, geographical distribution and toxicity of harmful algal blooms that have increased our understanding of environmental stressors that promote these events across the North Pacific. She has led efforts aboard NOAA ships to map toxic blooms and has participated in numerous research cruises as principal investigator.

Her research on the impact of harmful algal blooms on the resilience of coastal economies and marine wildlife health has been featured in the Seattle Times, The Guardian, the New York Times, USA Today, Associated Press, National Public Radio, the San Francisco Chronicle, Washington Post, and numerous West Coast television news programs. She is the Science Board Chair-Elect for the North Pacific Marine Science Organization (PICES) and currently leads a project on fisheries and harmful algal bloom forecasting in India. She is the president of the International Society on the Study of Harmful Algae, serves on the Global Harmful Algal Bloom (GlobalHAB) steering committee and the International Ocean Commission's Intergovernmental Panel on Harmful Algal Blooms. She has published over 100 peer-reviewed papers, served as editor for a number of special publications on harmful algae, and has received invitations to speak at numerous symposia on almost

every continent. She enjoys national and international collaborations as a means to enhance our cultural, scientific and personal understanding of one another.

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Kevin Sellner

Trained as a biological oceanographer and phytoplankton ecologist, Dr. Kevin Sellner focused his initial research career on phytoplankton dynamics and fate of primary production in fresh and marine waters. His interests expanded to harmful algal blooms (HABs) in the mid-1980's which he continues to pursue in his retirement designing and implementing cyanobacteria projects for local waters in western Maryland, USA. Kevin has served on regional (Florida, Maryland) and national HA advisory committees, co-written several national HA reports, provided HAB testimony to the U.S. Congress, and was an initial member of U.S. National Harmful Algae Committee which provides advice to Federal agencies on developing issues, needs, and focus areas with toxic and high biomass algal blooms. He served as the first program manager for the U.S. interagency competitive research program ECOHAB (Ecology and Oceanography of Harmful Algal Blooms) and oversaw review, selection, and funding of approximately \$50M in initial project support.

Dr. Sellner joined Hood College's Center for Coastal and Watershed Studies as a Senior Scholar in 2015 where he continues his HAB research with students and colleagues. Recent projects have explored several mitigation techniques for freshwater and brackish cyanobacteria blooms, including flushing, flocculation, acidification, barley straw (*Hordeum vulgare*) additions, low level algicide input, and peroxide loading to reduce microcystin-producing cyanobacteria. He is a new member of the Interstate Technology and Regulatory Council's Strategies for Preventing & Managing Harmful Cyanobacterial Blooms (HCBs) Team which will draft mitigation reports, guidance documents, and factsheets on mitigating US freshwater cyanobacteria blooms. He has published >100 papers, reports, and factsheets with two recent reviews of prevention, control, and mitigation techniques for HABs in fresh and marine waters.

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Andy Reich

Mr. Andrew Reich is the scientific advisor to the Chief of the Bureau of Environmental Health at Florida Department of Health. Previously he was the administrator of the Public Health Toxicology Section. He has over 25 years of experience in public health addressing issues such as water quality, fish advisories, hazardous waste investigations, toxicology consultations, environmental contamination and disease outbreaks. Andy was also acting chief of the Bureau of Environmental and coordinated the Bureau's response to the Ebola threat.

For over 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 the National Oceanic and Atmospheric Administration (NOAA), US Centers for Disease Control and Prevention, (CDC), Army Corps of Engineers and the US Environmental Protection Agency.

Mr. Reich has a Master's of Science degree in Public Health from the University of Alabama in Birmingham as well as a Master's in Medical Science from Emory University in Atlanta, Georgia with a concentration in Intensive Care Medicine.

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