



INVITATION to LUNCH SEMINAR

with Bryan W. Brooks

Visiting Professor, CENAKVA, Faculty of Fisheries and Protection
of Waters, University of South Bohemia



Date

Monday, May 9, 2022, 12:00 -13:00



Place

Na Sádkách 1780, 370 05 České Budějovice

Campus of the University of South Bohemia

The lecture room R1



Lecture

Are Harmful Algal Blooms Becoming the Greatest Inland Water Quality Threat to Public Health and Aquatic Ecosystems? A Case Study in One Health



Abstract

Harmful Algal Blooms (HAB) appear to be increasing within inland waters at the global scale, and represent a classic One Health challenge. When HAB events require restrictions on fisheries, aquaculture, recreation and drinking water uses of inland water bodies significant economic consequences result. Unfortunately, the magnitude, frequency and duration of HABs in inland waters are poorly understood across spatiotemporal scales, and are differentially engaged among and within countries. Beyond site-specific water quality degradation caused directly by HABs, the presence of HAB toxins can influence routine surface water quality monitoring, assessment and management practices. HABs present significant challenges for achieving water quality protection and restoration goals when these toxins confound interpretation of monitoring results and environmental quality standards implementation efforts for other chemicals and stressors. Further, cyanobacteria and other HAB forming species differentially produce toxins across environmental conditions, which present spatiotemporal risks to aquatic and terrestrial wildlife and human health. Whether HABs presently represent the greatest threat to inland water quality is debatable, though HABs in inland waters of developed countries typically cause more severe acute impacts to environmental quality than conventional chemical contamination events. In this presentation, I introduce some of our work on the subject, which is a textbook example of the One Health approach, and identify several timely research needs to engage the complexities of HAB assessment and management, to address the forcing factors for HAB formation, and to reduce the threats posed to inland surface water quality, particularly in the face of climate change.



Details

Please confirm your participation [here](#) by May 6, 2022.

Lunch sandwich for all registered participants.

Free admission. Capacity max. 50 persons.



Bryan William Brooks, Ph.D.

Distinguished Professor, Environmental Science and Biomedical Studies
Environmental Health Science Program

Director, Environmental Health Science Program

Editor-in-Chief, Environmental Science & Technology Letters

EDUCATION

Ph.D., Environmental Science, University of North Texas, Denton, TX

M.S., Biological Sciences, University of Mississippi, Oxford, MS

B.S., Biological Sciences, University of Mississippi, Oxford, MS

EMPLOYMENT / APPOINTMENTS

02/2020 - present

Editor in Chief, Environmental Science & Technology Letters (American Chemical Society Publications)

06/2021 -01/2022

Interim Editor in Chief, Environmental Science & Technology (American Chemical Society Publications)

2014 – 01/2020

Editor in Chief, Environmental Management (Springer Nature).

2017 – present

Distinguished Professor of Environmental Science and Public Health, Baylor University

2011 – 2017

Professor of Environmental Science and Biomedical Studies, Baylor University

2009 – present

Core Faculty Member, Masters of Public Health, Department of Public Health, Baylor University

2008 – present

Founding Director, Environmental Health Science Program, Baylor University

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Research Interests

Water Quality; Water Reuse;
Environmental, Aquatic and Eco-
Toxicology; Comparative
Pharmacology and Toxicology
Risk and Hazard Assessment;
Environmental and Green
Chemistry;
Environmental Public Health;
Harmful Algal Blooms;
Urbanization.

More information

