NEW MEMBER SPOTLIGHT

Michael Schmidt

M.Sc. Candidate; Teaching Assistant, Trent University

I am currently in the first year of my master's degree in the Environmental and Life Sciences Graduate Program at Trent University. I am also a member of the Quinte Farm Research and Stewardship Collaborative. My research is currently focused on nitrate contamination in groundwater. I am curious about how interactions between shallow groundwater and surface water impact nitrate levels. I also want to better understand nitrate lag time in groundwater. My thesis examines nitrates in groundwater in Lake Ontario watersheds. The first chapter explores existing datasets and the relationships between nitrates and other parameters (e.g., land use/land cover data, overburden, groundwater geochemistry). I presented these findings in a poster during the IAGLR 2021 conference. My second chapter will seek to better characterize groundwater nitrate contamination in areas draining into the Bay of Quinte. I hope to publish the results of my work in the Journal of Great Lakes Research. Moreover, I want to continue a career of research focused on groundwater and biogeochemistry within the Laurentian Great Lakes region. Next step: Ph.D.



Luwen Wan

Graduate Research Assistant, College of Natural Science, Michigan State University



About my Work

I am a Ph.D. candidate in the Department of Earth and Environmental Sciences at Michigan State University. In our collaborative Hydrogeology Lab, I am working closely with Dr. David Hyndman and Dr. Anthony Kendall to quantify the nitrogen and phosphorus delivered to the U.S. Great Lakes coastline with a Spatially Explicit Nutrient Source Estimates and Flux, aka SENSEflux, model. This model will also be used to estimate the contributions of different nutrient sources and pathways. This work is funded through an interdisciplinary NASA project that aims to better understand historical and present-day drivers of change in Great Lakes coastal wetlands. I am excited to be involved in this project and am enjoying working with researchers from multiple universities – the Great Lakes Wetland Ecohydrology Science Team. In addition to this project, my dissertation will use remotely sensed data and machine learning approaches to detect tile drainage, which is a commonly neglected but important nutrient pathway to the Great Lakes. With this data product, I will be able to simulate the effects of tile drainage on the fate of nutrients and transport across the U.S. Midwest region.

Why IAGLR?

I joined IAGLR mainly because my research is focusing on the Great Lakes Basin. Early this year, I had the opportunity to give an oral presentation at the State of Lake Ontario Conference (virtually) hosted by IAGLR. After the pandemic, I would like to engage in more IAGLR events, interact with other scholars, and connect with scientists, managers, and stakeholders who share an interest in Great Lakes research and communication. I also hope my research can enrich the IAGLR science community and benefit Great Lakes watershed management.

IAGLR APPRECIATION AWARDS

During the Annual Business Meeting on May 26, IAGLR recognized the following indiviuals for their service to the association:

The **IAGLR Board of Directors Appreciation Award** went to **JENNIFER BOEHME**, International Joint Commission, **MARY GINNEBAUGH**, retired from Wisconsin Department of Natural Resources, **JESSICA IVES**, University of Windsor, **SARAH LAROCQUE**, University of Windsor, **RICHARD OGUTU-OHWAYO**, African Lakes Network, **SCOTT MCNAUGHT**, Central Michigan University, and **PAUL SIBLEY**, University of Guelph. They have faithfully served on the IAGLR board and completed their terms of service.

The **IAGLR Committee Chair Appreciation Award** went to **SARAH LAROCQUE**, University of Windsor, and **FRANCINE MCCARTHY**, Brock University, outgoing Awards Committee co-chairs; **RICHARD OGUTU-OHWAYO**, outgoing International Committee chair, and **PAUL SIBLEY**, outgoing chair of the Conference and Nominations committees.

The **IAGLR Conference Appreciation Award** went to IAGLR 2021 Conference Site Chair **NOEL URBAN** and IAGLR 2021 Program Co-Chairs **JUDITH PERLINGER** and **GORDON PATERSON**, all of Michgan Technological University.

The **JGLR Outgoing Associate Editor Appreciation Award** went to **DAVID (BO) BUNNELL**, US Geological Survey, **LEE GRAPENTINE**, Environment and Climate Change Canada, and J**OE MAKAREWICZ**, SUNY Brockport.