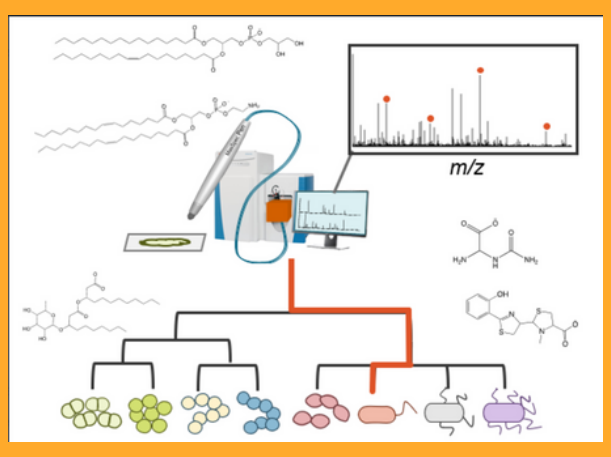
FRIDAY, SEPT 26
3:15 PM
RNS 310

CHEMISTRY SEMINAR

Dr. Sydney Povilaitis ‘18
Hamline University

Membrane Chemical Diversity: Potential for Bacterial Diagnostics and Understanding Yeast Response to Environmental Stress



Mass spectrometry is a versatile technique capable of obtaining rich molecular profiles from biological samples. These molecular profiles can be used for both diagnostics and to probe interesting questions for fundamental scientific research. This seminar will discuss two mass spectrometry methods: a method for identification of bacteria based on lipid and metabolite molecular profilesand preliminary work investigating the lipid composition of yeast membranes under environmental stress.

About the Speaker

Dr. Sydney Povilaitis (’18) graduated from St. Olaf College with a BA in Chemistry and completed her doctorate at the University of Texas at Austin where she developed technologies for bacterial identification and investigated peptide-membrane interactions under the guidance of Professors Livia S. Eberlin and Lauren J. Webb. In 2023, she joined the Chemistry Department at Hamline University as an assistant professor of analytical chemistry. Her current research interests include developing mass spectrometry methods for measuring the lipidomic adaptation of yeast to environmental stress and the identification of body fluids for forensic applications.