## **Automated Synthesis: Towards a Decentralized Synthesis Network**

## Seminar

Tuesday

Oct. 15 2024

3:00 - 4:00 p.m.

Beaupre Center, Room 105

## **Kerry Gilmore**

Department of Chemistry, University of Connecticut With an ever-increasing mastery over the methods of bond formation and functional group transformation, what is the next stage of development for organic chemists? In this talk, we will discuss how the role of a chemist is shifting away from the instrument that performs the reactions to what we chemists are trained for – analysis, constructing understanding, and extrapolating from both an experimental and conceptual level. The two key tools being integrated that will drive this shift are automation and machine learning. We will discuss how automated instrumentation – and active learning platforms - can and should be developed, aimed at complementarity and connectedness as opposed to "one ring to rule them all". Finally, we'll touch on how these tools can be made accessible and integrated to achieve rapid development in a site-independent manner.