

RESEARCH SEMINAR SERIES

# Advancing Antibiotic Discovery with Machine Learning: Challenges, Innovations, and Insights

---

January 29, 2025 | 12:00 pm – 12:50 pm

050 Apotex Centre, Bannatyne Campus



## Dr. Rebecca Davis

Professor

Department of Chemistry

University of Manitoba

**Dr. Rebecca Davis** is a Professor at the University of Manitoba, specializing in Organic and Computational Chemistry. She holds a B.Sc. in Chemistry from Washington State University and a Ph.D. in Organic Chemistry from the University of California, Davis. After a postdoctoral fellowship at Aarhus University, Denmark, she joined the University of Manitoba. Her interdisciplinary research focuses on antibiotic design, molecular data libraries for machine learning, and novel catalytic processes for small molecule synthesis. Dr. Davis has secured funding from various national, network, and private sources to support her work.

She has contributed to the scientific community through leadership roles, including serving on the National Digital Research Alliance and the NSERC–Chemistry Liaison Committee. Dr. Davis advocates for women and minorities in science and co-founded the Working for Inclusivity in Chemical Sciences group. Her achievements include being recognized as one of Canada's Top 100 Most Powerful Women in 2023 and delivering a TEDx talk on quantum chemistry.