

# Biology Graduate Symposium 2022

## Schedule of Speakers

Time	April 28, 2022	
9:00	<b>Opening &amp; Welcome – Dr. Moira Glerum &amp; Rachel Beaver</b>	
	<b>Session 1</b>	<b>Session 2</b>
	<b>Chair: Alexander Douglas</b>	<b>Chair: Alex Umbach</b>
9:30	<b>Julia Sunga</b> The role of social preferences in the organization of a gregarious mammal colony	<b>Yifan Yang</b> A resampling method for RNA-seq analysis
9:45	<b>Danny McIsaac</b> Local and landscape drivers of frog communities in urban stormwater management facilities	<b>Nilanth Yogadasan</b> A machine learning approach identifies plastomic predictors of C4 photosynthesis in PACMAD grasses
10:00	<b>Gwynne Domashinski</b> Fatty adaption: Patterns in energy storage in swarming little brown bats a decade after white-nose exposure	<b>Harold Hodgins</b> Discovery of ancient neurotoxins
10:15	<b>Sean McLay</b> Indications of benthic macroinvertebrate assemblage recovery following wastewater treatment upgrades	<b>Sean Newbury</b> Transactivation of PDGFR $\alpha$
10:30		<b>Veronica Viljakainen</b> Elucidating microbial plastic degrading enzymes (PDEs) using a metagenomics-driven approach
10:45	<b>Break</b>	
11:00	<b>Keynote Speakers – Dr. Ashley Ross and Dr. Matthew McLeod</b>	
12:00	<b>Lunch Break</b>	

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	Session 3	Session 4
	Chair: Rachel McNamee	Chair: Jersey Fontz
1:00	<p><b>Patrick Breadner</b> The partitioning behaviour of SARS-CoV-2 in wastewater</p>	<p><b>Britney Firth</b> Seasonal and environmental effects on upper thermal limits and oxygen tolerances of Eastern Sand Darter (<i>Ammocrypta pellucida</i>)</p>
1:15	<p><b>Brian Youden</b> Multifunctional gold-liposomes as an all-in-one platform for radiotherapy</p>	<p><b>Xiaoqing Dang</b> Development of diagnostic strategies for salmonidae diseases based on <i>Oncorhynchus mykiss</i> culture Freshwater samples</p>
1:30	<p><b>Jessica Luc</b> Profiling the host transcriptome response to SARS-CoV-2 and its intrahost genetic diversity</p>	<p><b>Rachel Dawe</b> Impacts of wastewater treatment plant effluent and pharmaceutical exposure on innate cytokine expression of darters (<i>Etheostoma spp.</i>) in the Grand River watershed</p>
1:45	<p><b>Emily Baker</b> Investigating the role of the transcription factor hindsight in a notch-induced tumour model</p>	<p><b>Mehdi Moslemi Aqdam</b> Understanding among-lake variability of fish mercury concentrations in the Canadian subarctic</p>
2:00	<p><b>Rohini Prakash</b> Construction and optimization of a sDNA vector production system for gene therapy platform</p>	<p><b>Marissa Zago</b> Effects of invasive <i>Phragmites australis</i> management on avian species diversity in the coastal wetlands of Long Point, Ontario</p>
2:15	<p><b>Rebecca Quinn</b> Characterization of the mechanistic roles of Rif1-Glc7 in DNA double-strand break</p>	<p><b>Madeleine Prater</b> Arctic marine food web structure</p>
2:30	<b>Break</b>	

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	<b>Session 5</b>	<b>Session 6</b>
	<b>Chair: Michelle McKnight</b>	<b>Chair: Spencer Weinstein</b>
<b>2:45</b>	<p><b>Adrian Van Dyk</b> The Interaction of the <i>Escherichia coli</i> CP-Lyase and shikimate pathways with glyphosate</p>	<p><b>Hadeel Abed</b> Characterizing the seasonal presence of cyanobacterial toxin &amp; nitrogen-fixing genes in an oligotrophic watershed using metagenomic analyses</p>
<b>3:00</b>	<p><b>Nicole Fraser</b> Crystal structure of a fungal polyglycine hydrolase using a RoseTTAFold model</p>	<p><b>Hannah Thibault</b> Reconstructing past variation in lake water balances to identify the role of a shifting hydroclimate at watersheds upstream of the drying Peace-Athabasca Delta</p>
<b>3:15</b>	<p><b>Cody Collis</b> Viral communities in freshwater environments investigated through metagenomic analysis of Big Turkey Lake, Ontario</p>	<p><b>Lauryn Pinks</b> Light and nutrient availability interactively mediate heterotrophic carbon processing in stream biofilms through algal priming: insights from artificial and natural streams</p>
<b>3:30</b>	<p><b>Nikhil George</b> Virus-host interactions in a municipal landfill include non-specific viruses, hyper-targeted viral populations, and interviral conflicts</p>	<p><b>Lauren Banks</b> Does scale matter in determining the role of groundwater input as a driver of ecological function and structure in a headwater stream network?</p>
<b>3:45</b>	<b>Closing Remarks – Rachel Beaver &amp; Dr. Moira Glerum</b>	
<b>5:00</b>	<b>End of Symposium – Thank you</b>	