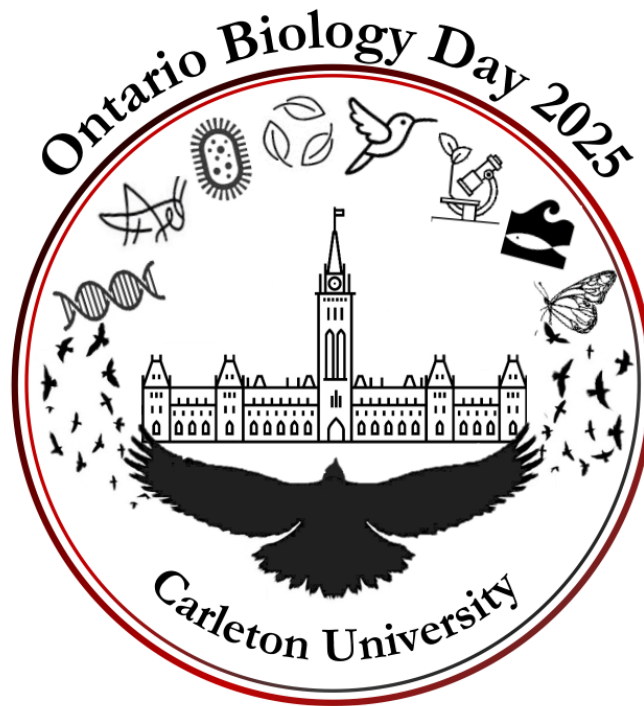


Ontario Biology Day

37th Annual Conference



Carleton University

March 22-23, 2025



We would like to acknowledge the Algonquin nation whose traditional and unceded territory we are gathered upon today.

Ontario Biology Day – 2025 – Sponsors

Thank you!



Department of Biology

Faculty of Science



Welcome to Ontario Biology Day – 2025

On behalf of the Department of Biology at Carleton University, we would like to welcome you to the 37th Annual Ontario Biology Day undergraduate student research conference. This annual conference brings together students from across Ontario to present their research in the biological sciences, from the level of molecules and the cell, to ecology, evolution and behaviour. This year, we are delighted to welcome more than 200 delegates from 15 universities to our province. The quality and diversity of research completed by you, our next generation of scientists and educators, is truly remarkable and we would like to congratulate you on your achievement. We wish you success in your presentations and look forward to this weekend of science and socializing.

Our conference this year will be opened with talks by Dr. Thomas Kazmirchuk and Dr. Bahram Samanfar. Our conference banquet will be held on campus at Oliver's Pub located in Nideyinàn (formerly the University Centre) and will feature a talk by science journalist and journalism professor at Carleton, Dr. Sarah Everts. Following our two days of talks and posters, our conference will close with talks by Dr. Emily Curren and Dr. Eugene Fletcher. We encourage you to explore their biographies in our program booklet.

We would like to acknowledge the support of all persons, institutions and organizations that have contributed to making this conference possible this year. The Carleton Undergraduate Biology Society (CUBS), numerous graduate students, post-doctoral fellows, research associates, staff and faculty members from Biology and Biochemistry and other departments at Carleton have all dedicated their time to prepare for this conference. We are also grateful for our talk and poster judges attending our conference from universities across Ontario. The generous support from our sponsors and the Faculty of Science at Carleton has allowed us to welcome so many of you to our campus.

This conference is a celebration of your hard work, and we look forward to learning about your ideas and research discoveries.

Best wishes for a great conference!

The 2025 Ontario Biology Day Organizing Committee –

Jeff Dawson
Haiyun Bo
Roslyn Dakin
Thomas Kazmirchuk
Heath MacMillan
Iain McKinnell
Tim Xing

Our Conference Speakers



Dr. Thomas Kazmirchuk

Designing the Future of Medicine

Dr. Kazmirchuk is currently a MITACs post-doctoral fellow in the department of Biology at Carleton University. He received his Ph.D in Cellular and Molecular Biology at Concordia University in Montreal, QC. He is also an alumnus of Carleton, having completed both his B.Sc and M.Sc in Carleton Biology. His current award-winning research involves the intelligent design of peptides that act as both therapeutics and diagnostics for rare bleeding disorders. He loves to teach and mentor all stages of students, from undergraduate to doctoral. Through his international academic and industrial collaborations, Tom is actively laying the foundation for the future of medicine. In his off time, he loves being out in nature taking photos of wildlife.



Dr. Bahram Samanfar

Functional Genomics of Soybean (I am not a breeder, but I love working with breeders)

Dr. Samanfar is a Research Scientist at AAFC, Ottawa-RDC and an Adjunct Professor at Department of Biology, Carleton University. He is a molecular geneticist and applied genomicist with expertise in allele-specific molecular marker developments, recombination mapping, marker-assisted selection (molecular breeding), functional genomics, transcriptome-wide (RNA-seq) approaches, computational biology and bioinformatics, particularly in relation to Soybean. Dr. Samanfar received his Ph.D. from Carleton University and holds an M.Sc. degree from Paul Sabatier University (France) and M.Sc. and B.Sc. degrees from University of Tehran (Iran).

<https://bahramsamanfar.wixsite.com/samanfarlab/lab-members>



Sarah Everts

Sarah Everts is an award-winning science journalist and journalism professor at Carleton University based in Ottawa. Her work has appeared in Scientific American, New Scientist, Smithsonian, Guardian, Time, Chemical & Engineering News and others. She is also the author of the book, The Joy of Sweat: The Strange Science of Perspiration, which the New York Times called “crisp and lively... an entertaining and illuminating guide to the necessity and virtues of perspiration.”



Dr. Emily Curren

Understanding coastal pollution in the 21st Century: insights from the tropics

Emily Curren is a postdoctoral research scientist from the National University of Singapore. She works on coastal marine pollution, specifically harmful algal blooms and microplastics. Emily profiles the diversity and distribution of tropical marine cyanobacteria, with focus on characterizing toxic and novel species. She also studies the plastisphere and evaluates the impact of microplastic pollution on human health and food security. Emily is also a committee member of the IOC-WESTPAC Harmful Algal Blooms work group and has ongoing international collaborations with partner universities in Japan and Malaysia.



Dr. Eugene Fletcher

Solving big problems with a tiny organism

Dr. Eugene Fletcher is an Assistant Professor at the Department of Biology, Carleton University. Prior to joining Carleton in the summer of 2023, he was the Research and Development (R&D) Lead at Escarpment Laboratories, a yeast company based in Guelph, Ontario. At Escarpment Labs, he spearheaded an active research program to develop yeast strains for craft brewers in Canada and abroad.

Eugene got his PhD in Cell Biology from the University of Edinburgh, Scotland. After completing his PhD in 2014, he pursued postdoctoral training at Chalmers University of Technology in Gothenburg (Sweden), Technical University of Denmark, and the University of Ottawa.

His research program at Carleton focuses on developing better yeasts for industry. In addition to his academic and industry experience, Eugene holds a 2023 US patent and is passionate about moving ideas from the lab bench to market.

Schedule – at a glance

Day	Time	What's Happening
Saturday March 22	10:00 AM - 12:00 PM	Registration – Richcraft Hall, 3 rd Floor
	12:00 PM – 1:00 PM	Welcome Message - Richcraft Hall RM 2200 Talk by Dr. Thomas Kazmirchuk Talk by Dr. Bahram Samanfar
	1:15 PM - 2:15 PM	Concurrent Sessions
	2:15 PM – 2:30 PM	Coffee Break
	2:30 PM – 3:15 PM	Concurrent Sessions
	3:15 PM – 3:30 PM	Coffee Break
	3:30 PM – 5:00 PM	Concurrent Sessions
	5:00 PM – 7:00 PM	Poster Session – Nideyinàn (formerly the University Centre) – 4 th Floor Atrium
	6:00 PM – 9:00 PM c. 6:30 PM c. 7:00 PM c. 7:30 PM	Conference Banquet - Ollie's Pub in Nideyinàn Building (formerly the University Centre) The banquet venue will open at 6:00. Light appetizers will be available with our meals being served soon after. Talk by Sarah Everts to follow our meal
Sunday March 23	8:00 AM – 9:00 AM	Coffee Break
	9:00 AM – 10:15 AM	Concurrent Sessions
	10:15 AM – 10:30 AM	Coffee Break
	10:30 AM – 11:45 AM	Concurrent Sessions
	12:00 PM- 1:30 PM	Awards Presentation & Closing Remarks Richcraft Hall, RM 2200 Talk by Dr. Emily Curren Talk by Dr. Eugene Fletcher Lunches will be available
	12:30 PM-1:00 PM	Business Meeting (Optional)

Concurrent Talk Sessions

Richcraft Hall (3rd Floor)

Ontario Biology Day 2025

Saturday 1:15 - 2:15 PM

Start time	Room 3224 Urban Ecology - I	Room 3202 Health - I	Room 3220 Agriculture and Forestry	Room 3228 Microbiology - I	Room 3201 Animal Ecology - I
1:15 pm	59 Callia Collard: Effects of anthropogenic noise in Paris on the European Robin	5 Basak Korkmaz: Studying the role of Ubiquitination in Clathrin-Mediated Endocytosis During Replicative Aging	12 Isabelle Venzon: Impact of EcoWool on crop quality	24 Nour Elshobary: Investigating and disrupting antibiotic repression by the global regulator wbla in <i>Streptomyces venezuelae</i>	22 Emily Laver-Shareski: The effects of warming on predator-prey interactions using microarthropods as a model
1:30 pm	26 Ishaan Bhathal: Examining changes in Tree Swallow (<i>Tachycineta bicolor</i>) gut microbiome as a result of pollution across Southern Ontario	37 Amber Austin: AMPK is vital for the regulation of skeletal muscle fibrosis in cancer cachexia	13 Angel Lainscek: The influence of position and colour of sticky traps on leafhopper detection in organic vineyards	20 Intesar Shah: The impact of heat and hydroxyurea on reactive oxygen species level in <i>Schizosaccharomyces pombe</i>	1 Gabby Kohut: Perceived human presence alters coyote behaviour, reducing activity and foraging
1:45 pm	58 Madison Bygrove: Impacts of human-made noise on the presence and song structure of Eurasian blackcaps (<i>Sylvia atricapilla</i>)	44 Anneliese Schall: Effects of chronic AMPK activation on age-associated muscle loss	47 Kiersten DeViller: Caught in the act: Assessing lure type effects on Japanese beetle (<i>Popillia japonica</i>) trap capture	97 Yamamah Al-Jumaili: Investigating gene dysregulations associated with antifungal resistance in <i>Candida</i> strains from Northern Ontario	18 Kennedy Jamieson: Do elephants in protected areas know that they are protected? An experimental analysis of antipredator behaviour in African Elephants
2:00 pm	64 Kristine Kamensky: The effects of anthropogenic noise on the song structure and habitat occupancy of the Eurasian Wren (<i>Troglodytes troglodytes</i>)	92 Claire McInroy: Inflammation as a driver of age-related DNA methylation	4 Niamh Moreton: Temporal dynamics of mountain pine beetle (<i>Dendroctonus ponderosae</i>) population structure over an outbreak	15 Ummuhan Canatan: Mother-daughter protein asymmetry during budding yeast replicative aging	98 Lorriana Broglio: Forensically important insects in forests of Greater Sudbury: Investigating implications for forensic entomology

Break 2:15-2:30 PM

Saturday 2:30 - 3:15 PM

Start time	Room 3224 Urban Ecology - II	Room 3220 Plant Biology - I	Room 3201 Animal Ecology - II	Room 3228 Microbiology - II	Room 3202 Health - II	Room 3112 Animal Behaviour - I
2:30 pm	38 Ruby Tsz Ying Yip: Using citizen science to study plant invasions in Churchill, Manitoba	39 Maria Proskurina: Drought stress detection in conifers: linking vegetation indices, pigment changes, and scales	63 Lama Farah: Assessing the impact of environmental noise on auditory hair cell density in bluegill sunfish (<i>Lepomis macrochirus</i>)	10 Sofya Rudovskaya: Characterization of queE-dependent filamentation in <i>Escherichia coli</i> and <i>Yersinia pseudotuberculosis</i>	91 Olivia Norman: Investigating the role of CHRFAM7A in the immune response of human macrophages	61 Rana Elkafarneh: The relationship between social calls and flight behaviours in big brown bats
2:45 pm	71 Amesh Wickramasinghe: The heartbeat of river ecosystems: exploring indicators of ecological health in urban Windsor-Essex rivers	52 Spenser Morouney: Seeds of change: Impacts of permafrost disturbance on tundra shrub reproduction	65 Zain Khan: Biotic and abiotic influences on fish diversity and distribution in the St. Lawrence river using environmental DNA	6 George Raymond Thomas: Host-virus-viophage dynamics: virophage-mediated protection of freshwater haptophyte algae	84 Josée McDavid: Examining the impact of colitis on intestinal inflammation and L-cell physiology in mice	62 Natalie Emerick: What's all the buzz about: Habitat use overlap in bats and aerial insectivore birds
3:00 pm	17 Britt Petersen: Shining a light on the shadows: Examining the cascading effects of pollinator gardens on nocturnal pollinators and their predators	105 Austin McGonegal: Does size matter? Effect of neighbor functional traits on flowering	56 Eryn Wolfe: Testing the effects of hypolimnetic aeration in a polluted northern lake	69 Genie Nehruji Effect of QACA/B efflux pumps on povidone-iodine resistance in <i>Staphylococcus epidermidis</i>	41 Ahmed Khalil: Bacterial translocation and immune cell interactions in a mouse restraint stress model	68 Tamjeed Nawaz: Continuous or bimodal: Investigating variability in moth evasive responses to bat predator cues

Break 3:15-3:30 PM

Saturday 3:30 - 5:00 PM

Start time	Room 3112 Animal Behaviour - II	Room 3220 Plant Biology - II	Room 3228 Infection and Immunity	Room 3201 Animal Ecology - III	Room 3202 Health - III	Room 3224 Late Entries
3:30 pm	70 Chris Sankaral: Effects of handling stress on post-swim stress physiology in juvenile lake sturgeon (<i>Acipenser fulvescens</i>)	95 Kayla Twilley: Influence of nutrient availability on senescence in wetland monocot species with differing nutrient economies	27 Rosa Adams: Cuticular cues involved in locust infection by the insect specialist <i>Metarhizium</i>	79 Hazel Barr: Corridor ecology: animal activity near shorelines in the Lake Laurentian Conservation Area (LLCA), Sudbury, Ontario	94 Emma Mageau: Investigating the role of prostaglandins and isoprostanes mediated by dysregulation of inflammatory enzyme PTGS2 in radiation resistance of triple negative breast cancer cells	60 Michael Anthony Douaihy White shark scarring in Australian waters: Wound classification, distribution and Accumulation rates.
3:45 pm	14 Margaret Kitney: The effect of sex on the thermoregulatory behaviour of the guppy (<i>Poecilia reticulata</i>)	96 Mackenzie Hobbs: Elemental composition of Ostrich fern (<i>Matteuccia struthiopteris</i>) fiddleheads in Sudbury-Manitoulin Districts, Ontario	11 Andrea Fernandes: Horizontal transmission of modified Negevirus via oral ingestion of spiked sugar meal	30 Madelaine Picard: Native intertidal biodiversity plays a role in resisting the establishment of the invasive European green crab, <i>Carcinus maenas</i>	74 Olivia Wahby: Circadian regulation of intestinal homeostasis: how period gene mutations affect stem cell differentiation and turnover	109 Sharifa Lomiyey Effects of PIKfyve lipid kinase inhibition on endoplasmic reticulum in the context of ER-remodeling
4:00 pm	53 Maryem Naimee: Wavelengths of influence: Blue light and its role in memory and mate-choice in fruit flies	90 Sirui Tong: Rhizosphere effects on enzyme activities in red pine (<i>Pinus resinosa</i>) stands	83 Sabrina Lepage: Patterns of parasitism in urban rodents and effects of ectoparasite diversity on body condition	80 Shannon Crockford: Forest succession 2003-2024 and animal activity in Lake Laurentian Conservation Area in Sudbury, Ontario, Canada	76 Akudo Eze-Onuorah: Investigating the involvement of kaiso in chemotherapy drug sensitivity of triple-negative breast cancer cell lines using knock out cells	
4:15 pm	49 Avneet Kahlon: The role of male body size and eye color in female harassment dynamics in <i>Drosophila melanogaster</i>	104 Joel Lucenay: How post-successional understories, their mycorrhizal associations, and their connection to coniferous/deciduous-dominated stands change with rising temperatures	40 Christina Bethune: Effects of TLR4 genetic diversity on song sparrow mate choice and survivorship	66 Renil Kooplicat: Gene transcription profile response to hybrid breakdown and temperature stress in chinook salmon (<i>Oncorhynchus tshawytscha</i>)	2 Maira Chaudhry: Assessment of frailty index in 5xfad mice during disease progression: a neurological perspective	
4:30 pm	103 Kristian Gapp: Individual distinction and microgeographic variation in Black -Throated Green Warbler song	3 Alyssa McNally: The impact of climate change on temperate broadleaf forests in the Niagara region	19 Harnoor Gahir: The role of uropathogenic <i>Escherichia coli</i> filamentation on resistance to clinically relevant antibiotics used to treat urinary tract infections	57 Kyle Banwell: eDNA & scDNA as a tool for characterizing piscivore feeding ecology in lake St. Clair	77 Kyle Kim: Kaiso-depletion regulates androgen receptor downstream target genes associated with increased cell proliferation in triple-negative breast cancer	
4:45 pm	100 Ruth Ogiri: White-throated Sparrow song length variation across singing contexts			67 Reese Miller: Exploring the biases of baited remote underwater videos for aquatic ecology	16 Kevin Kattathara: Studying the effects of cellular aging on clathrin-mediated endocytosis in human cells	

Poster Presentations and Banquet 5:00 -9:00 PM

Sunday 9:00 - 10:15 AM

Start time	Room 3224 Community and Landscape Ecology	Room 3112 Genotypes to Phenotypes	Room 3202 Neuromuscular Biology	Room 3228 Animal Cell Biology
9:00 am	46 Erin Ricaloglu: Balancing generalist and specialist interactions for biodiversity conservation in fragmented landscapes	89 Owen Allard: Maternal genetic background influence on phenotypic variation in <i>Drosophila melanogaster</i>	9 Adam Sutoski: Evaluating the therapeutic potential of MK-8722 in enhancing skeletal muscle regeneration in Duchenne muscular dystrophy	21 Dorcas Adewumi: Can the PreSens OxoDish be used to calculate oxygen consumption rate (OCR) in cell culture?
9:15 am	45 Alyssa Tinella: Taking the permafrost's pulse: Plant community responses to permafrost thaw	7 Maha Jahangir: Modifying antithetic integral feedback (AIF) based on theoretical predictions for enhanced regulation and noise suppression in gene expression	43 Willamina MacDonald: Identification of monoaminergic and cholinergic pathways in cutaneous sensory cells of developing zebrafish	81 Joshua Freimanis: The role of reactive oxygen species in chemotherapy-dependent ribosomal RNA degradation and death in A2780 ovarian tumour cells
9:30 am	85 Kate Pappin: Recovery trajectories of boreal lake zooplankton communities in the face of multiple stressors	75 Holly Stibbe: Potential regulation of the Rac exchange factor PREX1 by the transcription factor Kaiso	42 Guoria Sun: Investigating the role of ARPC4 in human neurodevelopment disorders	25 Grant Booth: Generation of a 5-channel fluorescent imaging technique through the insertion of a long stokes shift fluorescent protein allowing for the complete imaging of the notch transcriptional activation complex
9:45 am	93 Decklyn Brodersen: Tardigrade diversity and community composition of an Ontarian forest	107 Taha Cheema & Jaskarn Bola: Computational assessment comparing the standard genetic code's ability to minimize error across 54 amino acid properties with an optimized genetic code	8 Erlin Espina: Pharmacological AMPK activation influences skeletal muscle catabolism in cancer cachexia	48 Logan Dammer: Refining cell culture test methods for environmental protection
10:00 am	106 David Storms: The role of tree community functional diversity and water legacy in the fruiting of soil macrofungi		108 Ricky Hong Neuromuscular junction morphology is modestly influenced through AMPK activation in aged mice	34 Deandra Dixon: Development of sex-specific cell culture media

Break 10:15-10:30 AM

Sunday 10:30 - 11:45 AM

Start time	Room 3220 Plant and Fungal Cell Biology	Room 3201 Development and Morphology	Room 3202 Stress	Room 3228 Toxicology and Immunology
10:30 am	31 Shahrzad Rahmani: The effect of autophagy on circadian rhythmicity via target of rapamycin (TOR) pathway in <i>Neurospora crassa</i>	32 Alexandra Weber: A functionally jawless mutant of the zebrafish <i>Danio rerio</i>	28 Robin Brown: Muscle adaptation to high altitude in the world's highest dwelling mammal, <i>Phyllotis vaccarum</i>	86 Ellis Albrecht: Chloride pollution impacts in Boreal lakes: An investigation of physicochemical interactions and biological responses using zooplankton communities as bioindicators
10:45 am	33 Amiel Terrenal: Cycloheximide modulates Target of Rapamycin (TOR) pathway activation in <i>Neurospora crassa</i>	82 Matteo Vocaturo: More on bite force and encephalization in the Family Canidae and in wolverines (<i>Gulo gulo</i>)	23 Kaylyn Montoya: The effects of skeletal muscle-specific AMPK on exercise-induced mitochondrial remodelling	29 Iman Nemar: Impacts of microplastic fiber pollution on benthic invertebrates: biological and environmental implications
11:00 am	101 Amna Arif: Do shade and <i>Vinca minor</i> affect mycorrhizal fungal abundance	87 Naomi Naokwegijig: Meso-carnivores: investigating the diets of the bobcat (<i>Felis rufus</i>) and eastern wolf (<i>Canis lupus Lycaon</i>)	35 Sally Adil: Acute oxygen-dependent epigenetic regulation in rainbow trout liver: Is H3K4me3 linked to induced metabolic genes?	50 Ravleen Kaur: Chronic sublethal neodymium toxicity to Fathead Minnows (<i>Pimephales promelas</i>)
11:15 am	102 Kumar Pokharel: Lipid polyester profiling in stigmas of tobacco (<i>Nicotiana tabacum</i>) mutants	88 Miah Wildschut: The effects of urbanization on the morphology of American toads (<i>Anaxyrus americanus</i>)	51 Mustajab Khalid: The effects of venlafaxine and hypoxia on rainbow trout	78 Cameron Lefebvre: Gastrointestinal parasite influence on glucocorticoids in wild deer mice (<i>Peromyscus maniculatus</i>)
11:30 am	99 Diya Prajapati: Isolation and quantification of lipid polyesters classes in developing stigmas of <i>Nicotiana tabacum</i>	36 Lucy van Haaften: Examining the cause and patterns of ultraviolet-induced fluorescence in northern and southern flying squirrels in Ontario, Canada	54 Najiba Soudi: The Role of Claudin-14 in mediating the protective effects of water calcium hardness in fish exposed to high pH water	55 Shakiraa Suntharalingam: Exploring phosphorus concentrations in <i>Tigriopus californicus</i> saltwater habitats and their prolonged effects

Lunch, Featured Talks, and Presentation of Awards 12:00-1:30 PM

Poster Session

Nideyinàn Atrium (4th floor) – 5:00 PM to 7:00 PM

Ontario Biology Day 2025

#	Presenter	Poster Title
30	Celeste Abraham	Exploring the efficacy of probiotic treatments in reducing <i>Pseudogymnoascus destructans</i> concentrations in bats affected by white-nose syndrome
57	Hanin Al-Ezzi	A genetic approach to understanding phage-rhizobium interactions
11	Sophia Anazia	Regulation of gsk3 β in nutrient starvation and cellular differentiation via clathrin-mediated lysosomal pathways
1	Emily Archambeault	Using novel physiological indicators to detect investment in and timing of breeding in an arctic-breeding seaduck
68	Washma Arshad	The behavioural effects of artificial light at night in birds: a meta analysis
6	Daniel Bekele	Investigating the role of UGD in <i>Shigella flexneri</i> Polymyxin B resistance through PmrAB-dependent regulatory system
65	Roxanne Bergeron	Effects of soil biota on Ontario tree species
46	Saniya Bhalla	Identifying equivalent genes across the <i>E. coli</i> pangenome
62	Alicia Bruni	Phenotypic variation in pollen Germination and Tube Growth in Stigma Lipid Mutants of Tobacco (<i>Nicotiana tabacum</i>)
59	Emily Chacchione	Microbially-mediated impacts of contaminants present in reclaimed water and biosolids on green pea growth
45	Qing Gui Chung	Investigating a dual-fluorescent mCHERRY-GFP system for tracking salmonella viability during phagosomal maturation
19	Anastasia Cornea	Concentration dependent effects of benzalkoniumchlorides on freshwater benthic invertebrate communities
4	Eric Deaconu	Spatial gene expression patterns of digestive cysteine proteases in <i>tetranychus urticae</i>
44	Connie Di Raimo	Investigating the role of PIKfyve inhibition on lysosome-mitochondria co-migration
51	Alyssa Dupuis	Lights, fish, action: Investigating the effects of light settings on attracting different fish species and sizes
55	Zahava Dworkin	Exploring the mechanisms of <i>Rhizobium leguminosarum</i> biofilm formation upon exposure to bacteriophage: Agricultural applications
40	Abby Eaton	Estimating parasympathetic nervous system involvement in the seabird food-stress response
47	Shahmeen Farooqi	Investigating the role of chromatin remodelling complex component actin-related protein 6 (ARP6) in temperature regulated plant immunity in <i>Arabidopsis</i>

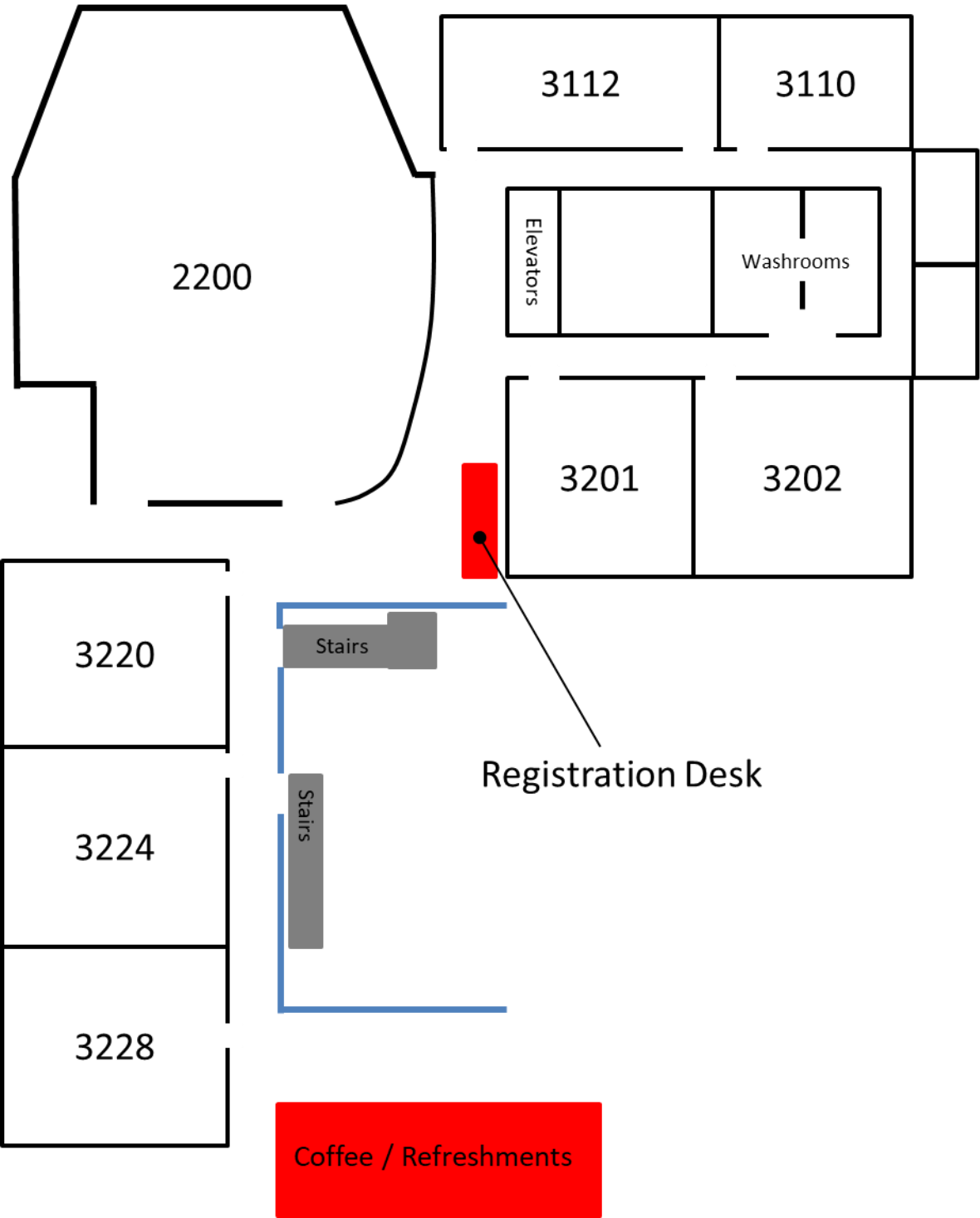
23	Raina Fatima	The role of SHP-1 in macrophage phagocytic capacity during FcγRIIB-mediated inhibitory signalling
61	Kendra Favaro	Effects of ionic salts on the physiological and behavioural olfactory responses of aquatic invertebrates
37	Chilyn Fenton-Stickle	Two-eyed seeing in the arctic: Orca-narwhal interactions and threats to Inuit traditions
8	Alizée Fieffé-Bédard	The effect of TNF on density and morphology of microglia in the CA1 region of the brain
41	Nicolas Fragoso Wandurraga	Characterizing the developmental birth windows of PM neurons
66	Haiely Frasier	Does seed predation by granivores in an old-field community differ among plant species?
28	Priscilla Fung	Characterizing the function of the AKNA gene using deletion and knock-in CRISPR methods in the zebrafish
24	Simer Gill	The effects of exercise acclimation treatment on estrogen-related receptor expression and mediation of tumour progression in zebrafish (<i>Danio rerio</i>)
70	Lucy van Haaften	An analysis of glaucous gull (<i>Larus hyperboreus</i>) diet from Cornwallis island, Nunavut
14	Ben Harrison	Impact of SERT knockout on surfacing behaviour in <i>Danio Rerio</i>
63	Kristin Hillier	Rapid identification of species at risk habitat use with birdnet
39	Anya Hu	Phosphoenolpyruvic acid (PEP) synthesis in mature chloroplasts of <i>Arabidopsis thaliana</i>
36	Kristen Huang	Implicating the serotonergic system in feeding and growth in zebrafish (<i>Danio rerio</i>)
52	Tiffany Huang	Undergraduate student knowledge, attitudes towards science, perceptions, and experiences with vaccines and recreational IV drips
34	Laiba Jamal	What is the impact of flexible grading schemes on the learning environment and classroom dynamics in science courses?
2	Hania Kusznirewicz	Silk nanoparticle drug delivery of double-stranded RNA as an epithelial ovarian cancer treatment
7	Veronica Langdon	Biomechanical analysis of force production and skating efficiency in female varsity hockey players
21	Sharifa Lomiyev	Effects of PIKfyve lipid kinase inhibition on endoplasmic reticulum in the context of ER remodeling
32	Danielle MacNeil	Exploring the ecological niches of European starlings (<i>Sturnus vulgaris</i>) and tree swallows (<i>Tachycineta bicolor</i>) and insect communities through stable isotopes analysis across PFAS-contaminated and non-contaminated sites in southern Ontario
10	Amasha Malawiya Arachchige	Does microbial function vary with stream health? Comparison of Don River and East Humber tributaries with poor to good quality conditions

15	Shruti Manna	Investigating the impacts of replication stress upon wild-type and GSK3Δ MDA-MB-231 cells in presence and absence of pyruvate
12	Christina Meier	Time-of-Day differences in cell composition in chronic pain
53	Laura Middleton	Does structural enrichment affect the growth and behaviour of captive-reared chinook salmon?
49	Morgane Brading	A bacterial vaginosis model: Following disease progression
22	Shikha Narula	Investigating Pmk1's roles in the fission yeast cell cycle
54	Linda Nguyen	Perceptions of climate change learning among undergraduate students and instructors
5	Alexandria Ojha	Evaluating dimethoate resistance of spider mite populations from southwestern Ontario soybean crops
56	Sofiyyah Oladipupo	The effect of interstrain competition on the nodule occupancy of green pea plants
60	Vaidehi Patel	Amplifying BIRDNET's species identification: is confidence score related to song characteristics?
50	Katrina Pegg	The importance and site of WssF in phenotypic expression of acetylated biofilm cellulose
69	Anton Peter	Assessing swimming performance of the Eastern Sand Darter following hard and soft release techniques
29	Pakin Pongpaiboon	Analysing sex-dependent effects of monocrotaline (MCT) through glycogen storage
58	Olivia Robillard	Resilience in symbiosis: How rhizobia surviving phage attacks enhance plant growth
17	Pooja Samaraweera	Elevated direct bilirubin does not predict elevated conjugated bilirubin in neonates
25	Tayin Seeton	The effects of paternal pre-fertilization THC exposure on fertilization success and early embryonic development
9	Ornella Shaikovsky	The role of a fluorescent Wbox2 peptide in clathrin-mediated endocytosis: Assessing specificity with ikarugamycin
26	Nojan Shishechiha	Effect of arbuscular mycorrhizal fungi on bacterial metabolism in an active hydroponic green wall system
42	Niha Sohail	Synergistic effects of Spz2 and GDI N7-3 mutations on development of the neuromuscular junction in <i>Drosophila melanogaster</i>
27	Arianna Stanley-Harrison	Species in feces: examining the effects of per- and polyfluoroalkyl substances on the gut microbiome of mice
35	Ayesha Siddiqua Syeda	The effect of <i>de novo</i> mutation on the phototactic rate of <i>Chlamydomonas reinhardtii</i>
13	Brianna Tapia	Identifying and expressing pip-boxes and HRP-boxes upstream of T3SEs in <i>Xanthomonas</i> and <i>Pseudomonas</i> genomes
3	Vanessa Vashishth	Melanin's impact on chemotherapy efficacy in luminal a breast cancer

67	Audrey Verra	The influence of hard versus soft release methods on Eastern Sand Darter (<i>Ammocrypta pellucida</i>) burrowing behaviour in response to a predator
31	Sydney Williams	Conflict and opportunity: exploring the impact of interference competition on food access in ruby-throated hummingbirds (<i>Archilochus colubris</i>)
33	Benjamin Winchester	Antibiotics and their effects on deer mice (<i>Peromyscus maniculatus</i>) small intestine histomorphology
16	Jessica Yemen	Control of pulmonary vasculature in deer mice (<i>Peromyscus maniculatus</i>)
18	Alacea Yerxa	The role of adaptor protein complexes in phagocytosis of opsonized particles
38	Mutsuko Yoshida	Electrical impedance tomography in divers
64	Bryanna Zimbaro	Investigating the role of multiple factors on tear meniscus height in dry eye disease

The Conference Venue

Richcraft Hall, 3rd Floor



Thank you!