



Talk – Booklet

Saturday, March 23rd: _____ **2**

Concurrent Session I (10:50 am – 11:50 am) _____ **2**

Pollutants Everywhere. (ENG 105) _____ 2

It's a water world. (ENG 106) _____ 2

Are you dinner? (ENG LG05) _____ 2

A changing home. (ENG LG06) _____ 3

Biological Intelligence? (ENG LG11) _____ 3

Wear my genes. (ENG LG12) _____ 3

We have chemistry. (ENG LG14) _____ 3

Concurrent Session II (5:30 pm – 6:30 pm) _____ **4**

Engineering goodies. (ENG 105) _____ 4

Tropic of Cancer. (ENG 106) _____ 4

Adapting with the genes (ENG LG05) _____ 4

Getting Physical? (ENG LG06) _____ 5

Microwars (ENG LG11) _____ 5

Behave yourselves!! (ENG LG12) _____ 5

Colourful Biology. (ENG LG14) _____ 5

Saturday, March 24th : _____ **6**

Concurrent Session III (9:00 am – 10:00 am) _____ **6**

Little or big organs? (ENG 101) _____ 6

Let's fly (ENG 102) _____ 6

Reorganizing your molecules. (ENG 105) _____ 6

Just keep swimming. (ENG 106) _____ 7

I can't see you. (ENG LG11) _____ 7

Oh no, is that bad metabolism? (ENG LG12) _____ 7

Caught in a web. (ENG LG14) _____ 7

Concurrent Session IV (10:20 am – 11:20 am) _____ **8**

Measure my biology. (ENG 101) _____ 8

Do you need a doctor? (ENG 102) _____ 8

More water, please. (ENG 105) _____ 8

Diplomatic Immunity? (ENG 106) _____ 9

Sensational or sensing biology. (ENG LG11) _____ 9

Are you lunch? (ENG LG12) _____ 9

Last of us? (ENG LG14) _____ 9

Sponsors _____ **10**

Saturday, March 23rd:

Concurrent Session I (10:50 am – 11:50 am)

Pollutants Everywhere. (ENG 105)

Presenter Name	Institution	Title
Dimichele Hailey	Laurentian University	Insect biodiversity in limed and un-limed polluted areas in Greater Sudbury, Ontario
McCutcheon Katrina	McMaster University	Characterization of Microbiomes from Tree Swallow (<i>Tachycineta bicolor</i>) Nestling Fecal Samples Collected from Colonies Near a Wastewater Treatment Plant
Rosli Soraya	McMaster University	Long-term water quality trends of two inland lakes in the Township of Georgian Bay: Go Home Lake and Stewart Lake.
Nykamp Natalie	Wilfrid Laurier University	Exposure to metals impacts a fish's ability to regulate fluctuations in hypoxic conditions

It's a water world. (ENG 106)

Presenter Name	Institution	Title
Agostini Natasha	McMaster University	Relating variation in macrophyte leaf traits to environmental conditions in Great Lakes coastal marshes
Côté Veilleux Hanna	Laurentian University	The swimming performance of spermatozoa in the wild Cisco (<i>Coregonus clupeaformis</i>)
Peters Silas	University of Toronto	The impacts of two commonly used road salts on the colonization of aquatic ecosystems by predaceous diving beetles (Dytiscidae) and other macroinvertebrates
Stevens Jessica	McMaster University	Impact of human disturbances on water quality of inland lakes in Georgian Bay: Gibson and Six Mile Lake

Are you dinner? (ENG LG05)

Presenter Name	Institution	Title
Del Grosso George	Western University	Investigating the role of an intradiol ring cleaving dioxygenase in <i>Tetranychus urticae</i> adaptation to <i>Arabidopsis thaliana</i>
Grieve Haley	Trent University	Factors affecting Red-backed and Blue-spotted salamander activity range selection
Perry Emily	McMaster University	Impacts of N-supplementation on rhizobia quality at the population level
Singhal Yash Kumar	University of Toronto	Effects of Repeat Damage on Induced Defence Priming of <i>Ricinus Communis</i> Extrafloral Nectaries

A changing home. (ENG LG06)

Presenter Name	Institution	Title
Bouffard Michaela	Laurentian University	Demographic Analysis of a Coastal Population of Spotted Turtles (<i>Clemmys guttata</i>) Inhabiting Mosquito-control Ditches on Long Island, New York
Charles Lily	McMaster University	Relating Wildlife Road Mortality Hotspots to Ecologically Significant Habitats in Whitefish River First Nation, Ontario
Smith Jordan	Western University	<i>Mythimna unipuncta</i> response to foliar zinc application in <i>Zea mays</i> L.
Clément Hugo	Laurentian University	The effects of urbanization on grooming in eastern chipmunks

Biological Intelligence? (ENG LG11)

Presenter Name	Institution	Title
El Roz Haya	Western University	Parkin Oxidation and Alpha-Synuclein Aggregation in Parkinson's Disease
Loizides Katerina	Toronto Metropolitan University	The Impact of Evidence-Based Study Strategies on Academic Performance
Ramalingam Siriram	University of Ottawa	BIODIDAC is back and better!
Lena Adamson	McMaster University	The Role of ZDHHC21 in Hippocampal Neuronal Development

Wear my genes. (ENG LG12)

Presenter Name	Institution	Title
Cocco Ella	Laurentian University	Investigating the effect of low-dose Interleukin-6 on natural killer cell phenotype and function
Cruz Li Vanessa	Toronto Metropolitan University	Characterizing the Role of TFEB in Differentiation, Polarization, and Phagocytosis in Murine Macrophages
Hassan Yahia	McMaster University	Documenting Growth Regulatory Protein Expression During Skeletogenesis of Sea Urchin Embryos
Bogucki Liam	Western University	Development of Bioengineered <i>Sachromyces cerevisiae</i> for the Biosynthesis of Ephedrine and Related Alkaloids

We have chemistry. (ENG LG14)

Presenter Name	Institution	Title
Tan Natalie	Laurentian University	Determining the Limiting Nutrient (Nitrogen or Phosphorus) in Three Types of Wetland Soils in Northern Ontario
Shirin Kalavi	Toronto Metropolitan University	Testing Novel Boron Compounds for anti-bacterial Properties
Punj Bhavya	Wilfrid Laurier University	Use of cuticular hydrocarbons (CHCs) as a signal of age in mating decisions by fruit flies, <i>Drosophila melanogaster</i>
Zhao Jessica	Western University	Can sulfur alleviate cadmium toxicity in soybean?

Concurrent Session II (5:30 pm – 6:30 pm)

Engineering goodies. (ENG 105)

Presenter Name	Institution	Title
Michiels Reagan	Western University	Developing a qPCR assay for the detection of etoxazole resistance in two-spotted spider mites
Polkinghorne Kole	University of Windsor	Looking at the Functional Consequences of Tuberin Mutations in Cell Cycle Regulation
Smith Rachela	McMaster University	Evaluation of Agaricus bisporus Farming-Waste as a Packing Peanut Alternative
Kelly Paul	Western University	Engineering Amaryllidaceae alkaloid production in <i>Saccharomyces cerevisiae</i> : Overcoming uncharacterized biosynthetic steps through harnessing the yeast Ehrlich pathway

Tropic of Cancer. (ENG 106)

Presenter Name	Institution	Title
Grimmett Edward	University of Windsor	The Role of Spy1 on Sex-Specific Differences and Proliferation in Hepatocellular Carcinoma
Patel Ria	University of Windsor	Investigating the Role of the Tumor Suppressor Tuberin in the DNA Damage Response
Kamil Sahar	Toronto Metropolitan University	Investigating the Role of DRP1 and MFF Expression in Triple Negative Breast Cancer Cell Line Recovery Following Ultrasound-Stimulated Microbubble Treatment (USMB).
Laframboise Taylor	Laurentian University	Investigating the role of FRA1 in radiation-induced carcinogenesis

Adapting with the genes (ENG LG05)

Presenter Name	Institution	Title
Valera Jessika	Western University	Investigating the potential pleiotropy of the autism candidate gene <i>neuroligin 3</i> on the development of <i>Drosophila melanogaster</i>
Ahmad Rashid	University of Windsor	Transgenerational effects: maternal and environmental effects on the inheritance of the gut microbiome in <i>Oncorhynchus tshawytscha</i>
Umana Michael	Toronto Metropolitan University	Examining the Impact of Copper on Antibiotic-Resistance Gene Dissemination in Wastewater Ecosystems
Lac Jackie	Western University	Is individual genetic diversity at the innate immune locus TLR3 associated with reduced overwinter survival of song sparrows (<i>Melospiza melodia</i>)?

Getting Physical? (ENG LG06)

Presenter Name	Institution	Title
Herwig Beatrice	Laurentian University	The effect of wetland plants on soil hydrological characteristics
Mazhari Robia	Wilfrid Laurier University	Determining the effect of immunological stressors on mating behaviours in <i>Drosophila melanogaster</i>
Watanabe Emile	University of Toronto	Acoustic communication and its function in sexual selection and territoriality in <i>Chelydra serpentina</i>
Beneteau Gabrielle	University of Windsor	Tuning out the noise: Evidence of habituation in wild freshwater fish

Microwars (ENG LG11)

Presenter Name	Institution	Title
Masanovich Alex	University of Windsor	Exploring the assembly of the SARS-CoV-2 RNA-dependent RNA polymerase complex
Vaillancourt Sierra	McMaster University	An Examination of the Population Dynamics of a Self-Sacrificial Phage Defense Mechanism
Blanchet Myia	McMaster University	Activation of Silent Biosynthetic Gene Clusters in WAC06154 a Wild <i>Streptomyces</i> Isolate Through Environmental and Regulatory Manipulation
Sakaki Rebecca	McMaster University	Investigating the role of σE in the exploratory growth of <i>Streptomyces venezuelae</i>

Behave yourselves!! (ENG LG12)

Presenter Name	Institution	Title
Benbassat David	McMaster University	Foraging Behaviours of the Juvenile Round Goby
Cyr Charlotte	Western University	The effect of urban noise on the pitch of bird calls
Durocher Remy	University of Windsor	Handling Stress Responses of Yellow Perch (<i>Perca flavescens</i>)
Nelson Emma	Western University	Analysis of individual <i>Drosophila</i> social behaviour upon two flies meeting

Colourful Biology. (ENG LG14)

Presenter Name	Institution	Title
Mclean Donovan	Laurentian University	Timing of Autumn Senescence in Northern Ontario Wetland Plants
Ramathesun Raahavi	Brock University	Color me mine: Parallelism in Male Trinidadian guppies color patterns
Sarin Tanya	University of Waterloo	Quantifying the contribution of needle age and climate on black spruce (<i>Picea mariana</i>) foliar trait variation
Trudeau Bradleigh	Laurentian University	Leaf Senescence in late successional and early successional trees in a Northern Ontario mixed wood forest

Saturday, March 24th :

Concurrent Session III (9:00 am – 10:00 am)

Little or big organs? (ENG 101)

Presenter Name	Institution	Title
Almasri Nourhan	Toronto Metropolitan University	Molecular Mechanism of Endoplasmic Reticulum Hitchhiking and Lysosome Dynamics upon PIKfyve Inhibition
Cisneros Medrano Julio	Trent University	Influence of monocrotaline in gastrointestinal anatomy in a mouse model of cardiac cachexia
Mehrabi Ayshin	Toronto Metropolitan University	AMPK regulates the spatial organization of early endosomes through Gapex-5 to enhance Mitochondrial iron uptake
Badalova Maria	University of Windsor	Testing of Novel Reagents to Prevent the Progression to Treatment Resistant Neuroendocrine Prostate Cancer

Let's fly (ENG 102)

Presenter Name	Institution	Title
Blackwell Samantha	University of Windsor	Exploring Variation in the Trill of a Common North American Songbird
Kaiyue Zheng	McMaster University	The Effect of Warming Temperatures on Wood Warbler Populations
Amlin Mackenzie	Western University	Insights into Chimney Swifts: Investigating Population Dynamics, Chimney Use, and Weather Impacts on Roosting Behaviour with Citizen Science
Kamay Caroline	Western University	A comparison of pectoralis fibre type and capillarity in 11 small songbird species

Reorganizing your molecules. (ENG 105)

Presenter Name	Institution	Title
Huynh Andrew	University of Toronto Mississauga	Investigating the Crosstalk of Histone Modifications in Epigenetic Gene Silencing
Capperauld Michael	Trent University	Magneto-priming provides no physiological advantage for soybean performance: additional evidence at the phytohormone level
Fatmi Heba	Toronto Metropolitan University	Meiotic gene meu27 influences DNA damage checkpoint response and meiosis division in fission yeast
Dahi Tarkan	University of Toronto	Histone Variant Exchange of H2A.Z and mH2A1 Splice Isoforms for Long Term Memory Maintenance

Just keep swimming. (ENG 106)

Presenter Name	Institution	Title
Socransky Liam	Laurentian University	Sperm quality in relation to male attributes in a wild lake trout (<i>Salvelinus Namaycush</i>) population
Bullock Jessica	University of Toronto	Among-species variation in the parental care and following responses of juvenile cichlids in the genus <i>Apistogramma</i>
Hung Elli	University of Toronto	Understanding the impacts of multiple road-related contaminants on <i>Daphnia magna</i> survival and transcriptome
Desaulniers Jessica	Laurentian University	Impact of Human Infrastructure on Health and Clutch Size of Female Blanding's (<i>Emydoidea blandingii</i>) and Snapping Turtles (<i>Chelydra serpentina</i>)

I can't see you. (ENG LG11)

Presenter Name	Institution	Title
Waqar Shazah	University of Waterloo	Quantifying the expression of choanoflagellate proteins in different life stages
Guo Quanshen	McMaster University	Investigation of methyltransferase in the assembly of tert-butyl terminus of butyrolactol A
Jocius Lydia	Western University	Could mating incompatibility due to <i>Wolbachia</i> interfere with reintroduction efforts for the mottled duskywing butterfly?
Dumitrescu Rhea	Western University	Survival of gastrointestinal bacteria in different media for targeted delivery to honey bees colonies

Oh no, is that bad metabolism? (ENG LG12)

Presenter Name	Institution	Title
Toth Johanna	McMaster University	Metabolomic analysis of the initiation and regulation of thermogenesis in Eastern Skunk Cabbage, <i>Symplocarpus foetidus</i>
Martin Jeffery	University of Windsor	Tuberin's Role in the G2/M Transition in Response to Growth Factors: Focusing on the ERK Pathway
Pakhi Pakhi	McMaster University	Assessing Impact of Estrogen on Pancreatic Beta Cell Health and Function
Han Sen	Trent University	<i>Daphnia</i> Longevity

Caught in a web. (ENG LG14)

Presenter Name	Institution	Title
Tershana Estel	Toronto Metropolitan University	The effects of grade inflation on self-esteem and academic performance
Pigeon Blake	Western University	Wetting and drying of sediments and the drought-enhanced release of mercury and methylmercury
Robertson Alexander	Trent University	Do annual cicadas have a tree preference?
David Naveen	University of Toronto	Investigating Determinants of Environmental Values and Pro-Environmental Behaviour

Concurrent Session IV (10:20 am – 11:20 am)

Measure my biology. (ENG 101)

Presenter Name	Institution	Title
Binumbi Merveille	Laurentian University	Leaf dry matter change during senescence in early-successional and late-successional species in Northern Ontario
Barghout Colleen	Western University	Comparing markers of oxidative damage in proteins and lipids of 13-lined ground squirrels in different stages of hibernation
Winward Eli	McMaster University	Novel Techniques to Confirm Breeding Habitat of Jefferson Salamanders in Vernal Pools of Southern Ontario: Use of Remote Sensing and eDNA
Xie Ningrui	McMaster University	Mathematical Approaches for Simulating Epidemic Progression: Addressing Limitations of the Linear Chain Trick in ODE Models

Do you need a doctor? (ENG 102)

Presenter Name	Institution	Title
Rennie Matthew	Laurentian University	Investigating the impact of microalgal extract on the production of the anti-diabetic hormone GLP-1
Reaume Hayden	Laurentian University	Phase-I Trial of a Multi-Target Dietary Supplement: Investigating Effects on Physical and Mental Well-being Using the SF36 Wellness Survey
Mouawad Elie	University of Windsor	Investigating the role of Spy1 on Therapy Response in Medulloblastoma
Gupta Risha	Trent university	Investigation of the sex-dependent effects of monocrotaline on food intake

More water, please. (ENG 105)

Presenter Name	Institution	Title
Angelova Yoana	Toronto Metropolitan University	Evaluating the Effects of Low-Frequency EMF on the Toxicity of Heavy Metals to Green Freshwater Algae (<i>Raphidocelis subcapitata</i>).
Bugeya Beck	Trent University	Crayfish Concerns: Potential Impacts of Exotic Crayfish on Pelee Island's Endangered Salamanders
Charczynska Karolina	McMaster University	Long-term changes in water quality of two inland lakes in the Township of Georgian Bay: Gloucester Pool and Myers Lake.
Guimond Kieran	University of Toronto	Bird diversity in stormwater ponds during fall migration

Diplomatic Immunity? (ENG 106)

Presenter Name	Institution	Title
Beriia Tamara	Toronto Metropolitan University	Role of cellular pH in the process of lysosomal remodelling in primary macrophages
Pitkethly Molly	Laurentian University	The Anti-Inflammatory Actions and Mechanisms of pCF3-diEPP on T Cell Priming in Mice.
Kim Heeji	University of Toronto Mississauga	Production of infectious agents from a virus-resistant strain of the haptophyte algae, <i>Chrysochromulina parva</i>
Wendling Ariel	Laurentian University	The Effect of Dextran-Sulfate-Sodium Induced Ulcerative Colitis on L-cells in Mice

Sensational or sensing biology. (ENG LG11)

Presenter Name	Institution	Title
De Villa Loridee	University of Toronto Mississauga	Input specificity of the superior colliculus
Giannini Giuliana	University of Toronto	Bio-Careers: Facilitating Career Path Exploration With a Podcast Series
Debruyin Katerina	Laurentian University	Effect of Extremely Low-Frequency EMF on Inflammatory Action of Human THP-1 Macrophages
Chubbs Tyler	Laurentian University	Nutrient Limitation in Wetland Soils and Effects by Different Plant Species

Are you lunch? (ENG LG12)

Presenter Name	Institution	Title
Hazel Kelsey	Toronto Metropolitan University	Investigating the Yield and Light Penetration Impacts of Novel Pot and Trellis Designs in Above-and Below-Ground Competition in Raspberry (<i>Rubus idaeus</i>)
Jack Sheldon	Western University	Do Wildlife in Protected Areas Know They Are Protected? Experimentally Testing Fear of the Human "Super Predator" in South African Savanna Mammals
Ragogna Aiden	Laurentian University	"Comparative Analysis of Cephalization and Bite Force: Exploring the Evolutionary Variances in Head Region Development between Canids and Felids"
Kyle Olivia	Laurentian University	Do Wetland Plant Roots Actively Forage For Nutrients?

Last of us? (ENG LG14)

Presenter Name	Institution	Title
Zabrzycki Isabell	McMaster University	Effects of Carbon and Nitrogen Sources on Mycelium-Based Film from <i>Schizophyllum commune</i>
Russell Joshua	Trent University	Here, and There, and Back Again: Three Decades of Change in Arctic Snow Cover and Vegetation
Mihorean Mackenzie	Western University	Where do Canadian <i>Entoloma</i> mushrooms come from?
McManus Keira	University of Waterloo	Effects of permafrost thaw on boreal plants

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