



Arts and Science Students' Union
Third Annual Undergraduate Research Conference

9AM - 10AM

Room 1071: DEMOCRACY, DICTATORSHIP AND DISCORD

1. Rocky Mountain Waves: A Study of Alberta's Realignment Elections
David de Paiva
2. Returning a Rogue: How to Reintegrate North Korea Into the World
Bryan Licalde
3. Freedom of speech: a right vs. a duty. A comparative study on freedom of speech in Canada and China
Yang (Vicky) Zhou

Room 1072: FRONTIERS IN MODELLING

1. Multiplatform computer modeling on the evolutionary trajectory of metastatic cancer
Daniel Mau
2. Braiding the Beautiful Game: An Algebraic Approach to Analyzing Football
Abdullah Zafar
3. Molecular characterization of a closed-skull impact model of mild traumatic brain injury in mice
Amir Adel

Room 1073: MEDICAL THERAPIES

1. Communication from bug to body: uncovering the role of ATP as a biomarker of bacterial fitness in the gut microbiota
Faustina Lau
2. Synthesis and Characterization of Mitochondria-Targeted Sirtuin-1 Activators: A Novel Approach to Mitochondrial Medicine
Aaron Dou
3. Targeting Yap/Taz activity in the fibrotic lung epithelium using a pharmaceutical drug.
Eliora Sy Wee

Room 1087: THE CLASSROOM: UNDER THE MICROSCOPE

1. Modernity vs. Tradition: The Controversy of the Use of Comprehensible Input in Latin Classrooms
Karuna Sinha
2. Disability Inclusive Education in Malawi
Jonta Kamara
3. Anthropological viewpoints on plurilingual interactions in education
Mira CY Chow

10:00 AM - 11:00 AM

Room 1071: OPENING REMARKS & KEYNOTE

Dean Melanie Woodin's Welcome (10:10 AM -10:15 AM)

Professor John Robinson and his undergraduate students (10:15 AM - 11:00 AM)

- Professor Robinson, with the Munk School of Global Affairs and Public Policy, and the School of the Environment, will introduce his award winning research on bringing sustainability to university campuses. Then, hear from his undergraduate students and their experiences conducting award-winning, internationally-recognized research!

11:00 AM - 1:00 PM

Sidney Smith Lobby: Poster Presentations

Coins, context and cataloguing: coins from Dhiban in the Royal Ontario Museum

Evelyn Ullyott-Hayes

How can we optimize episodic memory performance?

Haleema Khan

Realizing Electromagnetically Induced Transparency in Superconducting Artificial Atoms

Andrew Hardy

Characterization of AlgK-AlgX Protein Interaction in *Pseudomonas aeruginosa* Alginate Biosynthesis

Evelyn Li

CD200 marks definitive hematopoietic mesoderm during human pluripotent stem cell differentiation

Lauren Durland

Manipulation of Membrane Potential in Brain Tumour Models

Rida Shaikh

Ketene and Ammonia Forming Acetamide in the Interstellar Medium

Akash Kothari

Interpersonal Emotion Regulation in Mothers and Fathers Involved with Child Protective Services: Narrative Interview vs. Self-Reported Strategies

Miranda Li

Making Do, Queering Networks, and Trolling Back: Transgender Experiences With Dating Apps

Taylor Thompson

The Construction of Class in Colonial Gold Coast's Cocoa Industry

Luc Foster

Swipe Left on Sexism: Examining How Women Are Perceived When Confronting Sexism on Dating Apps

Annabelle Moore

Can Face Processing Patterns Help Identify Mental Health Issues?

Eilidh McAlister

The Haunting Dangers of CTE in Players of American Football

Abdula Maher

12:30 PM - 3PM (All in Room 1071)

12:30 - 1:30: ILLNESS AND CURES

1. The Role of CD4+ T cells in Viral Shedding During Human Immunodeficiency Virus (HIV) Infection
Sarah Grech
2. Exploring the Role of Kidney Tissue Resident Macrophages in Diabetic Nephropathy
Tashi Rastogi
3. Serum fatty acid profile in patients with type 1 diabetes mellitus following omega-3 supplementation over one year
Daniel Chen
4. Culture Media-Derived DNA: A Novel Approach for Comprehensive Circulating Tumor DNA Research
Philip Ding

1:30 - 2:15: LIFE IN THE ANTHROPOCENE

1. Microfibre pollution in wastewater treatment plants and possible solutions
Dorsa Nouri Parto
2. How to bear caring in the 21st Century: Defining and Explaining Anthropocentric Dissociation
Maia Harris

2:15 - 3:00: EUREKA! AT THE FOREFRONT OF DISCOVERY

1. How Do Cells Move? A Novel Signalling Pathway that Orchestrates Cell Migration
Alexander Bogatch
2. Identification of counterfeit and genuine edible birds nests using Fourier transform infrared (FTIR) spectroscopy with multivariate analysis
Utkarsh Mali
3. Novel use of “DNA barcodes” to understand insects that develop inside mushrooms
Sydney Gram

1 PM - 2PM

Room 1069: MEMORY AND MEANING

1. Two Dying Gods: Formulations of the Secular in Nietzsche and Heine
Maral Attar-Zadeh
2. Moral Injury in Great War Memoirs of the Western Front and the Expansion of Shell Shock’s Legacy
Aidan Gowland
3. A Warning from the Past: Lessons from Right-Wing Populism and Financial Crises in Post WWI Germany and Hungary
Alka Bhide

Room 1085: SOCIAL CONSTRUCTS AND CONSEQUENCES

1. Towards Decolonizing Sex Work in Canada: Lessons from the Nordic and New Zealand Models
Sydney Narciso Wilson
2. Stigma Management among SC/ST Pre-professionals in Kerala, India
Xinyang Ye

3. Of Fairies and Freakshows: Monstrosity and Freakery in Perceptions of Disease

Madelyn Hertz

4. Moving in and Moving Out: Understanding social exclusion and rural-urban migrant mental health in Shenzhen

Hui Wen Zheng

Room 1088: IMAGE, TEXT, AND TRADITIONS

1. The Textual Tradition of Calpurnius and Nemesianus

Leah Stephens

2. Royal Ladies Hunting: An Exploration of Mughal and Kota Painting Traditions

Jennifer Boothby

3. Street Art: A Modern Conservation Question

Tomée Tzatzanis