AUGUST 16 • 2022 • 8:30AM-2:00PM • UTM CAMPUS

THE OFFICE OF THE VICE-PRINCIPAL, RESEARCH

SURF 2022 PROGRAM

#SURF2022
Event Agenda

Introductory Remarks - 9:00-9:05 AM
Kent Moore, Vice-Principal, Research & Professor of Physics

Session One - 9:05-10:00 AM
Moderated by Payam Zahedi, Director, OVPR

Keynote Speaker: Iva Zovkic, Associate Professor, Department of Psychology

Epigenetic basis of learning and memory

Iva Zovkic is a neuroscientist whose research is focused on epigenetic mechanisms of memory formation across the lifespan. She is specifically interested in histone variants, based on the observation that histone variants are replication-independent, which makes them the primary source of histones in the adult brain. Her team found that H2A.Z is a negative regulator of memory, and they are now actively pursuing the hypothesis that H2A.Z accumulation over the life span is an active contributor to dementia and age-related cognitive decline. To this end, the lab published work demonstrating genome-wide accumulation of histone H2A.Z in aged mice and is investigating its role in Alzheimer's disease, with the ultimate goal of developing new therapeutics for memory decline. However, H2A.Z is just one of many histone variants, and the especially diverse group of H2A variants are excellent targets for memory regulation. The Zovkic lab is interested in understanding how individual H2A variants contribute to memory and gene regulation, and the way that histone switching and chromatin reorganization supports memory formation and memory decline.

Student Rapid Talks

Understanding the social benefits of urban trees
Ximena Bailly
Faculty Supervisor: Tenley Conway

Disseminating Undergraduate Research at UofT: A Qualitative Study
Paige France
Faculty Supervisor: Christopher Eaton
Spatial non-stationary effect of the unhealthy food environment and green spaces for diabetes in Toronto

Haoxuan (Peter) Ge
Faculty Supervisor: Jue Wang

Investigating the Effect of Content-Based Songs on Learning Math

Vashti Kamassah
Faculty Supervisor: Christina der Nederlanden

Brighter, Longer, Better: Antibleach Cocktails to Extend the Lifetime of Single Emitters

Shrivardhan Mishra
Faculty Supervisor: Claudiu Gradinaru

Wellness Break - 10:00-10:15 AM

Session Two - 10:15-11:05 AM
Moderated by Payam Zahedi, Director, OVPR

Keynote Speaker: Negin Dahya, Assistant Professor, ICCIT

Teaching & Learning Technology: A Study in Dzaleka Refugee Camp

Negin Dahya is an Assistant Professor at U of T’s Institute for Communication, Culture, Information & Technology (ICCIT). Dahya's research engages feminist and postcolonial theories in the context of science and technology studies. As a social scientist, Dahya conducts qualitative research informed by ethnographic and visual methodologies. These primarily include interviews, observations, and visual documentation and analysis of participant made media like digital video or photographs. Her research contributes to the domains of critical media education and refugee education and technology. Her work has evolved to include research on VR concept art design in a juvenile rehabilitation facility in the USA and refugee communities in camps and resettlements. She explores the role and relationships between education and technology within the constraints of refugee camps, or, in relation to the systemic socio-technical factors that influence migration and resettlement in North America. Her work focuses on girls and women as well as people of colour and the ways their own engagements with media and technology serve and support them; her work also identifies systemic structures of power, privilege and oppression that influence these realities and are entangled in pedagogy, curriculum, media, and technology.
Student Rapid Talks

Algardi’s Bronzes by the Numbers: How Organizing a Sculptor’s Bronze Oeuvre Can Help Us Understand Bronze Production in Seventeenth-Century Rome

Elizabeth Provost
Faculty Supervisor: Evonne Levy

Understanding the Role of University in the Personality Development and Well-Being of Racialized Students

Jaiditya Sharma
Faculty Supervisor: Joanne Chung

Determining Labelling Efficiency of Fluorotryptophan-Enriched Fluoroacetate Dehalogenase Using Fluoroanthranilic Acid Derivatives

Lauren Tabunar
Faculty Supervisor: Scott Prosser

Do Students Read Instructor Emails? A Case Study of Measuring Student Engagement to Email Reminders

Elexandra Tran
Faculty Co-supervisors: Joseph Williams & Andrew Petersen

Single-cell Segmentation Analysis on Dynamic Bacterial Micro-colonies

Sandra Zhitkova
Faculty Supervisor: Joshua Milstein
Poster Presentations* - 11:05 AM-12:00 PM

Students will be at their posters to explain their research and answer questions.

Lunch - 12:00-1:30 PM

While you enjoy a delicious lunch, please continue to wander and view student posters. Please note that students may not be at their posters at this time.

Closing Ceremony & Awards - 1:30-2:00 PM

Poster Presentations

Marim Adel & Feyza Lafci
The Personality Expression of Racialized Undergraduate Students in Everyday Life

Bailey Agard
Where's the Bingleduff? How speaker accent shapes children’s linguistic processing

Abdul Rahman Al Kos
Exploring a novel channel in trichoplax: the half- Cav channel

Ali Al-Hasnawi
Methods for modelling urban tree canopies using LiDAR data

Ryan Alexander & Rachel Mander
Hyporheic Flow In Mullet Creek

POSTER NUMBER

Poster 01
Poster 02
Poster 03
Poster 04
Poster 05
Irtqa Arif
Effect of air pollution on plant health and mutations

Keerath Bhachu
Tissue-specific expression of HCN and its metabolic precursors in Trifolium repens

Giang Bui
Prior Experience in Programming: Are experienced students more likely to succeed in CS1 and CS2?

Thalia Burden, Ayesha Bhardwaj & Rohan Revoori
Do coyotes in Vaughan prefer the nightlife? A comparative analysis of coyote activity between an urban and rural environment

Meyha Chhatwal
Spontaneous Synchronization to Speech and its Effects on Music and Language Perception

Julianna Corbett & Sarun Balakrishnan
A Magnetic Resonance Imaging Study on the Association between Age and Cortical Thickness Among Regions in the Frontal Lobe

Josie Davies
Does the accent of the experimenter influence children's language biases?

Yi-Ting Deng & Hafza Nuh
The perception and production towards imitating aspirated voiceless consonants and /u/ vowel
Sherry Du  
*Road salt pollution increases sex-bias in emerging mosquito populations*

Pai Du  
*The Future Changes of Chill Portions in Ontario Under Climate Change*

Lilly Duman & Nicole Twum-Ampofo  
*Sex Differences in Fractional Anisotropy of White Matter Using Tract Based Spatial Statistics: A Diffusion Tensor Imaging Study*

Maya Eid  
*The second nucleotide-binding domain (NBD2) of the Sulfonylurea receptor (SUR) in ATP-sensitive potassium channels*

Mishaal Farooq & Sarah Mansoor  
*Statistics students’ perception of including a course project on their attitudes toward statistics*

Scott Ford  
*Effects of urbanization on Chlamydomonas algae*

Roysdale Forde  
*Employing Community Network Analysis to Investigate Protein Allostery*

Anya Franks  
*A multiproduct prenyltransferase supplies geranyl diphosphate for cytosolic monoterpene biosynthesis in rose scented geranium*
Lewei Gao & Hefan Zhang
From Supermarket to Family: Accessibility of Fresh Food in Mississauga

Christine Gaoiran
Development of an Impedance Bioresistor for the Quantification of SARS-CoV-2 S1 Protein

Gianna Giovio Canavesi
The grammatical role of tone in Keiyo (Kalenjin)

Michael Goldenitz & Sarah Rorwick
Investigating the relationship between myelin and brain lateralization by assessing radial diffusivity and handedness

Katya Golubeva
The Relation Between Health, Mental Health and Satisfaction with Oneself Among Canadian Youth

Shriya Gulati
Quantifying the Activity of Enzymes Using a CuBpy-MOF-Based Impedance Bioresistor

Kaitlyn Harris
Who saves the day? Challenging children’s linguistic biases through exposure to foreign-accented cartoon heroes

Alexandra Hawse
Who Said That? Exploring The Other Accent Effect in Children
Jessica Hira
Toddler Vocabulary Growth in a Linguistically-Diverse Community

Areesha Intisar, Muhammad Ahmad, Sara Nguyen & Jack Hamilton
Surveying and Documenting Botanical Diversity at UTM for Nature Trail App

Benji Jacob & Jawahir Mohamed
Giving Voice: Understanding the Intersections of Identity, Emotion, and Well-Being of Racialized Undergraduate Students at UTM

Liaba Jat & Maripaz Gonzalez
Are Foreign Accents Villainous?

Celina Micaela Javier & Simran Kaul
Cortical Thickness in Relation to Biological Sex in A Thai Sample: A Magnetic Resonance Imaging (MRI) Study

Jackson Jung
Urban Forest Management Plans

Camile Jutard & Rama Edaabis
Rational and Non-Rational Design of Franken-Protein HinZip

Kareena Kailass
Exploring Effective Avenues of Student Engagement for Test Preparation in Large University Courses

Chloe Kapanen
Industry Norms and the Plastic Crisis
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Gabriel Philippe & Jana Alfaras

Investigating the species composition and sex ratios of mosquito populations on the UTM campus

Emily Prete

Discriminating Speech and Song Based on Pitch Variability

Ruoxi Qian, Yujiiao Jiang & Yichen Qian

The connection between mental health, physical activity, sleep quality, and daily consumption of vegetable among Canadian youth

Elise Quadri

Exploring the molecular foundations of heterochromatin assembly by examining nuclear protein-chromatin interactions in vitro

Leah Rudmik

Cartoons creating bias: depictions of linguistic stereotyping in children’s media

Fatima Saleem

Aquatic-terrestrial connections at stormwater ponds: Investigating links between insectivore diversity and aquatic insect diversity

Riya Shah, Moxuan Huang & Carson Cornelisse

Spatial refining of food deserts: identifying socioeconomically disadvantaged neighbourhoods
Shayla Shewchuk
Liminal Spaces Facilitate Recovery Experiences

Arub Siddiqui
Development of Activatable Photosensitizers based on Nitroreductase for Selective Cell Ablation in Zebrafish

Ammar Sidhu
Automating Landcover Classification with Machine Learning for the TRCA

Dyllan Simpson
Do you look where I look? Individual differences in eye movements when perceiving groups of objects

Shakeeb Tahir
Automatic Land Use Classification using CCDC Algorithm

Evelina Tronina
Vascular Potassium Channels: ATP Binding, Stability, and States

Victoria Valeeva
Decoding Protein Dynamics with Machine Learning

Isabella Vessio
Changes in herbivory and evolution of antiherbivore defences in Trifolium repens along an urban-rural gradient in Toronto
Jonathan Waugh
Chlorophyll a Dynamics in the UTM Stormwater Pond

Yijia Wu
Longitudinal Data Analysis with Irregular Outcome-dependent Follow-up

Jessica Jia-Ni Xu & Giang Bui
Does the medium matter? Investigating Voice and Text Reflections in a Databases Course

Tianheng Zhang
The effect of ethnic and host identity in immigrants

Fei Zhengyang, David Cobo & Trong Anh Doan
Correlation Between Perceived Mental Health and prosocial indicators among Canadian Youths (2017-2018)

Xiong Zhenni
Impact of International Migration on the Well-being of Non-immigrants
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