The ubiquity of mobile technologies has revolutionized our lives, making social interaction and daily tasks more convenient. However, there are concerns and many claims about how cognitive abilities are being negatively affected. The empirical evidence for these claims is weak. A very small body of research explores the impact of the mere presence of smartphones. Outcomes are mixed and inconclusive.

- Thornton (2014) found that phone presence impairs attentional performance
- Langs (2017) failed to replicate these findings
- Ward (2017) also failed to replicate these findings, but found that phone presence impairs fluid intelligence

The present study seeks to clarify the influence of phone on cognitive performance by investigating the moderating role of technology use across different contexts and environments.

### EXPERIMENT 1
Scores on the RPM were significantly lower (p < 0.05) when participants had their own phone in view compared to when there was either no phone or the experimenter’s phone present.

### EXPERIMENT 2
No significant differences in performance on the RPM across the three conditions (p > 0.05)

### DISCUSSION
- To answer the question about the role of the mere presence of a phone on cognitive performance.
- This is consistent with previous findings in the literature.
- With regards to the general interpretation of the findings, the present study provides a more nuanced understanding of the role of technology use on cognitive performance.

### CONCLUSION
When working, intelligence, high tech, and their phones with other people should put their phones in a readily accessible location.

---

**MURC**

March 19 - 20, 2022

**2022 PROGRAM GUIDE**

Last updated: May 6, 2022
TABLE OF CONTENTS

4  Land Acknowledgement
5  What is MURC?
6  Presentation Themes
7  Schedule
9  Planning Committee
10  Keynote Speaker
11  Panel
12  Rogers Collaboration
13  Ask Me Anything Session & Featured Programming
14  Acknowledgements

16  Wave 1 Poster Presentation List
19  Wave 1 Oral Presentation List
21  Wave 1 Poster Presentation Abstracts
41  Wave 1 Oral Presentation Abstracts

57  Wave 2 Poster Presentation List
60  Wave 2 Oral Presentation List
62  Wave 2 Poster Presentation Abstracts
79  Wave 2 Oral Presentation Abstracts
TABLE OF
CONTENTS

96   Wave 3 Poster Presentation List
99   Wave 3 Oral Presentation List
101  Wave 3 Poster Presentation Abstracts
117  Wave 3 Oral Presentation Abstracts

128  Wave 4 Poster Presentation List
131  Wave 4 Oral Presentation List
133  Wave 4 Poster Presentation Abstracts
152  Wave 4 Oral Presentation Abstracts

167  Wave 5 Poster Presentation List
170  Wave 5 Oral Presentation List
172  Wave 5 Poster Presentation Abstracts
192  Wave 5 Oral Presentation Abstracts

208  Wave 6 Poster Presentation List
211  Wave 6 Oral Presentation List
213  Wave 6 Poster Presentation Abstracts
235  Wave 6 Oral Presentation Abstracts

251  Virtual Wave 1 Presentation List
255  Virtual Wave 1 Presentation Abstracts

288  Virtual Wave 2 Presentation List
293  Virtual Wave 2 Presentation Abstracts
The lands of what is now known as British Columbia have been cared for and inhabited by Indigenous Peoples since time immemorial. We specifically acknowledge that UBC’s Vancouver Point Grey campus is situated on the traditional, ancestral, and unceded territory of the xʷməθkʷəy ̓əm Musqueam people, and UBC’s Okanagan campus is situated on the traditional, ancestral, and unceded territory of the Syilx people. It is in this recognition of being on unceded land where we will ground our conversations of research further.

We also acknowledge that given the hybrid format of this year’s conference, MURC participants will be joining this conference from many places, near and far, and we also acknowledge the traditional owners and caretakers of those lands.

Learn more: What is a land acknowledgment?
WHAT IS MURC?

The Multidisciplinary Undergraduate Research Conference (MURC) is an annual celebration of undergraduate research happening on the UBC campus. Student researchers showcase their research in an oral or poster presentation format. Work presented at the conference includes undergraduate theses, directed studies and other faculty-supervised research projects.

This year, the theme for MURC is ‘Inspire Change.’ By leaving the known and embracing the unknown, we can not only learn more about each other, but the world as a whole. As we transition into a new stage of existence, it is crucial that we not only embrace change in favour of creating a better tomorrow, but approach it in a manner that inspires new generations to see change as an agent of positivity and growth, rather than one of fear.

MURC 2022 is excited to feature 512 presenters from 15 different schools and faculties.
PRESENTATION THEMES

Research presentations fall under four (4) themes.

Health and Wellness
- Addressing social determinants of health and how these affect health outcomes across different populations and communities
- Engaging with wellbeing in its various dimensions, including but not limited to traditional biomedical measurements and interventions

Innovation and Technology
- Creating and/or applying novel technologies to develop enhanced solutions that contribute to society
- Identifying the social and ethical impacts of different innovations

Sustainability and Conservation
- Addressing global challenges in the areas of food security, biodiversity, demand for energy and water, and prevention of environmental degradation to fight climate change
- Aiming to achieve a better and sustainable future for the world through social and ecological interventions

Individual, Community and Society
- Addressing social challenges on local and/or global scales, and advocating for social and ecological justice
- Working towards building a society in which the dignity of all people is respected, and equity and inclusion are embedded into society
- Engaging with communities and/or organizations to explore and address relevant issues related to social, political, and/or economic challenges
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM - 8:45 AM</td>
<td>Delegate Registration</td>
<td>CIRS Lobby</td>
</tr>
<tr>
<td></td>
<td>Poster Presenter Registration</td>
<td>Marine Drive Lobby</td>
</tr>
<tr>
<td></td>
<td>Oral Presenter Registration</td>
<td>West Mall Swing Space</td>
</tr>
<tr>
<td>9:00 AM - 9:45 AM</td>
<td>Opening Remarks Keynote (Dr. Jennifer Grenz)</td>
<td>CIRS 1250, Virtual</td>
</tr>
<tr>
<td>10:00 AM - 11:15 AM</td>
<td>Wave 1 Poster Presentations</td>
<td>Marine Drive Ballroom</td>
</tr>
<tr>
<td></td>
<td>Wave 1 Oral Presentations</td>
<td>SWNG 105, 107, 109, 207</td>
</tr>
<tr>
<td>11:30 AM - 12:45 PM</td>
<td>Wave 2 Poster Presentations</td>
<td>Marine Drive Ballroom</td>
</tr>
<tr>
<td></td>
<td>Wave 2 Oral Presentations</td>
<td>SWNG 105, 107, 109, 207</td>
</tr>
<tr>
<td>1:00 PM - 2:00 PM</td>
<td>Lunch &amp; Panel Session Inspiration Through Innovation</td>
<td>CIRS 1250, Virtual</td>
</tr>
<tr>
<td>2:15 PM - 3:30 PM</td>
<td>Wave 3 Poster Presentations</td>
<td>Marine Drive Ballroom</td>
</tr>
<tr>
<td></td>
<td>Wave 3 Oral Presentations</td>
<td>SWNG 105, 107, 109, 207</td>
</tr>
<tr>
<td>3:45 PM - 5:00 PM</td>
<td>Wave 4 Poster Presentations</td>
<td>Marine Drive Ballroom</td>
</tr>
<tr>
<td></td>
<td>Wave 4 Oral Presentations</td>
<td>SWNG 105, 107, 109, 207</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
<td>Location</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>7:30 AM - 8:00 AM</td>
<td>Registration</td>
<td>Online (Zoom)</td>
</tr>
<tr>
<td>8:00 AM - 9:15 AM</td>
<td>Virtual Wave 1 Presentations</td>
<td>Online (Zoom)</td>
</tr>
<tr>
<td>9:30 AM - 10:15 AM</td>
<td>Ask Me Anything Q&amp;A Applying to Graduate Studies</td>
<td>Online (Zoom)</td>
</tr>
<tr>
<td>10:30 AM - 11:45 AM</td>
<td>Virtual Wave 2 Presentations</td>
<td>Online (Zoom)</td>
</tr>
<tr>
<td>12:00 PM - 12:45 PM</td>
<td>Delegate Registration, Presenter Registration</td>
<td>Marine Drive Atrium, West Mall Swing Space</td>
</tr>
<tr>
<td>1:00 PM - 2:15 PM</td>
<td>Wave 5 Poster Presentations, Wave 5 Oral Presentations</td>
<td>Marine Drive Ballroom, SWNG 105, 107, 109, 207</td>
</tr>
<tr>
<td>2:30 PM - 3:45 PM</td>
<td>Wave 6 Poster Presentations, Wave 6 Oral Presentations</td>
<td>Marine Drive Ballroom, SWNG 105, 107, 109, 207</td>
</tr>
<tr>
<td>4:00 PM - 5:30 PM</td>
<td>Workshop &amp; Closing Remarks, Rogers 5G Research</td>
<td>ESB 1013, Online (Zoom)</td>
</tr>
</tbody>
</table>
PLANNING COMMITTEE

STAFF ADVISORS AT THE CENTRE FOR STUDENT INVOLVEMENT AND CAREERS
Pam Garcia
Laura Sierra
Selynn Yeap
Bana Ashour

CO-CHAIRS
Sarah Jiang
Rafid Haq

WORKSHOPS & PRESENTATIONS DIRECTORS
Adrian Chen
Samantha Cortez

LOGISTICS & PROGRAMMING DIRECTORS
Aimee Koristka
Nathan Louie

VOLUNTEERS DIRECTORS
Celina Chan
Dayle Balmes

COMMUNICATIONS & PROMOTIONS DIRECTORS
Nadya Tan
Sylvia Wang
Dr. Jennifer Grenz

Jennifer is an Assistant Professor and Indigenous Scholar in the Department of Forest Resources Management jointly appointed between the Faculty of Forestry and Faculty of Land and Food Systems at UBC. Jennifer is an edge-walker that works between two worlds, Indigenous ways of knowing and Western science. She is pushing the bounds of science to work beyond a singular worldview helping others to “make the old new again” by applying a relational lens. Her scholarly work challenges us to think differently about our role in ecosystem management and managing food systems (agrarian and traditional) as we face a changing climate.

Jennifer has a B.Sc in Agroecology from UBC, and from there, went on to a nearly two decade career working on ecological restoration, invasive species management, and science communication for non-profit organizations and all levels of government. She is an internationally well-known speaker on innovations in environmental advocacy and awareness. She completed her PhD in Integrated Studies in Land and Food Systems at UBC in 2020 focused on the application of an Indigenous worldview to ecology and invasion biology. A trade book version of her dissertation titled, “Medicine Wheel for the Planet”, is being published by Knopf Canada (imprint of Penguin Random House). Jennifer is an Associate Editor for “Environmental Science & Policy” working to make space in academic publishing to amplify the scholarly work of underrepresented voices. As a proud Nlaka’pamux woman of mixed ancestry, whose family comes from the Lytton First Nation, Jennifer takes time to continue the traditions of her great grandmother and grandmother as a gifted textile artist and grower of foods and medicines.
Ife Adebara
PhD Candidate
Ife is a PhD candidate at UBC. Her research is focused on the intersection of linguistics and computer science, more specifically on how deep learning methods developed for high resource languages, such as Natural Language Processing, can be adapted for languages in which fewer resources are available. Through these advancements, Ife hopes to improve diversity and inclusion in technology.

Chloe Gao
MD/PhD Candidate
Chloe is a current MD/PhD candidate at UBC. Through her diverse research experience working with the McMaster Health Forum, Waypoint Centre for Mental Health Care, and St. Michael’s Hospital among others, she developed an interest in mental health service redesign. During her training, she will work with Foundry where she hopes to advocate for various groups and communities and to integrate their unique perspectives into improved mental health programs and policies.

Shayda Swann
MD/PhD Candidate
Shayda is passionate about scientific research and the ways that she can integrate her research pursuits into her medical practice with patients. Shayda’s research is focused on determining how hormones affect aging, and more specifically the development of age-related comorbidities in women with HIV. She hopes to investigate this potential relationship by comparing hormone abundances with rates of comorbidities, taking into account other social determinants of health. She hopes that her work will improve the quality of care for women living with HIV.
Rogers has kindly sponsored MURC 2022. With their support, we are pleased to host a keynote workshop on its nation-leading 5G, or fifth generation, network. This session will provide an introduction to the benefits of 5G over its predecessors, how it achieves those improvements, and some of the exciting opportunities that this network brings. This session will be facilitated by Jonah Eisen and Zihan Wang.

**Johan Eisen**

Jonah joined Rogers in September 2021 and has spent his first 6 months coordinating research projects in the Rogers-University of Waterloo 5G partnership. Jonah obtained his BASc in Mathematics & Engineering from Queen’s University in 2019, including a 12-month internship at Defence Research & Development Canada in Ottawa. He graduated with his MASc in Electrical & Computer Engineering from the University of Waterloo in 2021, where he researched Information Theory.

**Zihan Wang**

Zihan Wang is a New Grad Technology at Rogers Communication, where Zihan provides technical and business analysis to support the strategic planning of the Wireless and Wireline Networks. She has graduated from Ivey Business School in Data Analytics. She performs technical and economic analysis for Spectrum auctions to drive valuations and deployment timing for new spectrum auctioned off by the Government of Canada.
ASK ME ANYTHING SESSIONS

Ijeamaka Anika
PhD Candidate

Ijeamaka Anika is a Ph.D. student at Peter A. Allard School of Law, where she completed her LLM as a recipient of the Allard Scholar Graduate Fellowship. During her Ph.D. studies, Ijeamaka is examining the influence of international criminal law jurisprudence on sexual and gender-based violence in domestic jurisdictions, building on feminist legal theory, governance, social rights, and cultural anthropology. Prior to attending UBC, Ijeamaka held a teaching position at the University of Nigeria Nsukka, and obtained her LLB (Hons) from Oxford Brookes University and an LLM in Public International Law from University College London.

FEATURED PROGRAMMING

Scavenger Hunt

Take part in MURC’s online scavenger hunt while navigating through the different events and presentations this year. Those that complete half of the objectives will be entered into a raffle for one of six $25 e-gift cards. The scavenger hunt will be hosted on Canvas and is open to current UBC students.

Research Trivia

Take a break from presentations and join us for our MURC 2022 Research Trivia session! Test your knowledge on categories ranging from research methods and prominent researchers, to social issues and big discoveries in different fields of research. The winner will receive a $25 e-gift card!
ACKNOWLEDGEMENTS

Review Committee
Ashley Welsh
Camilla Speller
Colleen Laird
Cornelia Laule
Dan Weary
Edward Conway
Gabriel Potvin
Jane Buxton
John Vigna
Jonathan Graves
Juan Abello
Kristen Walker
Laura Sly
Leonard Foster
Lisa Coulthard
Neil Eves
Neil Guppy
Silvia Bartolic
Susan Murch
Vicki Komisar
Xiaoliang Jin

Event Volunteers
Aatisha Avasthi
Adriana Ibtisam
Alina Bhimji
Alina Charissa
Amy Wang
Anna Zhu
Bonita Yu
Burak Ozkan
Cacey Garg
Cedric Lin
Celine Nagraha
Christine Seo
Deandra Taufik
Denise Zhu
Dipansha Tokas
Dora Qi
Eman Alsulaiti
Emily Saysanasy
Falencia Annette
Feier Shao
Fortier Tran
Grace Liu
Gurleen Litt
Hillary Chiu
Iris Xu
Janice Suhardja
Jennifer Nguyen
Jessica Liu
Jiayi Li
Johanna Zhou
Josh Collesso
Kaila Villarey
Kairavi Deshpande
Kalli McIver

Katherine Verasanti
Kayla Audreyartha
Kevin Jung
Khushi Puri
Kristen To
Levina Ira
Lucy Ava-Pointon
Mannat Sidhu
Maria Siminiuc
Maya John
Megan Ong
Michelle Dong
Nazanin Sadoughian
Pollen Haque
Priya Thind
Ravneet Grewal
Salva Sherif
Sammi Tang
Sayana Imash
Sherry Shao
Sherwin Tiu
Silva De
Sim Sidhu
Simrit Sidhu
Sophia He
Tyrone Borja
Tyrone Ly
Valerie Wy
Vince Lising
Violet Smith
Wendy Liu
Yufei Xiang
Yunong Wang
Adjudicators

Abhishek Soni
Abigail Yuen
Abishek Wadhwa
Alpamys Issanov
Ami Truong
Amirhossein Bahreyni
Armaghan Sarvar
Armita Safa
Buffy Chen
Callum McCracken
Cathy Yan
Charlotte Chao
Chelsea Gowton
Che-Min Lee
Colton Strong
Courtney van Ballegooie
Daemon Cline
Delbert Yip
Elisabeth Kang
Emel Islamzada
Emily Kamma
Emily Trudeau
Eric Lee
Erin Goldberg
Fei Yuan Lu
Fiana Kawane
Geoffrey Woollard
Gina McNeill
Grace Thiele
Guadalein Tanunliong
Hans Ghezzi
Heather Burt
Javier Toledo
John Kim
Jorge Peña
Jorge Vallejos
Joseph Janssen
Kate Huang
Katherine White
Katie Florko
Katie Goodwin
Katy Chen
Khushbu Patel
Kiersten Thomas
Liam Foulger
Ling Li
Lorna Tu
Madeline Lauener
Mahsa Zarei
Mathilde Duflos
Matthew Luzentes-Simpson
Md Shahriar Rahim Siddiqui
Megan Liu
Megan Wolf
Michael Yin
Michelle Pewarchuk
Minseon Jung
Mohamed Hendy
Mohit Pandey
Mudi Zhao
Nejat Hassen
Nisha Marshall
Pankaj Gupta
Patricia Unung
Punit Virk
Qing Zhang
Rajan Bola
Raneen Abdul-Rahman
Riley Petillion
Samantha Mar
Sarah Woodward
Sasha McDowell
Sasha Tuttle
Seja Elgadi
Shayan Shakeran
Shing Tat Lam
Sophia Ly
Sunaina Chopra
Svetlana Zdero
Sze Tung Lam
Tamila Kalimullina
Teesha Luehr
Umaimah Zanif
Vaishnavi Sridhar
Vanessa Diamond
Varun Shah
Veronika Larsen
Virginie Jean-Baptiste
Xi Ren
Xuesen Dong
Effect of Temperature on the Population Growth Rate of Tetrahymena thermophila

INTRODUCTION
- Aquatic species' survival, such as salmon, is crucial for Canada's $30 billion seafood industry.
- Aquatic species' survival, such as salmon, is crucial for Canada's $30 billion seafood industry.
- Aquatic species' survival, such as salmon, is crucial for Canada's $30 billion seafood industry.
- Aquatic species' survival, such as salmon, is crucial for Canada's $30 billion seafood industry.

METHOD
- Test conditions: 11°C, 20°C, and 30°C with three replicates.
- Sample Collection
- Sample Preparation
- Sample Analysis

RESULTS
- Cell Count
  1. Sample collected at every 2 hours (over 8 hours) and lastly at the 26th hour.
  2. Determined cell counts using compound light microscope after all samples collected.
- Analyzed data using a one-way ANOVA test.

DISCUSSION
- From the one-way ANOVA, we reject the null hypothesis at a 5% significance level.
- Greatest growth occurred at 30°C.
- T. thermophila is known to be a species that can survive in warmer conditions.
- Insufficient data for the 10°C condition.

Possible future directions:
- Inconsistent results for the 10°C condition.
- Possible future directions:
  - Fig. 4: Insufficient data for the 10°C condition.
  - Due to insufficient data, the presentation for the 10°C condition will be delayed.
**Theme: Innovation and Technology**

A Novel Bisphosphonate-Ligand Conjugate for Bone-Targeted Lead Chelation and Suppression of Osteoclast-Mediated Bone Resorption

Using Benford’s Law to Assess Biodiversity Datasets

Small fruits aroma, what is known and why does it matter?

**Theme: Individual. Community, and Society**

Rural Community Resilience Project

How do the methodologies employed in chemical residue analysis of ceramic vessels found in archeological sites in the Americas impact the current state of knowledge regarding the consumption of caffeinated beverages in these communities?

The Novel UBC Health Advocacy Framework in Pharmacy Student Practice

**Theme: Sustainability and Conservation**

Investigating neurosteroids and territorial aggression in a juvenile avian model using LC-MS/MS

Potential impact of fertilizer source on soil health and maize yield in lower Western Africa

Economic feasibility of precision restoration on intensive agricultural lands of Iowa

Arrival Dates of Transient Killer Whale Matri-groups in the Salish Sea

WAVE 1 POSTER PRESENTATIONS
A Proposed Study to Investigate the Effects of Early Life Gastrointestinal Bacterial Infection on Brain Function

The Effect of Structural Enrichment in Male Mice: A Systematic Review

Best practice recommendations for providing abortion care to diverse populations: A scoping review.

Association Between Objective and Perceived Climate Vulnerability and Reported Stress in Metro Vancouver

Does stress lead to a buildup of fatty acids that can increase risk of aortic aneurysms?

ADHD Symptoms, Social Media Use, and Social Media Intensity Before and After the COVID-19 Pandemic

Inflammatory factor, IL-1², and diabetes; will it save you?

Frontotemporal Dementia: a deeper dive into genetic status

Investigating the impacts of glutamate receptor modification on Alzheimer’s Disease

Counteracting the downregulation of the DCK gene to treat chemoresistance in AML patients

Effectiveness of Backset Guidelines for Children in Booster Seats to Prevent Whiplash Associated Disorders
| SWNG 105 | The effect of repeated pain and sucrose exposure on IGF-1 and IGFBP-3 levels in neonatal mice | Donna Seraj |
| Adrenal Insufficiency in Pediatric Kidney Transplant Recipients | Harry Chae |
| RACK1 reduction improves motor function and lifespan in an in vivo TDP-43 ALS model | Ananya Saraph |
| Lasting impact: Examining the association between quality of the therapeutic relationship and distress following psychotherapy termination for men and the mediating role of existential isolation | Quinn Storey |
| Does doxycycline antibiotic improve symptoms compared to nasal saline and/or nasal corticosteroids in a randomized controlled trial with adult patients with type 2 inflammatory CRS | Candace Lam Jennifer Ge Atheee Bidawid |

| SWNG 107 | Analysis of Dendritic Arborization Neurons in the Yellow Fever Mosquito (Aedes aegypti) | Maryann Rogers |
| A Narrative Review: Are there any differences in microRNAs expression pattern among different brain regions in Alzheimer’s disease (AD)? | Emily Chen |
| Characterizing Heat Transfer During Water Jet Cooling | Karan Santuka Ben Monckton Muchen He Wei Tai |
| Modeling Complex Q-ball Collisions in 2-Dimensions | Livia Jonnatan |
SWNG 109

Suitability of a Post-Operative Bariatric Nutrition Teaching Tool
Characterizing Ring D Hydrolysis in the Mycobacterium tuberculosis Cholesterol Catabolism Pathway
Inter-Organelle Communication: An Insight into ER-Mitochondria Contacts (MERCs)

Patricia Angeles
Clare Douglas
Alexandra Soanes
Yolanda Wang

SWNG 207

(Re)Discovering my Blackness: An Inquiry into the Decolonization of the Mind in Vancouver’s Black Afro-Diasporic Community
Development of Curricular Standards for Physical Activity Counselling and Prescription for People with Physical Disabilities
Cytochrome P450-Reductase Fusions for Upgrading Lignin

Rehema Ivan
Chihiro Abe
Jerry He
e for Bone-

ly

[10] ^<[[10] ^<
outcomes.
Methods

Implications
e
- non-secretion - - producing -1β - -1β -1β -1β -1β in T2D than in T1D. -1β -1β
ha

I autopsy,

TDP-

ins
Aβ

β

-β (Aβ)

β
and IGFBP-
Conclusion: Al-
Introduction

the r
WAVE 2
ORAL & POSTER PRESENTATIONS
Theme: Innovation and Technology

Development of an Omnidirectional Surrogate Neck
Genna Bonnor

Normal Map Estimation for Pixel Art Images
Roark Zhang

Optimizing the Reliability of Wind Turbines Power Generation
Tim Chang
Arian Arian
Kent Wu

Theme: Individual. Community, and Society

Understanding Canadian Perspectives Regarding the Deemed Consent Model for Deceased Organ Donation
Arjun Hothi
Jay Banwait
Mika Pascual

Theme: Health and Wellness

Perspectives of Hospital Pharmacists on Quality Improvement Initiatives in Patient Care
Ting-An Cheng

Development of a Comprehensive Biomarker Atlas in an Animal Model of Alzheimer’s Disease
Angela Mathews

Bone density variance compared to prototypical white standards as a cause for implant instability and postoperative complications in Black and Hispanic populations
Joyce Xi
Kriti Verma
Rosaline Baek

Anxiety in Rats Following a Period of Sobriety after Adolescent THC Exposure
Gloria Klein

Investigating the role of the VISTA protein in the inhibition of CD8+ T cells by myeloid-derived suppressor cells in a mouse model of pancreatic cancer
Jenny Zhao

Investigating the Role of Employment Services, Mental Health, and Substance Use Recovery in Vancouver’s Downtown Eastside Utilizing a Reflexive Approach
Kiana Popplewell
<table>
<thead>
<tr>
<th>Theme: Health and Wellness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope for spinal cord injury patients: novel drug administration for treatment of spinal cord injury</td>
</tr>
<tr>
<td>An Examination of Depression and Anxiety Prevalence in Patients With Cystic Fibrosis in Vancouver</td>
</tr>
<tr>
<td>Risk factors attributing to the rise in the incidence of colorectal cancer in Iran</td>
</tr>
<tr>
<td>The Impact of Genistein on the m6A RNA Demethylase ALKBH5 in Hepatocellular Carcinoma</td>
</tr>
<tr>
<td>The Association of Severe Mental Illness Disorders with Cervical Cancer Screening Frequencies in British Columbia</td>
</tr>
<tr>
<td>A proposed mechanism of cardiotoxicity induced by the interaction of the chemotherapeutic medication Etoposide, ICRF-193 and Topoisomerase-2 (TOPO2).</td>
</tr>
<tr>
<td>SWNG 105</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>COVID-19 vaccine hesitancy in Africa: A scoping review</td>
</tr>
<tr>
<td>Investigating the Role of ASD-risk Gene Orthologs in Habituation at 10s and 60s inter-stimulus intervals using C. elegans</td>
</tr>
<tr>
<td>The Machine Learning Approach to Breast Cancer Subtype Classification</td>
</tr>
<tr>
<td>Development of a safe immunogenic cell death-inducing vaccine for efficient treatment of breast cancer</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Sangwook Michael Woo
Douglas Forrest
Isabel Wilson
Rongxi Du
Blaise Appolinary
Raha Masoudi
Ali Nasserikhameneh
Prannav Jain
Peter Fang
Isaac Koenig-Workman
Blossom Cheng
Rachel Dupras
Anupriya Dasgupta
SWNG 109

Examining sustainable management strategies for Marine Protected Areas and No Take Zones  
Nayanika Gunvante

Feasibility of Using Mine Tailings to Sequester Carbon Dioxide in Canada's Nickel and Diamond Mines  
Harris Rana  
Sarah Chan  
Jarod Finnie

Abundance and composition of the potential prey community of web building spiders are impacted by ecosystem succession and microhabitat characteristics  
Aliye Sasmaz

Clarity or Confusion: A qualitative Analysis of Social Media Data to Gauge Post-Secondary Students’ Perceptions of COVID-19 Protocols On-campus  
Asha Octoman  
Maira Hosain  
Evi Dorsch  
Callum MacIntyre

Investigating the Effects of Elevation on Plant-Insect Interactions in Lupinus latifolius  
Juniper Malloff

SWNG 207

Effects of positive reinforcement training on mouse anxiety during restraint  
Maya Bodnar

Comparing NED and SIMBAD classifications across the contents of nearby galaxies  
Lucas Kuhn

INTACT (RetINal Toxicity And HydroxyChloroquine Therapy): A Pilot Study Using Ophthalmologic Image Transfer to Expand Access to Early Retinopathy Screening  
Jeremiah Tan
condition.
- the

-2 (TOPO2).
Individual,
- and post-

-of-home mobility

-report in the
represe
Jeremiah

of-

- of-its-

full-
WAVE 3 POSTER PRESENTATIONS

Theme: Health and Wellness

Anti-Neuroinflammatory Effects of Dietary Guar Gum on Experimental Autoimmune Encephalomyelitis

Managing Daily Responsibilities Among Collegiate Student-Athletes: Examining the Roles of Stress, Sleep, and Sense of Belonging

Investigating the Effects of a High Sucrose Diet and Time Restricted Feeding on Glucose Intolerance in C57BL/6 Mice

The Effect of a Combination Therapy of Protease Inhibitors (Ritonavir and Atazanavir) on the Viral Load and Insulin Resistance of Patients Living with HIV

Identification and Analysis of Epigenetically Regulated Prognostic Genes by Pterostilbene in Liver Cancer

Evaluating preliminary data visualization of an eye-tracking study

Differences in adolescent boys’ and girls’ perceptions and motivators behind their eating practices

NFAT5 Deficiency Attenuates IFN-β Signaling Stress Granule Formations and Downregulates Inflammatory Cytokine Expression

Relationship Between Childhood Maltreatment and Substance Use in Individuals with Borderline Personality Disorder: A Systematic Review

The Effects of Early Adolescent Cannabis Use on Female Schizophrenia Onset

Heterogeneous drug response in patient-derived ovarian cancer organoids

Study of “Epigenetic Predictor” genes expressions interworkings and similarities in ADHD

Elsie Wang

Quinn Storey

David Yang
Jaqueline Julia Karimiha
Amirhossein Moradi

Shivani Mehta
Sophia Shayan

Alice Zhang

Samantha Ma
Narges Bouzari
Patricia Angeles
Alicia Walch

Alireza Nasseri
Dehkharghani

Priya Johal

Tia Frazer

Eric Liu

Steven Chen
Theme: Health and Wellness

Oculomotor training and cognitive attention in sports-related concussion  
Katrina Yuen  
Leo McHegg

Regulation Of MicroRNA Expression In Scleroderma And Idiopathic Pulmonary Fibrosis  
Raveen Badyal

Examining the effect of Anti-phospholamban monoclonal antibody (2D12) and Thapsigargin on Spontaneous Calcium  
Borna Naderi

Omental-Secreted Adipokines and Chemotherapy Resistance in Ovarian Cancer  
Eman Dhanoya  
Madison Estrella  
Nishi Parikh

Determining the effects of extracted cinnamon polyphenols on glucose uptake in insulin-resistant cells  
Ipek Egilmez  
Noah Steward  
Edward Melnyk  
Katrina Jewell
**WAVE 3 ORAL PRESENTATIONS**

**SWNG 105**

Loneliness, Social Support, and Suicidal Ideation in Autistic Youth During the Transition to Adolescence  
Raymond Li

Designing a safe personalized nanovaccine with therapeutic and prophylactic role against breast cancer  
Julian Tolentino, Varun Kahlon, Riddhi Jain

Exploring the effects of ambient near-infrared radiation on cognitive performance and heart-rate variability  
Christine Seo

Barriers and facilitators to implementing a physical activity coaching and referral intervention among physiotherapist and spinal cord injury peer coaches  
Marisa Lin

Impacts of the medical binary model on non-binary experiences accessing healthcare and in the transgender community in British Columbia  
Morgan McCulloch

**SWNG 107**

Seeking novel therapies using CDK4/6 inhibitors in low grade serous ovarian carcinomas  
Josh Yang

Post-secondary students’ perspectives and experiences towards campus-based e-mental health services  
Kate Seo, Camila Ferreira, Angel Tung, Guilherme Adan

Investigating the extracellular ligands for Dystroglycan protein involved in Wrapping Glia formation in Drosophila melanogaster  
Henry Luo

Algorithm-Aided Matching of an On-Reserve Food Retail Dataset to the Canadian Nutrient File  
Alisha Buttar, Priya Sian, Emily Ho, Jesman Punian, Amy Dong, Abeera Irfan

**SWNG 109**

Integrative Model of Zinc Ion Homeostasis in Saccharomyces cerevisiae  
Prompt Suathim
The Relationship between Nicotinic Antagonists and Anxiogenic Drugs on the Conditioned Fear Response

Improving clinical decision-making for cancer patients: a genetically engineered Salmonella diagnostic tool designed to detect tumour immune activity

Payton Mackwood
Parneet Sekhon
Janella Schwab
Brenda Ma
Myles Osenton
Ka

- related
w 

- - -

onferroni
in vitro model.
propose to
-infr
non-
of the co
WAVE 4
ORAL & POSTER PRESENTATIONS
WAVE 4 POSTER PRESENTATIONS

Theme: Innovation and Technology

Objective and Automated Assessment of Motor Deficit using 3D Mesh Models in Human Parkinson Patients
Kimia Ameri
Xuzhe Xia
Meera Dyal
Ari Joung

Transgenic Development of Flavinogenic Yeast for Brewing
Sasha Plichta
Patsakorn Naowaphongrat
Memo Tejapaibul
Alice Martins

Graphical Analysis of Simple Stupid Bugs in Java Source Code for Bug Generation and Detection
Shawn Zhang
Mizuki Shindoh
Yanyu Zhang

Technology and transcription factors: Using CADD to target interactions
Anisha Neogi
Payton Angus
Neve Neve
Hannah Kotsaftis

Mobile Gyro Control for Intuitive Manipulation of Virtual Anatomy Specimens
Terry Lin

Developing a method to measure free stress hormone levels in mouse serum
Anna Mazurenko

Theme: Individual. Community, and Society

Developing an Online Resource for Safe Active Recreation for Families of Children with Autism Spectrum Disorder
Rebecca Anderson
Paige Dafoe

Sustainability and management of school garden programs in North Vancouver
Genevieve Mindorff
Clementine Nixon
Masa Kono

Good guy or bad guy? Investigation of factors that contribute to prosocial development in infants
Sarah Wissmann
**Theme: Sustainability and Conservation**

Statistical air pollution exposure models to address community environmental health concerns

Canadian Veterinarian Attitudes Towards Surplus Calf Management

Assessment of the Bioconcentration Factor of Butylated Hydroxytoluene in Daphnia magna

Exploring the effects of ocean warming and local stressors on marine mammals in western Canada through pathways-of-effects modeling

**Theme: Health and Wellness**

Predicting Discharge Status in a Post-Rehabilitation Stroke Population using a Cognitive Model, Stroke Characteristics and the FIM

The Role of Integrin Activation in Focal Adhesions in Embryonic Stem Cells

Glial Fibrillary Acidic Protein as a Diagnostic Blood Biomarker for Traumatic Brain Injury

Effect of Triple Combination Immunotherapy on Treg cells’ function in PDAC

Improving rates of attrition in mHealth applications use among college students with comorbid depression and anxiety.

Physical Activity and Memory Functions: Are there Differences Between the Sexes?

**Theme: Health and Wellness**

Natalia Bereznicki

Christine Chen

Carolina Ricardo

Bill Wang

Leela Moza

Shreya Chaturvedi

Angela Lee
Modulation of the Epithelial to Mesenchymal Transition in Breast Cancer by Cannabinoids: A Theoretical Approach

Chronic stress inhibits learning via decreased neurogenesis in the dentate gyrus and primes the PFC for anxious behaviors through stress induced CSF1

Blood Flow Restriction Training and Cognition Function in the Older Population: Can Blood Flow Restriction Contribute to Prevent Dementia and Mitigate the Following Muscle Atrophy Consequences?

The role of the nucleus parabrachial medialis (NPBM) in euthermic and hibernating 13-lined ground squirrels (Ictidomys tridecemlineatus)

Effects of Androgens on Behavioural Flexibility and Tyrosine Hydroxylase Expression

Development of a UV-LED based air purification system

CAR-T therapy and its applications in cancer treatment and palliative care

How does a galaxy die? Determining the star formation history from a galaxy’s spectrum.

Believe It or Nut: Friction and Convection Currents as the Driving Forces of the Brazil Nut Effect

Disha Gupta
Doua Ismail
Kristin MacDonald
Alonso Daboub
Enda Cakmak
Inaya Bhimani
Hoai Huong Nguyen
Karla Guevara
Cameron Kelsey

Steven Chin
Trevor Daykin
Ian Holzman
Alex Liang
Shannon MacFarland
Giuliana Kim
Annudesh Liyanage
SWNG 109

Preventative Multimodal Analgesia for Patients Undergoing Lower Limb Reconstruction with External Fixators; A Prospective Study of Postoperative Pain.

The Moderating Effect of Neuroticism and Conscientiousness on the Association Between Perceived and Actual Threat of COVID-19 Among Older Adults

Navigating Sexual Challenges: How Sexual Script Flexibility Promotes Sexual Well-being in First-time Pregnant Couples

SWNG 207

Investigating protein interactions and their rate of decay

Neural pathways underlying Drosophila short term visual memory

On Trust and Immigration: Understanding Immigrants as Experts in their Field
-of-the-
non-
and protein-
ultr
10 to 12-months old
-to-

ff
-1h-
location (i) -30

population.
episodic
Set-up

decision-
4

| MURC 2022 |
non-
## Theme: Innovation and Technology

- Social Robotics for Children: An Investigation of Manufacturers’ Claims  
  - Anna Riminchan
- Developing guidance for ethically-sound Scholarship of Teaching and Learning (SoTL) research at UBC  
  - Emily Wong  
  - Romina Amir Sardari
- Effect of Electrolyte Composition on Thickness and Resistance of the Solid Electrolyte Interface Found on Graphite Anodes of Lithium-Ion Batteries  
  - Tony Qiao
- Effects of the DNA methylation changes in colorectal cancer  
  - Paniz Ghavimi  
  - Fidan Sadig

## Theme: Individual. Community, and Society

- Assessing the Relationship Between Infants’ Attachment Styles and their Sociomoral Judgements  
  - Ava Momeni
- Analyzing the consistency of intake information reported by shelter staff upon owner surrender of companion animals  
  - Reiko Abe
- Inequalities in workplace opportunities for training and career advancement for elder workers by gender and race: A cohort study  
  - Joyce Jin
- Violence and Social Service Access in Vancouver’s Downtown Eastside: A Relational Reflexive Analysis  
  - Mya Froese
- Testing the fear of “falling” theory in the Chinese context: Examining education investment among Chinese parents  
  - Amy Zeng
**Theme: Sustainability and Conservation**

The Impacts of a Warming Ocean on the Migration of Cetaceans and Sharks

Model of Climate Change Activism

The Impact of Managed Honeybees on Native Pollination Services

Habitat disturbance, bet-hedging, and the success of invasive species

Breadfruit leaf and Male inflorescences extracts inhibit Cutibacterium acnes

Microbial degradation of microplastics in wastewater treatment plants

**Theme: Health and Wellness**

Determining the prevalence of food insecurity in the pediatric cystic fibrosis population in B.C. and the Yukon and its effects on healthcare outcomes

Prevalence, Characteristics and Health Care System Utilization following Non-Fatal Strangulation as Interpersonal Violence

The impact of Blood Flow Restriction exercise on post-op muscle development in athletes

Sensation Seeking and Adolescent Cannabis Use

Understanding Cortical Activation During Gait Adaptation in Advanced Parkinson’s Disease

Use of YM155 Survivin Inhibitor Molecule to Decrease the Instance of Drug-Resistance Relapse in AML Patients
WAVE 5 ORAL PRESENTATIONS

SWNG 105

Examining the efficacy of a virtual multi-disciplinary 10-week family based behavioural lifestyle intervention in children and adolescents  
Alexandra Heidl

UV Photolysis Study of Para-Aminobenzoic Acid Using Parahydrogen Matrix Isolated Spectroscopy  
Alexandra McKinnon

Designing Innovative Social Robots through end-User ParTicipation (DISRUPT)  
Gabriella Guerra

“Masturbation is Unhealthy”: Does Endorsement of Sexual Myths Differ Depending on Gender/Sex, Sexual Orientation, and Sexual Experience?  
Anthony Yuen

SWNG 107

Influence of Veracity and Intention on Children’s Trust Decisions  
Shawn Yee

A New “Chosen One”: Subverting Norms of Masculine Heroism Within Lesbian Harry Potter Fanfiction  
Jessica Norn

Commuter Schedule Optimization: A Utility-Oriented Approach  
James Yu

SWNG 109

Simulating Quantum Error Correction on Kitaev Surface Codes  
Julian Ding

SIDEKICK: A co-design approach to social robot development with families living with pediatric anxiety  
Jaya Kailley

Mechanical property optimization through microstructure engineering of traditional hand forged tools  
Jeff Koster
Connor Gingera
Teodora Cosovic
Effects of Temperature And Hypercarbia On Egg Shell Thickness In Podarcis muralis

Project Tree Hole: Using Ecological Microcosms to Study Urbanization

Arboriculture and Wildlife: Supporting Wildlife in the Urban Landscape

Amyloid fibril formation and gelling functionalities of lentil protein
Tony Qiao
"middle-"
1. freeze.

2.

3. e
In a
the bread
pollution
5

MURC 2022
PD did not f - 

- 

- 

- 

-
from end-adoption.
outcomes.
5

fa

to middle-
fa

- queer, or non-
5

- dr
-  -  -
conduc  -
-  - -
of-  -
-  -
-  -
-  -
-  -
-  -
-  -
-  -
-  -
-  -
-  -
-  -
-  -
-  -
-  -
-  -
-  -
the i

- -

°C 0

iles
-set metho
WAVE 6
ORAL & POSTER PRESENTATIONS
WAVE 6 POSTER PRESENTATIONS

**Theme: Innovation and Technology**

- Self-Assembly of Nano-sized DNA Arms
  
  Jasmine Manango

- Modifying Arabidopsis Thaliana Mucilage Composition to Alter Drought Tolerance
  
  Heather Brodoway

- Electrochemical growth of Acidithiobacillus ferrooxidans as a sustainable food source for space travel.
  
  Tamara Luistro

- Investigating the role of group identification in links between hubristic pride and moral judgement
  
  Jade Bazaz

- Canadian mining corporations in Ghana and the link between corruption and human rights
  
  Andre Aradei

**Theme: Individual. Community, and Society**

- OFWs in Canada: Transnational labour at the intersection of colonial, imperial, and state-sanctioned violence after Philippine Independence
  
  Ellysa Paskalitsa Smith

- Student and Faculty Perceptions of Student Workload in the E2P PharmD Program
  
  Radha Bazaz

- Moving beyond the monolithic Asian category: An examination of second-generation Filipino Canadians’ educational experiences and career aspirations
  
  Jenny Kim

- How students self-identify in crisis: a dialogue on biographical disruption during the COVID-19 pandemic
  
  Andre Aradei

**Theme: Sustainability and Conservation**

- Tracheid Wall Thickness: An Understudied Dimension of the Water Pathway in Conifers
  
  Brendan Hansen

- Incorporating crimson clover and hairy vetch to improve cover crop performance and establishment in fall-winter
  
  Franco Lopez Campomanes

- Investigating natural predators of Amphorophora agathonica Hottes (North American large raspberry aphid) as a viable method of population control
  
  Jathin Arjun
## Theme: Health and Wellness

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>The effects of gene expression regulation on memory dysfunction in temporal lobe epilepsy</td>
<td>Sophia Van Cuylenborg, Lily Chen, Sam Sidhu, Angelina Markovic, Rainbow Charoensuk</td>
</tr>
<tr>
<td>The Role of Social Distancing, Theory of Mind, and Social Substitution Behaviours on Children’s Socioemotional Wellbeing</td>
<td>Stefanie Ng</td>
</tr>
<tr>
<td>Understanding the SARS-CoV-2 Infection: Which Immunological Factors Can Explain Variations of Severity?</td>
<td>Arsh Jassal</td>
</tr>
<tr>
<td>Precarious work as a determinant of gender-based health inequalities: a systematic review</td>
<td>Tamara Rodney-Brathwaite</td>
</tr>
<tr>
<td>How does alcohol abuse increase the risk of Alzheimer’s disease later in life?</td>
<td>Naomi Choong, Avah Rustomjee, Ngaa Ndachena, Arzoo Dullat</td>
</tr>
<tr>
<td>Role of Selective Salpingography and Fallopian Tube Recanalization in Infertility Treatment</td>
<td>Amit Sharma</td>
</tr>
<tr>
<td>Development of an evidence-informed knowledge translation tool to facilitate resistance training prescription delivery for people with rheumatoid arthritis</td>
<td>Davin Hu</td>
</tr>
<tr>
<td>Investigating the role of oxytocin on vCA1 neurons and social memory.</td>
<td>Sherouk Shehata, Gurleen Gill, Arda Sinecen, Jessica Luo</td>
</tr>
<tr>
<td>Intimate Partner Violence Related Brain Injury in Canadian South Asian Women</td>
<td>Jaskarn Dhaliwal</td>
</tr>
<tr>
<td>Analyzing Machine Learning Models to Classify Triple-Negative and Non-Triple-Negative Breast Cancer</td>
<td>Rithika Nair, Emma Heath, Youqing Luo</td>
</tr>
</tbody>
</table>
WAVE 6 ORAL PRESENTATIONS

SWNG 105

Does Walking Improve Memory: Correlations between light physical activity and short-term episodic memory

Olive Huang

The Impact of Sex Hormones on regulatory T cells in autoimmune lupus

Navindi De Silva
Gabi Reznik
Grace Du
Maya Tharp

Priming is Affected when Navon Dimensions are Modified: Examining Visual Search Performance

Kevin Zhang

Evaluation of CD8 as a biomarker for predicting outcome in immunotherapy treatment for early-stage ovarian cancer

Monica Leca
Paria Sokhanran

Revised Approach to Measuring Chronic Pain

Kaycee Realina

SWNG 107

Cordless Connections, Troubling Times: Youth’s Experience of (Digital) Familyhood During COVID-19

Richy Srirachanikorn

The impact of pathogenic tau propagation into neurons in the fruit fly brain

Donson Dong

Construction of SIGEX duo-directional reporter plasmid pSPPH21

Sourena Oveisi
Helia Mansouri Dana
Parsa Abrishamkar
Parsa Tabassi

Bone Marrow Dosimetry for Radiopharmaceutical Therapy: Expanding the Capabilities of the MOBY Phantom

Mohammed Obaid
SWNG 109

Memory Confidence Training after Concussion  
Ow! What just bit me? Creating a reference library of DNA barcodes to identify mosquito species in B.C.  
Optimization of Western Blotting analysis of mineralocorticoid receptor in rats  
Episodic Breathing in 13-Lined Ground Squirrels  

Sanjana Bedi  
Joshua Chen  
Davey Li  
Wendy Yang

SWNG 207

Brewing Up Taste: Investigating the Emergent Craft Beer Industry  
Decolonizing Water  
“Chinese Beauty”: A Close Reading on The Feminizing Portrayal of Male Chinese Characters in Japanese Anime  

Ethan Shapiro  
Brianna Ragsdale  
Marcus Shew  
Dalia Xu
and built a modular nano-
- absorbent

conditions.
Innovatio

-cell
ice
disruption is
Sit
ter-

bottled

to
VIRTUAL WAVE 1 PRESENTATIONS

ROOM 1

Identifying Pathways to Increased Informal Helping in Older US Adults
Katy Yang

Sleep and Perseveration about a stressor
Brian Qi

Investigating intracellular pH dynamics in gap junction-mediated soma-germline signaling and spermatogenesis in Drosophila
Ariel Qi

How is Volunteering Associated with Reduced Mortality?
Exploring Underlying Pathways in a Longitudinal Cohort Study of Older US Adults
Rachel Leong

ROOM 2

What Makes Life Purposeful? Identifying the Antecedents of a Sense of Purpose in Life Using a Lagged Exposure-Wide Approach
Sofie Jensen

Review of the use of Methotrexate for the treatment of Rheumatoid Arthritis
Rayyan Zaman
Chloe Hess
Sara Hamidi

Comparing Genomic Landscapes of Carcinomas and Sarcomas
Karambir Singh Dhaunsi
Tiffany Xie
Sid Ahuja
Noel Illing

Understanding the effectiveness of past, current and proposed Indigenous palliative care programs in Canada
Amrit Bhela

Characterizing Islet Cells of the Human Pancreas
James Chae
Does stress lead to a buildup of fatty acids that can increase risk of aortic aneurysms?

Interactive Effects of Salinity and Temperature on Evasterias troschelii

Long-Term Food Education in BC

People who have a spiritual view of nature show greater moral concern for nature, irrespective of their need to appear socially desirable

From Victims to Visionaries: Representations of Older Asian Adults in Canadian News Media during COVID-19

Examining Attachment Styles in Hookup Culture

Asian Identity and Psychiatric Health Care: First-person and systemic perspectives on barriers to just and dignified treatment

Navigating Gold Mountain with Subtle Asian Networking: Exploring Asian diasporic workers’ use of online ethnic networks

Climate (In)justice and the Other: Dissecting the Politics of Representation of Climate Displaced People in the Bay of Bengal

Application of Rolling Hough Transform to Canadian Galactic Plane Survey Observations of Neutral Hydrogen for W3, W4 and W5 Region

Filmmaking and its role in scientific developments

Platinum (II) Salphen Complex for Cost & Energy Efficient OLED Displays

Clinical feasibility of a contactless multiparameter continuous monitoring technology for neonates in a large public maternity hospital in Nairobi, Kenya
ROOM 6

The impacts of a brief psycho-educational video intervention on body image, genital self-image, and sexual well-being

Reduced Epigenetic Age in Older Adults Who Volunteer

Importance of the participation of women in clinical research

Dysfunctional Beliefs About Sleep Aggravate Insomnia Among Individuals with Inflammatory Arthritis

Application of Random Forest in Predicting Breast Cancer Progression

Simone Goldberg
Cherise Kwok
Giselle Mirfallah
Emilie McGuire
Lotus Wei

ROOM 7

Metagenomic Detection of RNA Viruses in Severely Sick Children Using Oxford Nanopore Based Sequencing

A mixed reality guidance tool for medical training

Increasing Lipid Yield in Microalgae for the Production of Biofuels

Annie Yu
Vianne Chang
Rana Ghadymimahani
Eden Viveiros
Jay Jang
Vanessa Lo
Ruth Yu
Jackie McDougall
Nikita Sharma
Gabrielle Mew

ROOM 8

Know your limit, play within it: An examination of moral incongruence and rationalization among gamblers

From Human Intelligence in Nursing to Informed Artificial Intelligence: Making Healthcare More Equitable Through Less Algorithmic Bias

Eliscia Sinclair
David Shifflett
Dawson Penner
$\beta = -0.40, \quad \beta = -\beta$
261 | MURC 2022
-of-

role in end-of-

r.
thei
k

CO-

-time per

1%; RR

-up.
- 14, n =
pre-
of
due to

- -

- -
VIRTUAL WAVE 2 PRESENTATIONS
Prenatal triptan use for migraine and risk of adverse child neurodevelopment: A systematic review

The study of the frozen heart and glucose distribution in Wood frogs.

Evaluating the application of a complexity framework to the development of educational patient cases at different levels of complexity.

Early Detection of Preeclampsia using MicroRNAs and Transthyretin Levels in the Plasma

Sex differences in the effects of chronic unpredictable stress on negative cognitive bias and neural activity in the amygdala and nucleus accumbens

Video-Based Respiratory Rate Estimation for Infants in Low Resource Settings

Genome-wide association mapping of red raspberry fruit colour

Impact Analysis of a Rainwater Harvesting System for Northern BC Communities

AI Darcy: Finding generalizable equations for hydrology via AI Feynman

The Effects of Substrate Texture and Salinity on Aedes aegypti Egg-Laying Site Preferences
ROOM 3

Educational attainment as a pathway to poor mental health of parents in fragile families: Exploring the mediating effect of food insecurity

Decolonization and Indigenization of UBC’s Faculty of Pharmaceutical Sciences: Literature Review and Environmental Scan

The Chance of Complying Based on Perceived Wealth

Illusory Superiority in BC Undergraduates

Direct Player Observation to Quantify Head Impacts in Women’s Soccer

ROOM 4

Watch your knees! Effects of Coaching and Video Feedback on Children’s Quality of Motion

Objective and automated assessment of social isolation-induced behaviour deficits using machine learning

Characterizing the Secretion of Inflammatory Mediators by Microglia in Response to Multiple Stimuli

Short-term Organ Culture of Rat Seminiferous Tubules

Reciprocal and directional trends between relationship and sexual satisfaction in first-time mothers: A longitudinal analysis
ROOM 5

Heavy metal concentration from different ecosystems at UBC farm

The Mysteries behind British Columbian Chinook Salmon

Identifying transcriptomic changes in glial cells in Alzheimer’s disease

Developing Hybrid Lithium-Ion battery Models: Exploring ML and traditional modelling

ROOM 6

Long Term Impact of Salicylic Acid on Youthful Skin

Tissue clearing as a method to investigate brain injury

Domesticated Cognition

Effects of testosterone on behavioural flexibility in male rats

Perioperative multimodal analgesia including intravenous lidocaine infusion for pain management following idiopathic scoliosis correction surgery in children: challenges of implementing a clinical double blind randomized controlled trial
ROOM 7

Designing Health Care Educational Materials for South Asians in Canada  Jasleen Brar  Reeva Bhandal

Physical activity coaching for adults with spinal cord injuries during the transition from inpatient care to living in the community  Kenedy Olsen

Literature Review of Wearable Sensors for Balance and Mobility Impairments  Randy Gao

Archaeology of Fragmentation: A Middle Shang Case  Pengpeng Chen  Congrui Gu

Requirements specification for a makerspace for rural communities in British Columbia  Ashish Giri  Emily Mayzes-Kotulla
w
-based

to

- to -
Plasma
—of-the-
- of -
However,
Individu

1-year po

6-

-months, and

sa
THANK YOU

Thank you to everybody involved for their participation and continued support in making MURC 2022 possible. If you are interested in getting involved with MURC 2023, please visit students.ubc.ca/murc.

We can’t wait to see you next year at MURC 2023!