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# Assessing the Cognitive Impact of Smartphone P

Paris Will, Alessandra DiGiacomo, Alan Kingstone

The University of British Columbia

## BACKGROUND

- The ubiquity of mobile technologies has revolutionized our lives, making social interaction and daily tasks more convenient
- There are concerns and many claims about how cognitive abilities are being negatively affected, but 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
  - Lyngs (2017) failed to replicate these findings
  - Ward (2017) also failed to replicate these findings, but found that phone presence impairs fluid intelligence.

## SE

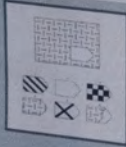
nt study seeks to: clarify the influence of phone on cognitive performance by investigating prior degree of technology use may be a factor.

## OGY

Participants were given 15 trials to solve 25 Raven's Progressive Matrices (RPSM), a test of fluid intelligence

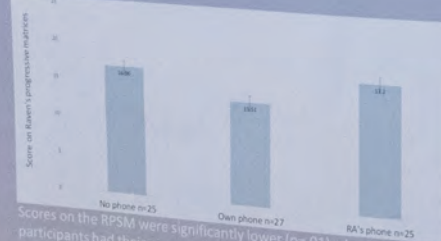
Conditions:

- Experiment 1 - phone present, phone absent, researcher's phone present
- Experiment 2 - phone present, phone absent, phone off
- Experiment 3 - recruited high and low technology users, randomly assigned



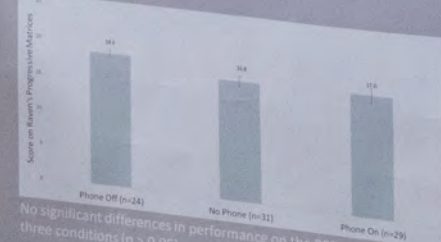
## RESULTS

### Experiment 1



Scores on the RPSM were significantly lower ( $p < .01$ ) when participants had their own phone in the room compared to when there was either no phone or the researcher's phone present.

### Experiment 2



No significant differences in performance on the RPSM across the three conditions ( $p > 0.05$ )

### Experiment 3



## DISCUSSION

- To answer the question of whether phone presence impairs fluid intelligence, the impact of the mere presence of smartphones on cognitive performance was investigated.
- This is the first study to investigate the impact of phone presence on cognitive performance in a laboratory setting.
- With this study, we found that phone presence impairs fluid intelligence.

## CONCLUSION

When working on tasks that require fluid intelligence, high technology users should put their phones away.

# MURC

## March 19 - 20, 2022

## MULTIDISCIPLINARY UNDERGRADUATE RESEARCH CONFERENCE

# 2022 PROGRAM GUIDE

Last updated: March 16, 2022

# LAND ACKNOWLEDGEMENT

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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 x̣ṃəθḳəỵ əṃ 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 race and racism 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 acknowledgement?](#)



# WHAT IS MURC?

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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.*

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## *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



# SCHEDULE

March 19, 2022

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Time	Event	Location
8:00 AM - 8:45 AM	Delegate Registration	CIRS Lobby
	Poster Presenter Registration	Marine Drive Lobby
	Oral Presenter Registration	West Mall Swing Space
9:00 AM - 9:45 AM	Opening Remarks <a href="#"><u>Keynote (Dr. Jennifer Grenz)</u></a>	CIRS 1250, Virtual
10:00 AM - 11:15 AM	Wave 1 Poster Presentations	Marine Drive Ballroom
	Wave 1 Oral Presentations	SWNG 105, 107, 109, 207
11:30 AM - 12:45 PM	Wave 2 Poster Presentations	Marine Drive Ballroom
	Wave 2 Oral Presentations	SWNG 105, 107, 109, 207
1:00 PM - 2:00 PM	Lunch & Panel Session <a href="#"><u>Inspiration Through Innovation</u></a>	CIRS 1250, Virtual
2:15 PM - 3:30 PM	Wave 3 Poster Presentations	Marine Drive Ballroom
	Wave 3 Oral Presentations	SWNG 105, 107, 109, 207
3:45 PM - 5:00 PM	Wave 4 Poster Presentations	Marine Drive Ballroom
	Wave 4 Oral Presentations	SWNG 105, 107, 109, 207

# SCHEDULE

March 20, 2022



Time	Event	Location
7:30 AM - 8:00 AM	Registration	Online (Zoom)
8:00 AM - 9:15 AM	Virtual Wave 1 Presentations	Online (Zoom)
9:30 AM - 10:15 AM	Ask Me Anything Q&A <a href="#"><u>Applying to Graduate Studies</u></a>	Online (Zoom)
10:30 AM - 11:45 AM	Virtual Wave 2 Presentations	Online (Zoom)
12:00 PM - 12:45 PM	Delegate Registration Presenter Registration	Marine Drive Atrium West Mall Swing Space
1:00 PM - 2:15 PM	Wave 5 Poster Presentations Wave 5 Oral Presentations	Marine Drive Ballroom SWNG 105, 107, 109, 207
2:30 PM - 3:45 PM	Wave 6 Poster Presentations Wave 6 Oral Presentations	Marine Drive Ballroom SWNG 105, 107, 109, 207
4:00 PM - 5:30 PM	<a href="#"><u>Workshop &amp; Closing Remarks</u></a> <a href="#"><u>Rogers 5G Research</u></a> <a href="#"><u>&amp; Closing Remarks</u></a>	ESB 1013, Online (Zoom)



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# KEYNOTE SPEAKER

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## 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.





# PANELISTS



## 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*

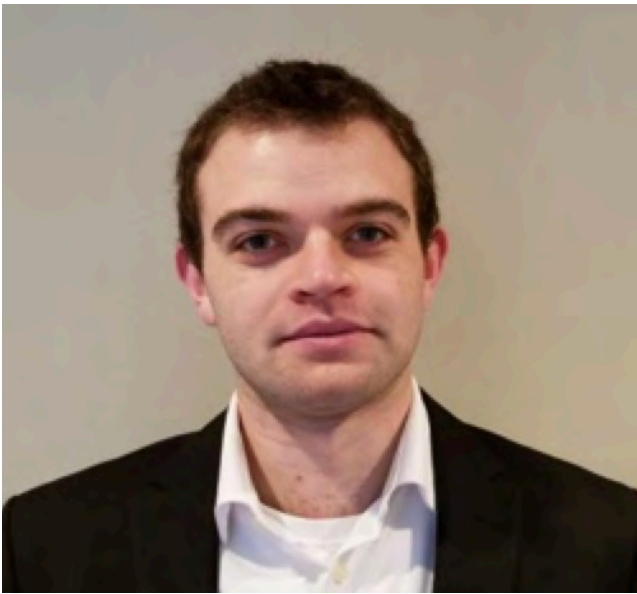
Shayda is passionate about scientific research and the ways that she can integrate her research pursuits into her medical practice with patients. Shayda's research is focused on determining how hormones affect aging, and more specifically the development of age-related comorbidities in women with HIV. 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 COLLABORATION

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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

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*Connect with Ijeamaka and ask your burning questions about research.*



## 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

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## 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 2021 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

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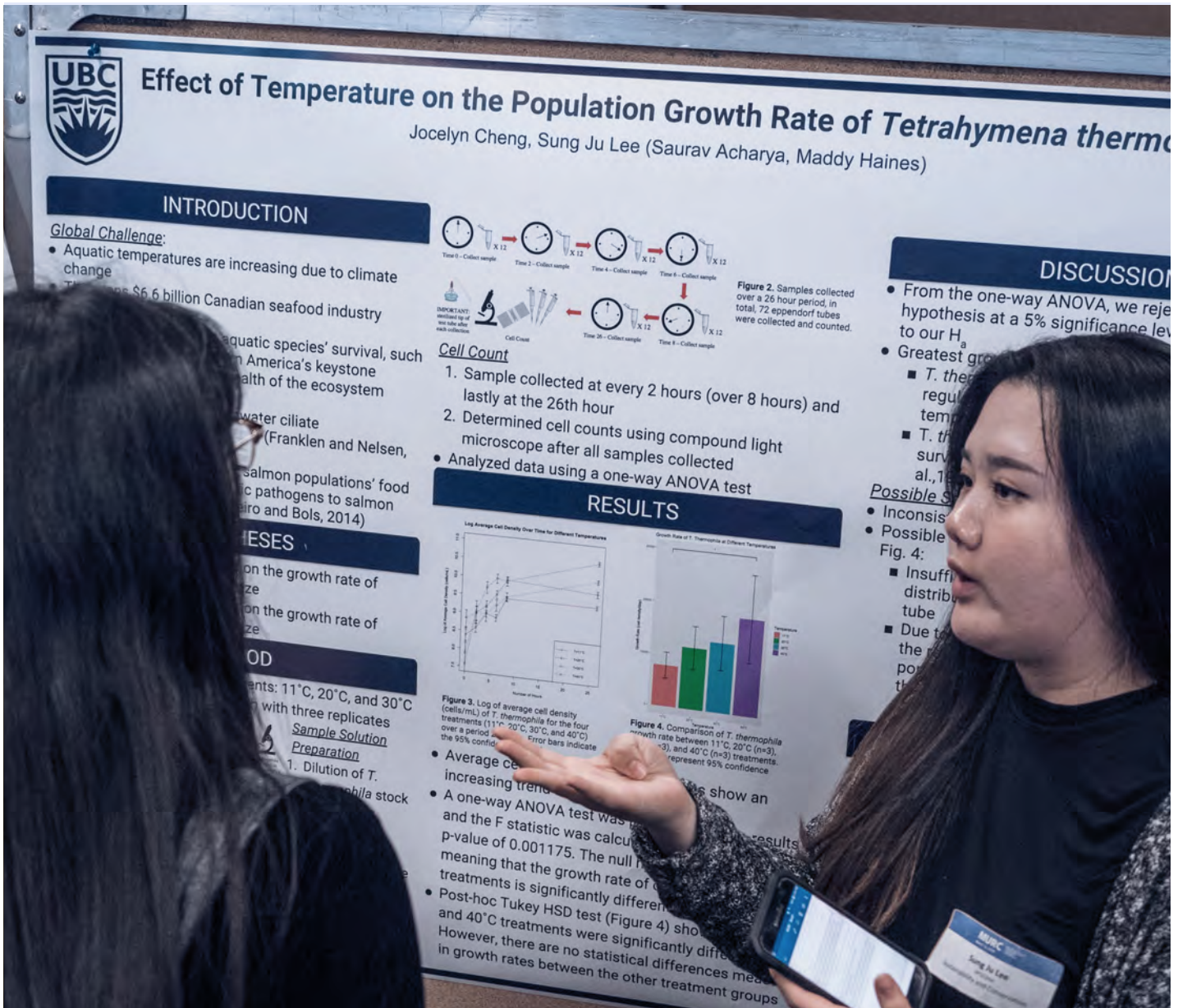
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# WAVE 1 ORAL & POSTER PRESENTATIONS

# WAVE 1 ORAL PRESENTATIONS

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## 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 Athee Bidawid

## SWNG 107

Analysis of Dendritic Arborization Neurons in the Yellow Fever Mosquito ( <i>Aedes aegypti</i> )	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
Modeling Complex Q-ball Collisions in 2-Dimensions	Muchen He Wei Tai
Mobile Device Usage Before and During the COVID-19 Pandemic	Livia Jonnatan

## SWNG 109

Characterizing Ring D Hydrolysis in the Mycobacterium tuberculosis Cholesterol Catabolism Pathway

Asana Imanpour

Suitability of a Post-Operative Bariatric Nutrition Teaching Tool

Patricia Angeles  
Clare Douglas  
Alexandra Soanes  
Alexandra Heidl  
Yolanda Wang

Inter-Organelle Communication: An Insight into ER-Mitochondria Contacts (MERCs)

Sana Ahmed

## SWNG 207

(Re)Discovering my Blackness: An Inquiry into the Decolonization of the Mind in Vancouver's Black Afro-Diasporic Community

Rehema Ivan

Development of Curricular Standards for Physical Activity Counselling and Prescription for People with Physical Disabilities

Chihiro Abe

Cytochrome P450-Reductase Fusions for Upgrading Lignin

Jerry He



# WAVE 1 POSTER PRESENTATIONS

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## Theme: Innovation and Technology

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

Brian Low  
Denise Chew  
Mido Luo  
Vania Kwan

Using Benford's Law to Assess Biodiversity Datasets

Yolanda Wu

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

Mohammed Al-Seragi

## Theme: Individual, Community, and Society

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?

Sofia Colmenares  
Jennifer Zhu  
Mina Lander

Rural Community Resilience Project

Shanze Chaudhry  
Payal Parti  
Angela Yang

The Novel UBC Health Advocacy Framework in Pharmacy Student Practice

Mojan Fazelipour  
Amy Dhatt

## Theme: Sustainability and Conservation

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

Emma Lam

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

Visal Saosuo  
Jessica Wijaya

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

Zihan Li

Economic feasibility of precision restoration on intensive agricultural lands of Iowa

Chuyi Zheng  
Wenwen Wang  
Zefan Liu

## Theme: Health and Wellness

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

Veronika Lewis  
Simran Chahal  
Divya Gupta

THE EFFECT OF STRUCTURAL ENRICHMENT IN MALE MICE: A SYSTEMATIC REVIEW

Carly Hilbert  
Bridget Woods

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

Parveer Pandher  
Anahita Seraji  
Juliette Sachet  
Nyla Kathol  
Kristina Kurvits

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

Georgia Green  
Leah Isfeld  
Doris Sun

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

Justin Wong

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

Gian Hermosura

Inflammatory factor, IL-1<sup>2</sup>, and diabetes; will it save you?

Isabelle Beggs  
Gazelle Sokhanran

Frontotemporal Dementia: a deeper dive into genetic status

Brianna Hou  
Ria Bhatt  
Kyrstin Lavelle

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

Sahibjot Daula  
Teaya Cabel  
Gurleen Litt

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

Catherine Wang  
Georgia Langdon  
Vanessa Lee

Inhibition of Platelet-Derived Growth Factors to Improve Acute Myeloid Leukemia Treatment.

Frederick Wang

Effectiveness of Backset Guidelines for Children in Booster Seats to Prevent Whiplash Associated Disorders

Genevieve Ah-Sen

# WAVE 2

# ORAL & POSTER

# PRESENTATIONS

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# WAVE 2 ORAL PRESENTATIONS

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## SWNG 105

COVID-19 vaccine hesitancy in Africa: A scoping review	Sangwook Michael Woo
Investigating the Role of ASD-risk Gene Orthologs in Habituation at 10s and 60s inter-stimulus intervals using <i>C. elegans</i>	Douglas Forrest Isabel Wilson
The Machine Learning Approach to Breast Cancer Subtype Classification	Rongxi Du Blaise Appolinary
Development of a safe immunogenic cell death-inducing vaccine for efficient treatment of breast cancer	Raha Masoudi Ali Nasserikhameneh Prannav Jain

## SWNG 107

Racialized Settlers and Their Role in Truth and Reconciliation	Peter Fang
Wandering in The Digital Age: How Does Out-of-home Mobility Impact Mood and Cognition in Young Adults?	Isaac Koenig-Workman
The Epistemology of Fetishizing Asian Women: The role of media, militaries, and moral panic in White violence	Blossom Cheng
Ungifted: Gifted Students' Identity and Career Development in Post-Secondary Education	Rachel Dupras
Spatial Legitimacy in Nehru's India: does secular space restrict subaltern sovereignty?	Anupriya Dasgupta

## SWNG 109

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

Nayanika Guvante

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

# WAVE 2 POSTER PRESENTATIONS

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## Theme: Innovation and Technology

Optimizing the Reliability of Wind Turbines Power Generation

Tim Chang  
Arian Arian  
Kent Wu

Development of an Omnidirectional Surrogate Neck

Genna Bonnor

Normal Map Estimation for Pixel Art Images

Roark Zhang

## Theme: Individual, Community, and Society

Understanding Canadian Perspectives Regarding the Deemed Consent Model for Deceased Organ Donation

Arjun Hothi Hothi  
Jay Banwait Banwait  
Mika Pascual 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

Creation of Educational Material and Implementation of the TLC-Act Drug Interaction Management Tool in Pharmacy Education.

Val Carvalho

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

## Theme: Health and Wellness

Investigating the Role of Employment Services, Mental Health, and Substance Use Recovery in Vancouver's Downtown Eastside Utilizing a Reflexive Approach	Kiana Popplewell
Hope for spinal cord injury patients: novel drug administration for treatment of spinal cord injury	Sana Samadi
An Examination of Depression and Anxiety Prevalence in Patients With Cystic Fibrosis in Vancouver	Moha Chaturvedi
Risk factors attributing to the rise in the incidence of colorectal cancer in Iran	Nima Danaei
The Impact of Genistein on the m6A RNA Demethylase ALKBH5 in Hepatocellular Carcinoma	Dahlia Parolin Yuexi Ma Natasha Ianicheva
The Association of Severe Mental Illness Disorders with Cervical Cancer Screening Frequencies in British Columbia	Aiman Atif Tina Huynh Zein Hedayati
The impact of Blood Flow Restriction exercise on post-op muscle development in athletes	Lila Bullock
MULTI-ANALYSIS OF ACE2 VARIANTS REVEALS INSIGHTS INTO COVID-19 DISEASE PATHOPHYSIOLOGY IN SUSCEPTIBLE POPULATIONS	Ryan Hong
A proposed mechanism of cardiotoxicity induced by the interaction of the chemotherapeutic medication Etoposide, ICRF-193 and Topoisomerase-2 (TOPO2).	Christopher Fischer- Labastida Joud Touqan
Pleasure in Pain: A Scoping Review on Potential Biological and Developmental Origins of Sexual Masochism	Cindy Zhang

# WAVE 3

# ORAL & POSTER

# PRESENTATIONS

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# WAVE 3 ORAL PRESENTATIONS

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## 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

Data-Driven Prospective Virtual Pre-Planning of Mandibular Reconstruction Surgery

Maharshi Panchal

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

Generative Adversarial Network (GAN) for Simulating Electroencephalography

Priyanshu Mahey

Integrative Model of Zinc Ion Homeostasis in *Saccharomyces cerevisiae*

Prompt Suathim

Grassroots Adoption of Cryptocurrency: Identifying Drivers of Uptake in Kenya and Nigeria

Arshiya Malik

## SWNG 207

Meta-analysis of epigenetics and proteomics for the discovery and comprehension of mechanisms for the treatment of leukemia

Thanh The Nguyen  
Siddhant Sharma

The Relationship between Nicotinic Antagonists and Anxiogenic Drugs on the Conditioned Fear Response

Payton Mackwood

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

Parneet Sekhon  
Janella Schwab  
Brenda Ma  
Myles Osenton

Improving mTOR Inhibitors as a treatment method for Acute Myeloid Leukemia

Susan Zhang

# WAVE 3 POSTER PRESENTATIONS

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## Theme: Health and Wellness

Anti-Neuroinflammatory Effects of Dietary Guar Gum on Experimental Autoimmune Encephalomyelitis	Elsie Wang
Managing Daily Responsibilities Among Collegiate Student-Athletes: Examining the Roles of Stress, Sleep, and Sense of Belonging	Quinn Storey
Skin microbiome and metabolome and its effects on health	Simon Zhu Barry Siu Marcus Liang
Investigating the Effects of a High Sucrose Diet and Time Restricted Feeding on Glucose Intolerance in C57BL/6 Mice	David Yang Jaqueline Julia Karimiha Amirhossein Moradi
The Effect of a Combination Therapy of Protease Inhibitors (Ritonavir and Atazanavir) on the Viral Load and Insulin Resistance of Patients Living with HIV	Shivani Mehta Sophia Shayan
Identification and Analysis of Epigenetically Regulated Prognostic Genes by Pterostilbene in Liver Cancer	Alice Zhang
Evaluating preliminary data visualization of an eye-tracking study	Samantha Ma
Differences in adolescent boys' and girls' perceptions and motivators behind their eating practices	Narges Bouzari Patricia Angeles Alicia Walch
NFAT5 Deficiency Attenuates IFN- $\beta$ Signaling Stress Granule Formations and Downregulates Inflammatory Cytokine Expression	Alireza Nasser Dehkharghani
Relationship Between Childhood Maltreatment and Substance Use in Individuals with Borderline Personality Disorder: A Systematic Review	Priya Johal

## Theme: Health and Wellness

The Effects of Early Adolescent Cannabis Use on Female Schizophrenia Onset	Tia Frazer
Heterogeneous drug response in patient-derived ovarian cancer organoids	Eric Liu
Study of “Epigenetic Predictor” genes expressions interworkings and similarities in ADHD	Steven Chen
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
Risk-taking Behaviour in Adolescent Cannabis Users	Preethi Gaunder



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# WAVE 4 ORAL & POSTER PRESENTATIONS

# WAVE 4 ORAL PRESENTATIONS

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## SWNG 105

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

Disha Gupta  
Doua Ismail  
Kristin MacDonald

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

Alonso Daboub  
Enda Cakmak  
Inaya Bhimani

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?

Hoai Huong Nguyen

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

Karla Guevara

Effects of Androgens on Behavioural Flexibility and Tyrosine Hydroxylase Expression

Cameron Kelsey

## SWNG 107

Development of a UV-LED based air purification system

Steven Chin  
Trevor Daykin  
Ian Holzman

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

David Shifflett  
Dawson Penner

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

Alex Liang

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

Shannon MacFarland

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

Giuliana Kim  
Annudesh Liyanage

## SWNG 109

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

Cameron Leong  
Mina Han  
Maple Lei

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

Kevin Wang

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

Gwen Farm

## SWNG 207

Investigating protein interactions and their rate of decay.

Alandra Moosmann  
Mendez

Neural pathways underlying Drosophila short term visual memory

Dennis Truong

On Trust and Immigration: Understanding Immigrants as Experts in their Field

Aysan Dehghani

Institutionalizing Queerness: Refugee Claims in Canada's Asylum Apparatus

Esme Stumborg

# WAVE 4 POSTER PRESENTATIONS

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## 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

Finding the Fastest Highway Paths: Traffic Light Percolation

Kevin Liu  
Kelly Chen  
John Chen  
Jason Tang

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

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

Developing an Online Resource for Safe Active Recreation for Families of Children with Autism Spectrum Disorder.

Rebecca Anderson  
Paige Dafoe



## Theme: Sustainability and Conservation

Assessment of the Bioconcentration Factor of Butylated Hydroxytoluene in *Daphnia magna*

Mark Zhang  
Ana Ferreira Granja  
Justin Chan

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

Vanessa Leibel  
Ana Timpano

Canadian Veterinarian Attitudes Towards Surplus Calf Management

Amalia Urloiu  
Jillian Hendricks

Statistical air pollution exposure models to address community environmental health concerns

Nika Martinussen

## Theme: Health and Wellness

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

Natalia Bereznicki

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

Christine Chen

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

Carolina Ricardo

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

Bill Wang

PARD3 and Centrosome Positioning

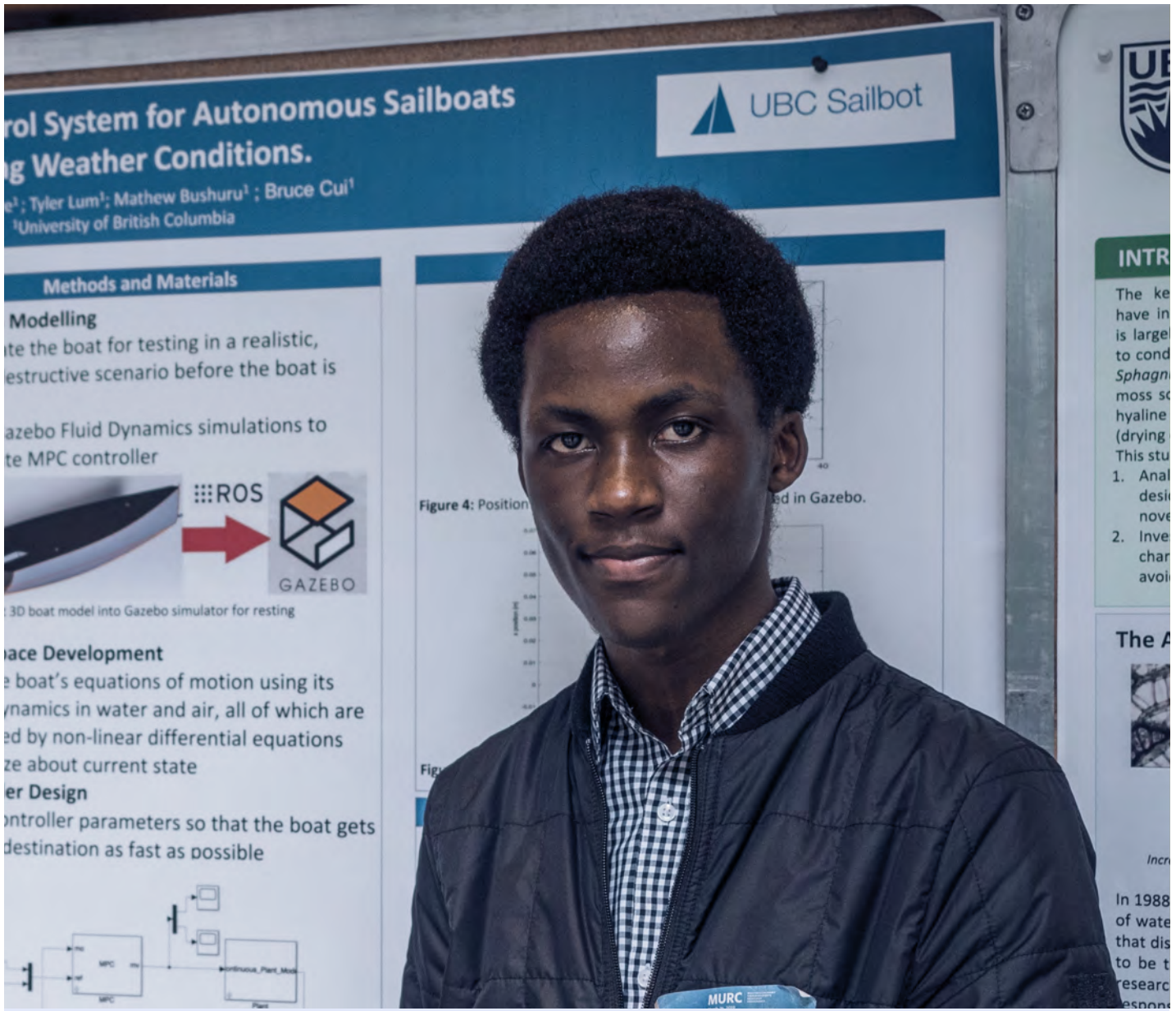
Quirina Thompson  
Miyuki Hui  
Glen Bayraktar

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

Leela Moza  
Shreya Chaturvedi

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

Angela Lee



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# WAVE 5 ORAL & POSTER PRESENTATIONS

# WAVE 5 ORAL PRESENTATIONS

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## SWNG 105

Functional outcomes for the aging population after complex head and neck reconstructive surgery	Jamie Kwon
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

Know your limit, play within it: An examination of moral incongruence and rationalization among gamblers	Eliscia Sinclair
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
Connecting with Strangers: The Role of Social Signalling	Charul Maheshka

## 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

## SWNG 207

Effects of Temperature And Hypercarbia On Egg Shell Thickness In Podarcis muralis

Fritzi Chandrakumar  
Natalie Ma

Project Tree Hole: Using Ecological Microcosms to Study Urbanization

Noam Harris

Arboriculture and Wildlife: Supporting Wildlife in the Urban Landscape

Alex Martin

Amyloid fibril formation and gelling functionalities of lentil protein

Vivian Zhang

# WAVE 5 POSTER PRESENTATIONS

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## 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

Model of Climate Change Activism

Thiago Amin  
Ruth Atagbuzia

The Impact of Managed Honeybees on Native Pollination Services

Tatum Narode  
Teagan Maclachlan  
Emily Husken  
Hin Chan

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

Tyson Mukai  
Steven Zhang  
Leticia Queiroz  
Raymond Raffaele

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

Sam Dang

Breadfruit leaf and Male inflorescences extracts inhibit *Cutibacterium acnes*

Ruhi Mander  
Simona Mastroianni

Microbial degradation of microplastics in wastewater treatment plants

Madalena Cunha Rocha  
Jiayi Shi  
Mahak Arora  
Jayni Chang  
Nadiya Hasan

## 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

Jacob Gravelle

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

Preet Kang Singh

Role of glycolysis in Venetoclax drug resistance in p53 mutated versus non-mutated Acute Myeloid Leukemia

Anjali Parthasarathy

Sensation Seeking and Adolescent Cannabis Use

Elena Greenall

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

Linda Jiang  
Nathan Li

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

Svetlana Zivadinovic  
Bradley Xiang  
Erin Reeder  
Liam Arroyal  
Justine Hodson

# WAVE 6

# ORAL & POSTER

# PRESENTATIONS

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# WAVE 6 ORAL PRESENTATIONS

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## 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

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

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



## SWNG 109

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

## SWNG 207

Brewing Up Taste: Investigating the Emergent Craft Beer Industry	Ethan Shapiro
Small Modular Reactors and the low-carbon economy	Noah Jantz
Decolonizing Water	Brianna Ragsdale Marcus Shew
“Chinese Beauty”: A Close Reading on The Feminizing Portrayal of Male Chinese Characters in Japanese Anime	Dalia Xu

# WAVE 6 POSTER PRESENTATIONS

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## Theme: Innovation and Technology

Self-Assembly of Nano-sized DNA Arms

Eashan Halbe  
Miguel Tsai  
Rachael Nicholas  
Ethan Rajkumar

Modifying Arabidopsis Thaliana Mucilage Composition to Alter Drought Tolerance

Amy Wong

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

Mariana Hofmann

## Theme: Individual, Community, and Society

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

Jasmine Manango

Student and Faculty Perceptions of Student Workload in the E2P PharmD Program

Heather Brodoway

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

Tamara Luistro

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

Ellysa Paskalitsa Smith

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

Radha Bazaz

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

Andre Aradei  
Jenny Kim

## Theme: Sustainability and Conservation

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

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

Brendan Hansen

## Theme: Health and Wellness

The effects of gene expression regulation on memory dysfunction in temporal lobe epilepsy

Sophia Van Cuylenborg  
Lily Chen  
Sam Sidhu  
Angelina Markovic  
Rainbow Charoensuk

The Role of Social Distancing, Theory of Mind, and Social Substitution Behaviours on Children's Socioemotional Wellbeing

Stefanie Ng

Understanding the SARS-CoV-2 Infection: Which Immunological Factors Can Explain Variations of Severity?

Arsh Jassal

Precarious work as a determinant of gender-based health inequalities: a systematic review

Tamara Rodney-Brathwaite

How does alcohol abuse increase the risk of Alzheimer's disease later in life?

Naomi Choong  
Avah Rustomjee  
Ngaa Ndachena  
Arzoo Dullat

Role of Selective Salpingography and Fallopian Tube Recanalization in Infertility Treatment

Amit Sharma

Development of an evidence-informed knowledge translation tool to facilitate resistance training prescription delivery for people with rheumatoid arthritis

Davin Hu

Investigating the role of oxytocin on vCA1 neurons and social memory.

Sherouk Shehata  
Gurleen Gill  
Arda Sinecen  
Jessica Luo

Intimate Partner Violence Related Brain Injury in Canadian South Asian Women

Jaskarn Dhaliwal

Analyzing Machine Learning Models to Classify Triple-Negative and Non-Triple-Negative Breast Cancer

Rithika Nair  
Emma Heath  
Youqing Luo

# VIRTUAL WAVE 1 PRESENTATIONS

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# VIRTUAL WAVE 1 PRESENTATIONS

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## ROOM 1 ([ZOOM LINK](#))

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 <i>Drosophila</i>	Ariel Qi
How is Volunteering Associated with Reduced Mortality? Exploring Underlying Pathways in a Longitudinal Cohort Study of Older US Adults	Rachel Leong
The Effects of Health Literacy on Quality Of Life of People with Chronic Obstructive Pulmonary Disease	Kira Jones

## ROOM 2 ([ZOOM LINK](#))

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
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

### ROOM 3 ([ZOOM LINK](#))

Interactive Effects of Salinity and Temperature on *Evasterias troschelii*

Jessica Li

Long-Term Food Education in BC

Elena Martin Zanuzzi  
Caroline Baldwin

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

Sakshi Sahakari

Predicting future *Pseudotsuga menziesii* range on Vancouver Island based on measurements of changing climate conditions and genetic sub-populations

Belen de Schutter  
Bill Zou  
Jasmine Hathway

Do Invasive Species Benefit More From Biofertilizers?

Munthha Shoaib

### ROOM 4 ([ZOOM LINK](#))

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

Lynda Li

Examining Attachment Styles in Hookup Culture

Aida Ardelean

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

Anna Mylvaganam  
Emily Mittertreiner

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

Jennifer Szutu

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

olly Benna  
Rwittika Banerjee  
Sagorika Haque

## ROOM 5 ([ZOOM LINK](#))

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

Elif Eren

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

Bennett Tan

Hard Negative Learning for Rapid and Sensitive Steroid Annotation in Biospecimen

Cindy Shi

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

Sahar Zandi Nia

Filmmaking and its role in scientific developments

Aakash Anantharaman

## ROOM 6 ([ZOOM LINK](#))

Importance of the participation of women in clinical research

Giselle Mirfallah

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

Simone Goldberg

Reduced Epigenetic Age in Older Adults Who Volunteer

Cherise Kwok

Dysfunctional Beliefs About Sleep Aggravate Insomnia Among Individuals with Inflammatory Arthritis

Emilie McGuire

Application of Random Forest in Predicting Breast Cancer Progression

Lotus Wei

## ROOM 7 ([ZOOM LINK](#))

Fluctuation temperatures as a predictor of eastern spruce budworm outbreaks

Emily Black

Manager Sentiment and Returns in the Canadian Equity Market

Catherine Li

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

Annie Yu  
Vianne Chang  
Rana Ghadymimahani  
Eden Viveiros

A mixed reality guidance tool for medical training

Jay Jang  
Vanessa Lo

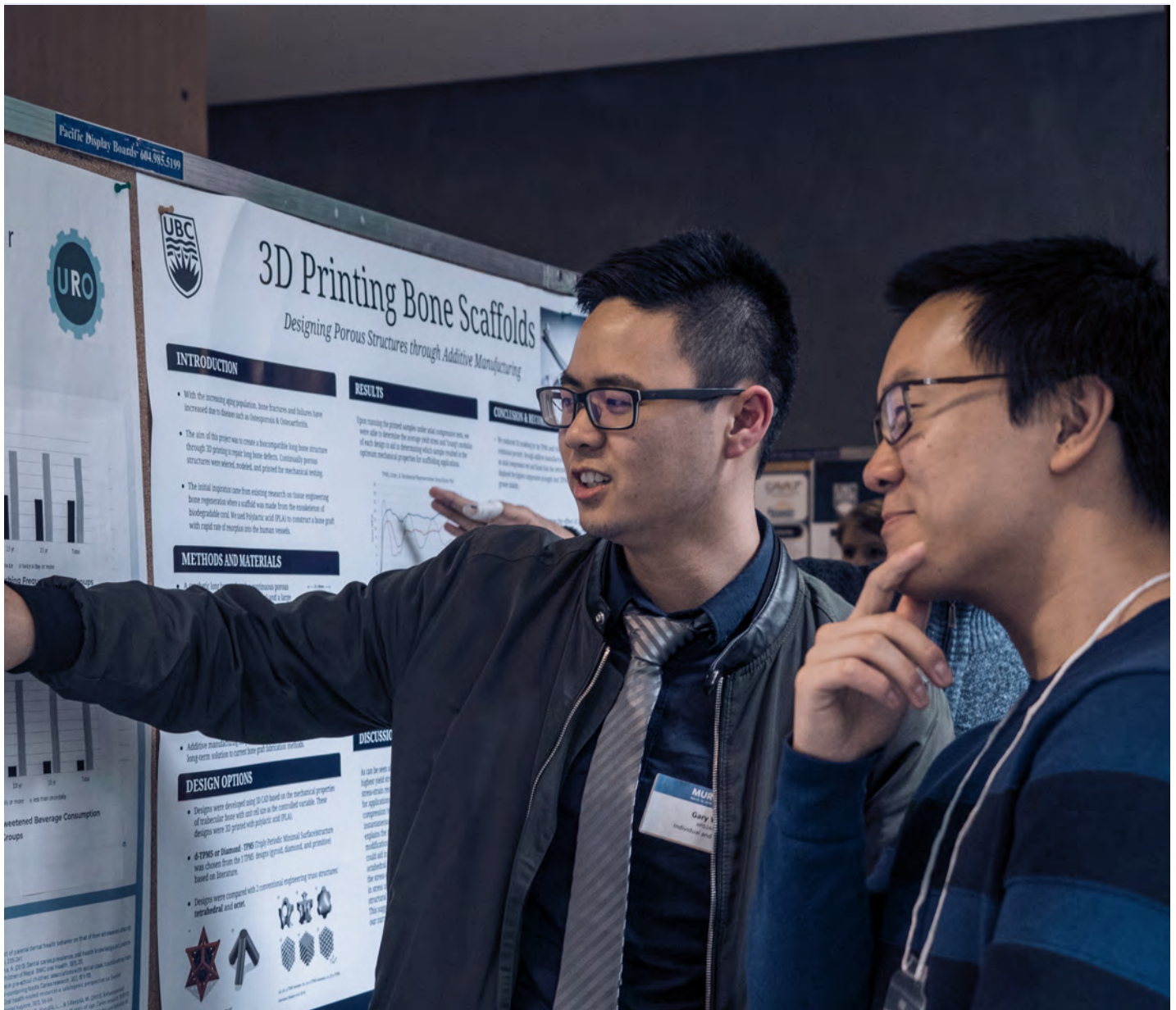
Designing Health Care Educational Materials for South Asians in Canada

Jasleen Brar  
Reeva Bhandal

Increasing Lipid Yield in Microalgae for the Production of Biofuels

Ruth Yu  
Jackie McDougall  
Nikita Sharma  
Gabrielle Mew





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# VIRTUAL WAVE 2 PRESENTATIONS

# VIRTUAL WAVE 2 PRESENTATIONS

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## ROOM 1 ([ZOOM LINK](#))

Prenatal triptan use for migraine and risk of adverse child neurodevelopment: A systematic review	Maggie Yang Sunny Park
The study of the frozen heart and glucose distribution in Wood frogs.	Jessie Li Sierra Jensen Anushka Rao
Evaluating the application of a complexity framework to the development of educational patient cases at different levels of complexity.	Kanika Khosla
Early Detection of Preeclampsia using MicroRNAs and Transthyretin Levels in the Plasma	Paarsa Salman
Sex differences in the effects of chronic unpredictable stress on negative cognitive bias and neural activity in the amygdala and nucleus accumbens	Cherise Kwok

## ROOM 2 ([ZOOM LINK](#))

Video-Based Respiratory Rate Estimation for Infants in Low Resource Settings	Stephanie Quon
Genome-wide association mapping of red raspberry fruit colour	Erjun Shen
Impact Analysis of a Rainwater Harvesting System for Northern BC Communities	Sharlene Santiago Anushika Jain Megan Dale
AI Darcy: Finding generalizable equations for hydrology via AI Feynman	Elena Wang Blanche Lan
The Effects of Substrate Texture and Salinity on <i>Aedes aegypti</i> Egg-Laying Site Preferences	Lauren Semkow Annie Zeng

### **ROOM 3 (ZOOM LINK)**

EDUCATIONAL ATTAINMENT AS A PATHWAY TO POOR MENTAL HEALTH OF PARENTS IN FRAGILE FAMILIES: EXPLORING THE MEDIATING EFFECT OF FOOD INSECURITY

Kyara Liu

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

Brenda Zou  
Olivia Burton

The Chance of Complying Based on Perceived Wealth

Julio Camargo Silva  
Mark Parinas

Illusory Superiority in BC Undergraduates

Wendy Cheung  
Stephanie Chow  
Cecilia Liu  
Chloe Siu

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

Ava Katz

### **ROOM 4 (ZOOM LINK)**

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

Mona Behrouzian  
Yu Chi Lin

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

Peter Chen  
Isla Xiao  
Sijan Poudel  
Samin Alighanadi  
Tracy Ngo  
Lynn Shibata  
Tina Nguyen

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

Anna Bernath

Short-term Organ Culture of Rat Seminiferous Tubules

Kassandra Zhou

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

Greta Jang

## ROOM 5 ([ZOOM LINK](#))

Heavy metal concentration from different ecosystems at UBC farm

Corrine Zhu  
Stephanie Xie  
Luke Ni

The Mysteries behind British Columbian Chinook Salmon

Antonio Dias

Identifying transcriptomic changes in glial cells in Alzheimer's disease

Tiffany Huang  
Zachary Ferguson  
Delphine Zhou  
Carmen Choo

CHINs up for CHINook Salmon and Orcas

Justin Tung  
Joshua Fan  
Noah Abajian

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

Roy He  
Harry Zhang  
Emerald Ngo  
Chloe Pi

## ROOM 6 ([ZOOM LINK](#))

Long Term Impact of Salicylic Acid on Youthful Skin

Ashley Jang  
Gunkaar Sekhon  
Judith Kan

Tissue clearing as a method to investigate brain injury

Sanraj Singh

Domesticated Cognition

Shab Molan

Effects of testosterone on behavioural flexibility in male rats

Esther Choi

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.

Aanisah Golam  
Halle Golding

## ROOM 7 ([ZOOM LINK](#))

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

Vianne Chang  
Rana Ghadymimahani  
Eden Viveiros  
Annie Yu

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

Requirements specification for a makerspace for rural communities in British Columbia

Pengpeng Chen  
Congrui Gu

Archaeology of Fragmentation: A Middle Shang Case

Ashish Giri  
Emily Mayzes-Kotulla