

HBI, ACHRI & Owerko Centre	
August 28, 2020 Summer Student Symposium	
zoom links: https://cumming.ucalgary.ca/summer-student-symposium	
9:00 - 9:10	Opening Remarks
9:10 - 10:10	10 Minute Oral Presentations - concurrent sessions
Basic Science Research	
1 Hiba Mahmood	Proliferation of Porcine Undifferentiated Spermatogonia in Co-Culture Conditions
2 Rohit Arora	Studying reindeer reveals mesenchymal transcription factors that determine whether wounded skin will scar or regenerate
3 Lauren Coulombe	A Mechanistic Explanation for the Benefits of Exercise in Chronic Neuropathic Pain
4 Qandeel Shafqat	Non-Invasive Detection of Persistent Brain Hypoxia in Multiple Sclerosis: A Near-Infrared Spectroscopy Study
5 Marcus Pehar	Dexmedetomidine: A Potential Alternative to Conventional Anesthetics
Clinical Research	
1 Taylor Groulx	Physical Activity and Psychological Well-Being in Pregnant Individuals During the COVID-19 Pandemic
2 Isha Gill	Psychological Distress in Youth with Refractory Concussion Symptoms: Identifying Treatment Targets
3 Riley Bohach	A characterization of the literature on the socioeconomic burden of rare diseases: preliminary results from a scoping review
4 Divya Goel	Pain in youth with slow recovery from concussion
5 Irene Manalastas	White Matter Microstructure and Externalizing Symptoms in Young Children with Prenatal Alcohol Exposure
Translational Research	
1 Abraham Hussein	Online Simulation Curriculum to Prepare Interdisciplinary Medical Teams for Electronic Dance Music Festivals
2 Claire Rockliff	The effect of concussion education and/or legislation on knowledge, attitudes, beliefs, and behaviours related to concussion management in sport among non-health care providers: a systematic review.
3 Sartaj Sidhu	Using wearable technology to qualify adherence to a neuromuscular training warm-up in youth basketball athletes
4 Brooklyn McDougall	Using Quantitative Susceptibility Maps to Compare Baseline Iron Deposits, Brain Atrophy and Cognition of Transient Ischemic Attack Patients
5 Jessica Ritchie	Head-mounted accelerometer detects decreased postural stability in self-reported concussion
10:20 - 10:30	Break
10:30 - 11:30	3 Minute Oral Presentations - concurrent sessions
1. Computational Methodology/Bioinformatics/Genetics	
1 Ana D'Aubeterre	Invaders of the upper genital tract: conservation between vaginal pathobionts and bacterial STIs
2 Elize Tran	In-Vivo Assessment of Intraluminal Thrombus Thickness as Aid for Rupture Risk Estimation in Abdominal Aortic Aneurysms.
3 Samuel Robertson	Lightsheet Microscopy Segmentation for Shape and Cell Proliferation Analysis
4 Louisa Krile	Electroencephalographic biomarkers and response to theta burst stimulation in major depressive disorder
5 Heidi Morrison	Comparison of the Evenson and Romanzini ActiGraph Algorithms During a Standardized Buffalo Concussion Treadmill Test in Concussed Youth
6 Raziq Kassam	Utilizing Brain Computer Interface (BCI) for Robotic Painting
7 James Chen	Telekinesis in Technology: Using Brain-Computer Interface for Power Mobility
8 Emma Gillesse	Use of Whole Genome Sequencing to Resolve Suspected Autosomal Recessive Disorders
9 Caleb Tong	Let's capture the curve: Categorization of Structure-based Constitutive Models for Aortic Wall Tissue
10 Linda Pallotto	Identifying Genes and Mutations That Contribute to Albendazole Resistance in Nematodes
2. Pediatrics/Development and Developmental Disorders	
1 Rylen Williamson	Evaluating the Zero Tolerance for Head Contact & Policy Change on the Incidence of Head Contacts, Penalties Assessed and Player Behaviour in 13-14 Year Old Ice Hockey Players
2 Andrew Tran	Radiotherapy and Social Functioning in Survivors of Pediatric Brain Tumor
3 Stella Heo	Individualization of Functional Neural Networks During Early Childhood
4 Mica Marbil	Rates and types of posttraumatic headache after pediatric mild traumatic brain injury
5 Alexis Cairo	High Participation and Injury Rates in Female Youth Team Sports: An Opportunity for Prevention
6 Cindy Zhang	PDE4B as a potential target for the treatment of Dravet syndrome
7 Paolo Pador	Impact of COVID-19 on child and adolescent mental illness: A rapid review and narrative synthesis.

8	Janelle Wai	Autism Spectrum Disorder and Wearable Technology: Validation of a Health Gauge Watch
9	Ethan Kao	A Candidate Gene Study of Obsessive-compulsive and Internalizing Behaviours in Childhood OCD
10	Zainab Osman	Assessing the Inter-rater Reliability of Google Street View Auditors Investigating Child Bicyclist Injury Sites in Three Canadian Cities
3. CNS injury/Neurodegeneration/Mental health		
1	Sara Xue	Effects of ATP and interleukin-1beta on inflammation and neurodegeneration in the spinal cord white matter of mice
2	Bhanvi Sachdeva	Uncovering the Role of the Cerebellum in Higher Cognition and Cognitive Disorders
3	Ayden Hansen	Increased NIRS Light Scattering in the MS Population - Possible Physiological Insight into the MS Brain
4	Steven Jiang	Development of a clinically viable multimodal neuroimaging protocol: Integration of electroencephalography.
5	Rafael Sanguinetti	National Survey of Mental Health and Suicide in People with Spinal Cord Injury
6	James Baysic	Using wearable technology to investigate soccer players movement patterns during change of direction maneuvers
7	Dylan Guan	Mild Behavioral Impairment is Associated with Dual-Task Gait Cost: Results from the COMPASS-ND Study
8	Monika Sohal	The impact of journaling as a prescription for the management of symptoms associated with mental illness: A Systematic Review and Meta-Analysis
9	Muhammad Malik	Developing a two-way mobile communication platform for spinal cord injury and other neurological conditions.
10	Raven Yip	Evaluating sleep in adults with persistent post-concussion symptoms
4. Population and Community Health/Epidemiology		
1	Sarina Aryal	Examining Inter-rater Reliability of Google Street View when Assessing Road Characteristics on Child Bicycling Routes Leading to Injury
2	Ally Sobry	The Concussion and Injury Burden in Sledge Hockey: Considering Grassroots to Elite Participation
3	Hannah Curlock	Walking aid training as a clinical competence in Canadian academic entry-to-practice programs
4	Catherine Lowe	Communication Technology Use, Age, and Depressive Symptoms during COVID-19
5	Sarah Graver	Are ultra-short-term measures a valid surrogate for short-term heart rate variability metrics?
6	Julianna Park	Prevalence of Multiple Forms of Sexting Behavior Among Youth: A Meta-Analysis
7	Jeshna Kumari	Effects of Mindfulness-based Cognitive Therapy (MBCT-PD) on Cortisol Levels in Pregnant Women Suffering Psychological Distress
8	Brooklynn Fernandes	Optimizing the Diagnosis and Management of Dementia within Primary Care
9	Srijal Gupta	Injuries, risk factors and prevention strategies in BMX: A Scoping Review
10	Claire Wamboldt	Parkour Wall Run Take-Off
5. Cellular, Molecular and Microbial Biology/Immunology and Inflammation		
1	Marina Liu	Characterization of immune cells within the tumor microenvironment of glioblastoma mouse model
2	Fatima Saleem	Unraveling the role of monocytes in infection and inflammation
3	Mikyla Callaghan	The plasticizer, bisphenol S, potentiates adipogenesis via DNA methylation with potential link to oxidative stress
4	Simran Sandhu	Engineering Rhodotorula toruloides to degrade cellulose: a synthetic biology solution to Vitamin A Deficiency
5	Azin Dolatabadi	Hidden truth about Atopobium vaginae: defining the functional diversity of three novel pathobionts
6	Nimaya De Silva	The Development of Complementary Auxotrophic Strains As a Biocontainment Strategy For Genetically Engineered Organisms
7	Hanji Baek	(Review) The Yin and Yang of LPS in the Brain
8	Nilakshi Debnath	Opsins; Illuminating Circadian Rhythms
9	Nicole Joe	Serum Cytokine Concentration and Clinical Outcomes Following Traumatic Brain Injury
10	Julia Casorso	Assessing natural sources of ethanol in wild primate foods: testing key predictions of the dietary exposure hypothesis
11:30 - 12:30		Lunch Break
12:30 - 13:45		Poster Presentations - concurrent sessions
1. Computational Methodology/Bioinformatics/Genetics		
1	Leslie Cao	Reindeer and humans share mesenchymal cell states that predispose wounds towards scarring or regeneration
2	Arshroop Khaira	Evaluation of Two Different Software Packages to Identify Aorta-Specific Differentially Methylated Regions of DNA
3	Kandace Peroramas	Genetic Determinants of Treatment Response in Patients with Obsessive-Compulsive Disorder: A Systematic Review
4	Min Jae Kim	Genome-wide association study of obsessive-compulsive traits in paediatric population
5	Ryan Lee	MediTriage Assistant - Leveraging Medical Ontologies for Preliminary Diagnoses

6	Andy Tran	The impact of primary immunodeficiency informed molecular landscape on the biology and prognosis of refractory childhood and adult malignancies
7	Nadia DiMarzo	Characterizing zebrafish harboring mutations for an ultra-rare pediatric epilepsy
8	Harshil Shah	Description of neurodevelopmental phenotypes associated with pathogenic variants in ten genes: A Scoping Review
9	James Gardner	Algorithm for the Automated Detection of Ventilatory Thresholds
10	Olesya Dmitrieva	A Systematic Review of the Effect of Transcranial Direct Current Stimulation (tDCS) on Reinforcement Learning and Risky Decision-Making in Healthy Young Adults
11	Parker Townes	Genetic predictors of mental health outcomes in young, socially isolated individuals amongst the COVID-19 pandemic: a systematic review
2. Pediatrics/Development and Developmental Disorders		
1	Brandon Huynh	Functions of nitric oxide in mouse testicular development
2	Chloe Fichter	The role of the gut microbiota in birth condition-associated cognitive outcomes
3	Kira Feighan	Impacts of gestational BPA exposure on adult hypothalamic neurogenesis
4	Faith Keister	Targeting cerebral perfusion to prevent intraventricular hemorrhage in extremely preterm neonates
5	Marina Ferreira	Mood and food in preschoolers: Links between fiber intake and explosive emotional behavior
6	Shannon Oosterbaan	Inhibitory Control in Preschool Children: Performance-Based Vs. Parent-Report Measures
7	Elana Sarabin	How Working Memory and Attention is Related to Cortical Thickness in Children with Attention-Deficit/Hyperactivity Disorder
8	Dong Mei Hou	Automating Cross-sectional Area Measurement of Lateral Ventricles
9	Maia Ross	Does atypical sensory sensitivity associate with social and behavioural symptoms in children with and without ASD?
10	Kailey Newel	How does a sport related concussion affect physical activity in adolescent population: A Systematic Review
11	Amy Chen	Laying the foundation to promote physical activity for children and adolescent affected by cancer
12	Shinde Karan	Assessment of Cortical Morphology After Perinatal Stroke
3. CNS Injury/Neurodegeneration/Mental health		
1	Sara Housh	Cerebrovascular Reactivity to Carbon Dioxide in Patients with Cerebral Amyloid Angiopathy and Alzheimer's Disease
2	Nina Pavlovic	The Effect of Fatigue on Head Impact Biomechanics in Professional Rugby League Athletes
3	Moriah Edge-Partington	The Effects of Early Life Stress on the Serotonin System
4	Hannah Smith	The Influence of Tackling Technique on the Magnitude of Head Impact Accelerations in Professional Rugby League Athletes
5	Jason Yip	Analysis of stroke recovery using two robotic assessments of rapid motor decision making and action
6	Ali Babwani	Understanding the Overlap and Distribution of Motor Maps in Children
7	Jerald Yuan	Gait Variability in Cerebral Amyloid Angiopathy and Alzheimer's disease
8	Arijit Lodha	Determining the relationship between the Chedoke McMaster Stroke Assessment and a visually guided reaching task in individuals with stroke.
9	Jake Ruschkowski	The relationship between salivary cortisol levels and telomere lengths following pediatric sport-related concussion
10	Megan Wilson	How does sport-related concussion alter EEG measures and affect fNIRS assessments; findings from two Systematic Reviews
11	Lydia Cho	Evaluating the effects of transcranial magnetic stimulation using functional connectivity in individuals with Post-traumatic stress disorder (PTSD)
12	Daria Merrikh	Repetitive Transcranial Magnetic Stimulation (rTMS) as a Treatment for Attention Deficit Hyperactivity Disorder (ADHD): A Systematic Review
4. Population and Community Health/Epidemiology		
1	Monica Russell	Effect of Axillary Crutch Length on Triceps Activation During Swing-Through Gait
2	Jaclyn Anderson	Window of opportunity: sexual swellings as ovulatory signals in the olive baboon
3	Benjamin Leggett	Assessing postural stability using wearable technology in youth soccer players
4	Tiffany Pham	Patterns of Cannabis Use Before and After Legalization in Canada
5	Tyler Yip	Benefits of Cyclist Green Wave Systems using Wearables
6	Aisha Iqbal	Promoting Better Cardiovascular Health in Calgary
7	Stephanie Bernier	A Systematic Review of School-Based Interventions to Improve Peer Relationships for Children with ASD
8	Akash Khaira	Understanding Chronic Pain from Knee Osteoarthritis after Total Knee Arthroplasty
9	Amy Braun	Bullying and Social Functioning, Schemas, and Beliefs among Youth at Clinical High Risk for Psychosis
10	Anjola Adeboye	The Reliability and Validity of Google Street View for the Assessment of Intersection Characteristics on Child Bicyclist Routes
11	Kate Manns	Comparing the Efficacy and Safety of OnabotulinumtoxinA Injections in the Treatment of Idiopathic Overactive Bladder between Relatively Younger and Relatively Older Patients
12	Robert Graham	The Effect of a Rule Change on Injury and Concussion Prevalence in Youth Volleyball
5. Cellular, Molecular and Microbial Biology/Immunology and Inflammation		
1	Peter Gobran	Infant DNA methylation and upper respiratory infections at 18-months of age

2 Kate Armstrong	Optimization of a robust pipeline to detect subtle changes in microglia morphology and activation states in germ-free mice
3 Ali Javed	Analysis of protein-protein interactions between fungi and mice via computational systems
4 Harleen Sanghera	A Brief Parenting Intervention and Mother-Child Immune Cell Gene Expression: A Randomized Control Trial
5 Rylie Essington	Diagnostic Patterns seen in Non-Progressive, Childhood Primary Angiitis of the Central Nervous System
6 Shi Hyun Jeong	A Novel Strategy to Treat Cardiac Dysfunction Associated with Acute Myocardial Infarction
7 Ye-Jean Park	Mutations of C. elegans morphogenesis
8 Nikol Tretiakov	Gestational Bisphenol A Exposure Induces Sex Specific Microglial Changes in the Embryonic Hypothalamus
9 Arzina Jaffer	Tissue-resident fibroblasts exacerbate local inflammation during fibrotic skin wound healing
10 Tina Ram	Primary Cilia impact on Astrocyte Development
13:45 - 14:00	Break
14:00 - 15:00	Keynote speaker Dr. Pierre Wijdenes, PhD: Postdoc, Biomedical Engineering Graduate Program
15:00 - 15:45	Awards & Closing Remarks