2026 SURE Symposium

Poster Session Program
Wednesday, August 26, 2026
Convocation Hall
Peter MacKinnon Building, 105 Administration Place
University of Saskatchewan

Schedule at a Glance

Time	What is happening
8:30 AM	Registration desk opens
9:00 AM	Opening remarks, Convocation Hall
9:30 to 11:00 AM	Session 1
11:30 AM to 1:00 PM	Session 2
1:00 PM	Pizza lunch
1:30 to 3:00 PM	Session 3
3:00 PM	Reception with appetizers, Convocation Hall
3:30 PM	Awards ceremony
4:30 PM	Symposium closes

About the Program

Poster presenters are listed alphabetically by first name within each session. A full alphabetical **index** of presenters appears at the end of this program.

Updated August 26, 2026

Session 1

9:30 to 11:00 AM

Alexander Herman

Board 1

Figure it out: how in-class sessions impact students understanding of topics taught in class

Supervisors and collaborators: *Dr Reisha Peters*

We (Reisha and I) gathered and processed student surveys done after in-class problem sessions to determine what impact they have on student understanding of topics taught in class and to what extent. my project is the analysis of this data and the conclusions I have drawn from this data.

Arsh Minhas

Board 2

Developing a murine hemangiosarcoma model using transformed H5V cells...

Supervisors and collaborators: *Dr. Gurpreet Aulakh*

Developing a human hemangiosarcoma cancer model using transformed H5V cells injected into live mice. (In progress: Experiment is estimated to completed in early september)

Bec Reh

Board 6

Immunoassay Optimization for the Detection and Quantification of Paenibacillus larvae spores, the causative agent of American Foulbrood (AFB), in Honey Samples.

Supervisors and collaborators: *Bec Reh, Oleksii Obshta, Alvaro De la Mora, Belarmino Neto, Bree Bilton, Igor Moshynskyy, Julia Tregobov, Maria Janser, Marina Bezerra da Silva, Vlad Katrii, Midhun Sebastian Jose, Ryan Merkl, Serhii Kondratiuk, Yashoda Wickramasinghe, Kienna Young, Vanessa Numedahl, Hector Eduardo Perez Ibarra, Juan Pablo Arias Marmolejo, Berenice Romero, Elemir Simko, Sarah Wood*

AFB is a bacterial disease of honey bees. Risk assessment based on spores/gram of honey is essential to disease management. Culturing honey samples takes 7-14 days. In contrast, an ELISA can provide results within 24 hours. The objectives were to: optimize ELISA protocol steps, determine the limit of detection, and challenge the ELISA using spore-spiked and naturally P. larvae contaminated honey.

Bettie Tang

Board 3

Local Structural Characterization of Transition Metal Active Sites in Biology: A Comparative Study on Methodology for X-ray Absorption Spectroscopy (XAS)

Supervisors and collaborators: *Ozra Mohammadi, Amanda Quirk, Mohsen Shakouri*

Transition metals play a vital role in biology by influencing the structure and function of biomolecules. We are building a spectral database of biologically relevant metals (Cu, Fe, Zn) bound to amino acids, leveraging synchrotron X-ray Absorption Spectroscopy (XAS) to investigate the coordination geometry of these active sites.

Curtis Kelly

Board 4

Swift River Disturbances: Riparian Plant Communities Dependent on Flood Frequncy

Supervisors and collaborators: *Malin Hansen*

Riparian plant communities have an important roles in water security and as primary producers in biodiversity hotspots. How plant communities change with environmental conditions like flood frequency, plant litter depth, and tree Canopy coverage were assessed with a field survey and statistic analysis. Understanding these communities has implications for conservation and restoration of them and their vital roles.

Daniyal Ahmad

Board 5

Uncovering Self-Doping Mechanisms in Quantum Materials via X-ray Spectroscopy

Supervisors and collaborators: *Robert Green*

In the material sciences, computational "cluster" models, which provide a partial atomic picture of a transition-metal complex, accompany experimental X-Ray techniques to understand the characteristics of quantum materials. My project aims to improve these models by implementing an iterative scheme to better distribute electrons throughout materials for increased physical accuracy.

Ellie Gee

Board 35

What Goes Around Comes Around: Turning Biases in Dance Vary with Reading Direction

Supervisors and collaborators: *Dr. Lorin Elias; Kateryna Shanina*

We investigated whether the established rightwards turning bias for Western classical dance extends to dances associated with right-to-left reading languages. We found that the right-to-left dance traditions had no significant turning bias, suggesting that turning biases may be modulated by differences in habitual visual-scanning biases associated with reading direction.

Emilie Gravel

Board 38

SpacesSplat

Supervisors and collaborators: *Ian Stavness*

A virtual reality spaces planning tool utilizing 3D Gaussian Splatting to visualize and manipulate objects, lights, viewpoints, and text annotations within a scene.

Erik Jeerakathil

Board 7

Seasonal changes in the intestines of migratory and resident sparrows

Supervisors and collaborators: *Dr. Catherine Ivy*

Sections of song-sparrow & house-sparrow intestines are analyzed to make note of how intestinal villi change with regards to density, length and crypt-villi ratio depending on the season (winter vs migration).

Frances Andes

Board 8

Left in Good Hands: Contextual Influences on Lateral Positioning in Naturalistic Parent-Child Interactions

Supervisors and collaborators: *Dr. Lorin Elias*

The project investigated behavioural laterality in naturalistic parent-child interactions by examining left vs. right side positioning in publicly available online videos. The study compared behaviours across home and public environments, finding a robust leftward positioning bias that was significantly stronger in public settings, suggesting an adaptive role in caregiving and right-hemisphere mechanisms.

Haley DeBack

Board 9

Comparison of Androscope and CASA Systems for Semen Evaluation Across Different Species

Supervisors and collaborators: *Mariana Kajevski, Linnaea Bird, Steve Yang, Dinesh Dadrwal, Jaswant Singh*

Despite variation in semen analysis data between CASA and Androscope, this study aims to determine whether these two methods are both individually accurate ways of analyzing semen across different species (cattle, bison, sheep) when compared against the spectrophotometer or hemocytometer reference standard.

Hannah Kolkman

Board 10

Ergonomic interventions to reduce shoulder demand in farmers: a pilot study

Supervisors and collaborators: *Dr. Angelica Lang & Dr. Joel Lanovaz*

Using optical motion capture to assess kinematics during farm-related tasks before and after 2 different ergonomic interventions: a 10-minute shoulder exercise protocol and a 3-minute video describing cues for better lifting practices.

Hunter Styre

Board 11

Decolonization through exposure and sharing of knowledge: Focus on drinking water

Supervisors and collaborators: *Lori Bradford*

My project strives to show people how to work with Indigenous peoples without projecting their own colonialist ideas/beliefs upon people that strive in their own beliefs and ways. I have conducted a

scoping review on why past efforts to provide safe drinking water to Indigenous communities have failed and encouraging people to actively communicate and accommodate.

Istafa Arraigncourt

Board 12

Association between the Use of Social Media and Current Levels of Self-Esteem.

Supervisors and collaborators: *Dr. Greg Boldt*

This study examined whether adolescent social media use was associated with current self-esteem among women aged 18–25. Twelve eligible participants completed an online survey using an adapted social media questionnaire and the Rosenberg Self-Esteem Scale. Results showed a negative but non-significant association, r = −.22, p = .50, offering no support for the hypothesis. Findings are limited by the small sample and retrospective design.

Jackson Yelich

Board 37

AutoSplant

Supervisors and collaborators: *Supervisor: Dr. Ian Stavness; Collaborators: Adam Hing, Michael Gao, Emilie Gravel*

The project is about using 3D Gaussian Splatting technology to scan and render a scene containing plants, then automatically segment and separate any plants. These scans could then be used in other workflows for automatic phenotyping, canopy volume calculation, etc.

Jada Duchene

Board 13

Building a Better Spike: Understanding the Role of Shoulder Strength and Stability

Supervisors and collaborators: *Taryn Moehler, Andrea Fernandez, Ryan Beatson, Kenzie Friesen*

The purpose of this study was to assess the relationship between shoulder strength and ball velocity, the relationship between shoulder stability and ball velocity, and the relationship between shoulder strength and shoulder stability. This study identified a significant relationship between nondominant-arm force output in the ASH "I" position and shoulder stability as measured by the CKCUEST.

Janice Mak

Board 14

DDX41 in Nuclear Speckles and Myeloid Malignancies

Supervisors and collaborators: *Yuliang Wu, Harmony Grainger*

Mutations in DEAD-box helicase 41 (DDX41) are associated with myelodysplastic syndrome (MDS) and acute myeloid leukemia (AML). Nuclear speckles (NS) are a membraneless organelles located within the nucleus that regulate gene expression via pre-mRNA splicing. Our lab established DDX41 localizes to NS and germline DDX41 variants mislocalize.

Jeshua Jacob

Board 15

Characterization of Protein-Protein Interactions Between Platelet and Complement System Proteins Through Mass Spectrometry-Based Proteomics

Supervisors and collaborators: *Dr. George Katselis*

Platelets and the complement system are homeostatic components that interact bidirectionally in the innate immune system. This project aims to combine mass spectrometry (MS)-based proteomics and bioinformatics to characterize proteins in both systems to decipher the platelet-complement crosstalk mechanisms.

Jordan Humm

Board 16

Uncertainty in Probability Visualizations

Supervisors and collaborators: *Dr. Carl Gutwin*

Looking at how we can make uncertainty and determining probability outcomes from visual designs more simple and intuitive. Mainly using ensembles plots.

Karar Al-Shanoon

Board 17

GreenSkEye Project (Placeholder title)

Supervisors and collaborators: *Lingling Jin, Ian Stavness*

The GreenSkEye project is an ongoing project that provides a platform for plant scientists to capture, monitor, organize and analyze their plant images

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Kienna Young

Board 18

In vitro rearing of honey bee drones from larval stage to instrumental insemination

Supervisors and collaborators: *Sarah Wood and Marina Carla Bezerra da Silva*

Current pesticide risk assessments overlook honeybee reproductive castes. The study's objective was to improve pesticide risk assessment by standardizing a protocol that integrates established in-vitro drone rearing and instrumental insemination of queens. We reared drones in-vitro, then collected semen from their sexual gland to use in instrumental insemination of queens.

Laurel Tarr

Board 19

Creating an adult chicken model of E. coli

Supervisors and collaborators: *Aaron White and Megan Tomilin*

Colibacillosis infection, caused by avian-pathogenic Escherichia coli (APEC) is one of the most impactful diseases in the Canadian poultry industry. Wanting to create a vaccine against it, my project is to create an adult chicken model of infection to use for vaccine validation and testing. Dosing of E. coli for the chickens at an adult level is not well known, and so my project is to elucidate the dose that will cause pathology and disease.

Lizzy Woodtke

Board 20

Does Migration Distance Influence Lung Morphology in Songbirds?

Supervisors and collaborators: *Catherine Ivy*

Bird migration distance reflects oxygen demands. In this project, I used microscopy techniques to examine lung histology in five songbird species with varying migration distances. I predicted that longer distance migrants will have greater gas exchange surface area than shorter distance migrants, supporting increased oxygen requirements during sustained flight.

Madeline Kennedy

Board 21

The Differences Are In-Haskap-able: Developing New Image-Based Phenotyping Protocols for Haskap Plant Characteristics

Supervisors and collaborators: *Anze Svara*

Feeding digital images of haskap plants into a small language model to see if it can detect phenotypic differences between genotypes

Matthew Wolfe

Board 22

Soil salinity variability across marginal and non-marginal cropland in Saskatchewan and Alberta.

Supervisors and collaborators: *Chantel Chizen*

Sites within marginal and non-marginal cropland were selected using crop yield data to study the effects of forage conversion on soil properties. Soil samples taken in spring 2026 before forage conversion serve as the baseline for continuing research. Variability in electrical conductivity was assessed between field sites and control and treatment areas.

Mellissa Lu

Board 23

Small protein inhibitors of HIV-1 Vif-mediated antagonism of APOBEC3G

Supervisors and collaborators: *Will Rice, Linda Chelico*

APOBEC3G is a deoxycytidine deaminase in our immune cells that can fully restrict HIV-1 replication. However, it is degraded by Vif, the viral infectivity factor encoded by HIV-1. Thus, our project aims to discover small protein inhibitors of HIV-1 Vif to decrease antagonism of APOBEC3G.

Michael Gao

Board 36

biglab.usask.ca

Supervisors and collaborators: *Ian Stavness, Adam Hing, Jackson Yelich, Emilie Gravel*

A platform for viewing and interacting with 3D scenes captured with 3DGS technology.

Mominah Bilal

Board 28

Love and Laterality: Investigating Hemi-Spatial Attentional Biases in Tennis Players

Supervisors and collaborators: *Ellie Gee, Gillian Rose*

Our study found that professional tennis players exhibit rightward pseudoneglect, with more failures when balls approach their right visual field. No significant sex differences were observed. Results suggest right hemisphere dominance influences gameplay, but sex-based differences in brain lateralization did not impact bias magnitude.

Norah Jacob

Board 24

Nothing About Us Without Us: Data Sovereignty in Indigenous Health Research

Supervisors and collaborators: *Dr. Hope Jervis-Rademeyer*

This community-based project explores First Nations and Métis experiences of spinal cord injury care in Saskatchewan. This poster focuses on the development of a Data Sovereignty and Relationship Agreement and how principles of Indigenous data sovereignty, relational accountability, and community guidance are being embedded throughout the broader research process.

Olivia Dyck

Board 33

Turning X-linked Adrenoleukodystrophy Human Fibroblasts into Inducible Pluripotent Stem Cells using Yamanaka Factors

Supervisors and collaborators: *Dr. Tyler Wenzel*

Our lab was given a skin biopsy from a patient with X-linked adrenoleukodystrophy (X-ALD). I cultured fibroblasts derived from the biopsy and induced them to become stem cells using Yamanaka factors. This is a smaller portion of our larger project to determine a treatment for X-ALD.

Pratheesh Soman

Board 26

Characterizing Trait Evolution Using Ancestral Pangenomes

Supervisors and collaborators: *Lingling Jin*

Evolution of agronomically important traits is an essential area of study that helps inform and accelerate crop breeding efforts. We use ancestral pangenomes to characterize trait evolution and investigate how changes in genome composition drive phenotypic and environmental adaptations, using salt tolerance in the grass family as a case study.

Rebecca Gutek

Board 27

An Interpretative-Phenomenological Exploration of The Influence of Religion on University Students' Self-Concept

Supervisors and collaborators: *Supervisor: Jan Gelech; Collaborators: Escence Charpy-Matthews, Aly Humble, and Zacharie Soriano*

The purpose of this research was to investigate how university students experience the influence of religion on their self-concept. Applying an interpretative phenomenological analysis to qualitative interview data yielded four themes: Centrality of Community; Religion as a Foundation for Life; Competition of Priorities; and Transition From Nominal to Personal Religion.

Shelton Ziola

Board 29

Investigating the Effects of Dysfunctional Heterogenous Nuclear Ribonucleoprotein A1 on Mitochondrial Protein Abundance in Multiple Sclerosis

Supervisors and collaborators: *Dr. Michael Levin*

We examined the effects of three heterogenous nuclear ribonucleoprotein A1 (hnRNP A1) mutants on mitochondrial protein abundance in primary embryonic mouse neurons. Using Western blotting, we quantified alterations in oxidative phosphorylation subunits and mitochondrial fission protein abundance linking hnRNP A1 dysfunction to mitochondrial impairment in multiple sclerosis.

Shruti Kaur

Board 25

SmartDome

Supervisors and collaborators: *David Loken (Hatch), IMII*

SmartDome integrates strain-gauge structural monitoring with AI-based assessment to evaluate glue-laminated beam behaviour. A second module uses computer vision to detect foreign contaminants inside storage environments. Together, these features support safer, more reliable industrial operations through real-time sensing and intelligent analysis.

Sydney Peake

Board 30

Impact of Nursing Support on Maternal Satisfaction with Breastfeeding Among Vulnerable Postpartum Women in Canada

Supervisors and collaborators: *Dr. Michelle Pavloff; Vanessa Cruthers, Oluwakemi Dada, Bonn Ruiz Evangeslistar, and Isabella Waldner*

Our research poster examines how nursing breastfeeding support influences maternal satisfaction among vulnerable postpartum women in Canada. Findings highlight barriers and identify effective, culturally responsible nursing interventions that improve breastfeeding satisfaction, self-efficacy, and maternal-infant outcomes. Strengthening accessible support services may help reduce health inequities and improve postpartum care.

Thandiwe Chaya

Board 31

Body Composition and Bone Mineral Density of a Championship Canadian Football League Team

Supervisors and collaborators: *Jon Farthing and Phil Chilibeck*

This project evaluated body composition and bone mineral density in professional Canadian Football League players using dual-energy X-ray absorptiometry (DXA). Body composition and bone density were compared across playing positions and with age-matched controls to examine differences in lean mass, fat mass, and skeletal health associated with elite football participation.

William Sawchyn

Board 32

Comparing the Effects of Interpersonal Light Touch on Standing Balance in Different Standing Positions

Supervisors and collaborators: *Dr. Alison Oates and Dr. Janeen Loehr*

Investigating the impact of how interpersonal light touch influences standing balance when standing in different positions relative to another individual (i.e., beside each other, facing each other, one person in front of the other) to determine which relative standing position best reduces postural sway and fall risk.

Zoha Sabir

Board 34

Taste Receptors in Zebrafish Gut Endocrine Cells

Supervisors and collaborators: *Suraj Unniappan*

This project investigates the distribution of taste receptors in zebrafish organs and how growth- and metabolism-related hormones affect their expression. Using molecular and imaging techniques, the research aims to improve understanding of fish feeding physiology and support healthier growth, sustainable aquaculture, and long-term food security.

Session 2

11:30 AM to 1:00 PM

Abdullah Shams

Board 1

Code Clone Detection Tools Validation

Supervisors and collaborators: *Chanchal Roy and Palash Roy*

In this research project, we have read the available literature by many authors about code clone detection tools and evaluated their results. We then found the tools described in the research papers and validated each paper's results against benchmarks classifying them based on reproducibility.

Agrata Rijal

Board 2

Optimization of synchrotron phase-contrast imaging parameters for in vivo synchrotron rabbit bone studies

Supervisors and collaborators: *Dr. David Cooper*

Ex vivo synchrotron phase-contrast imaging optimization for cortical bone microarchitecture on BMIT-ID's Edge 10 detector. Swept photon energy, propagation distance, pixel size, and dose using a rabbit tibia specimen.

Andrew Delainey

Board 3

Effects of Spermidine on Gene Expression and Phage Induction in Borrelia Burgdorferi

Supervisors and collaborators: *Dr. Jenny Wachter*

Borrelia burgdorferi virulence is dependent on the expression of RpoS (an alternative sigma factor); we have previously shown that bbd18 (a negative regulator of RpoS) is required for bacterial survival (and prevention of phage induction) in culture and in the tick vector; however, this is overcome by supplementation of the media with spermidine. This project investigates this phenomena at the transcriptomic level.

Azra Hadzihasanovic

Board 4

Evaluating the Electrophysiological Properties of Hippocampal Engram Cells that Support Fear Learning and Memory

Supervisors and collaborators: *Dr. Justin Botterill*

Engram cells refer to ensembles of neurons that are activated by experience, and are considered critical for learning and memory. However, little is known about their electrical properties. We used a genetically modified mouse line to label engram cells and compare their activity vs non-engram cells in the hippocampus.

Chigozirim Excel Okechukwu

Board 5

Building Evidence to Leverage Intrinsic and Extrinsic Factors (BELIEF) for Postpartum Women with Substance Use Disorder

Supervisors and collaborators: *Dr Jodie Bigalky*

This project explores the intrinsic and extrinsic motivational factors that influence substance use recovery in postpartum women. It involves a scoping review of existing information, a qualitative study (interviews) of our study population and community engagement to disseminate evidence-based recommendations.

Curtis Doering

Board 6

Wheels of Wisdom: Culturally Grounded Assistive Devices for Indigenous Communities

Supervisors and collaborators: *Chris Zhang, Lori Bradford, Akinola Ogbeyemi*

The Wheels of Wisdom project examines barriers to mobility devices in Indigenous communities, including environmental, accessibility, cost, and other factors that limit their ability to access these supports.

Devyn Hodgson

Board 7

Metal Binding Properties of the Putative Copper Regulator CutC

Supervisors and collaborators: *Dr. Oleg Dmitriev*

My project focuses on a protein called CUTC, which is believed to play a role in regulating copper levels in human cells. Copper is essential but can be toxic if not properly controlled, so understanding how this protein works is important.

Ella Kirkland

Board 8

Synthesis of oligo(ethylene glycol) substituted polymers for organic solar cells

Supervisors and collaborators: *Timothy Kelly*

Improving the viability of the polymer Poly(thiophene-quinoxaline)-7 (PTQ7) as a solar cell donor through functional group manipulation for the minimization of hazardous processes and solubility in greener solvents.

Emmanuella Ehidiamhen

Board 9

What's That Spice Again? Investigating Short-Term Working Memory Through Two-Choice Odour Span Task

Supervisors and collaborators: *Dr. John Howland*

Historically, the odour span task has been used to assess short term working memory. In my project, I am optimizing a two-choice version to slow down behavioural events for better neural activity analysis using fiber photometry. Rats are trained using delayed non-match-to-sample, learning to choose a novel odour after a short delay.

Evan Daniels

Board 10

Lung morphology of hibernating and summer-active ground squirrels

Supervisors and collaborators: *Dr. Catherine Ivy*

We hypothesize that the lung diffusing capacity of thirteen-lined ground squirrels (TLGS) is reduced during hibernation. Evan will investigate this hypothesis by slicing and staining TLGS lung samples. She will then image the sections and analyze the alveoli and capillaries to assess the influence hibernation has on TLGS lung morphology.

Glenn Raphael De Los Reyes

Board 11

SciFlowgent: Sustainable Agentic AI Support for Developing Scientific Workflows

Supervisors and collaborators: *Dr. Banani Roy, Khairul Alam*

SciFlowGent is a multi-agent framework for generating Galaxy scientific workflows from natural language requests. Users describe a scientific analysis task and SciFlowGent recommends a workflow composed of Galaxy tools and processing steps. The system combines planning, retrieval, and validation agents to construct scientifically relevant and technically compatible workflows.

Halle Beblow

Board 12

Comparative analysis of interferon-alpha subtype potency against Epstein-Barr virus

Supervisors and collaborators: *Kerry Lavender, Hajar Miranzadeh*

Testing the 12 IFNa subtypes against EBV initial infection, latency restimulation and immortalization.

Harnoor Bhangu

Board 13

Electronic Structure of Tin Carbodiimide: SnNCN

Supervisors and collaborators: *Alexander Moewes, Teak Boyko, Cardula Braun*

Sn(NCN) is known for its interesting structure (with nitrogen atoms acting as proton relays) and potential applications such as an electrode material for batteries and a catalyst for CO2 reduction. We study the effects of substituting an NCN molecule for an O atom. The findings include the electronic band gap using soft X-ray spectroscopy and also calculating the spectra and band gap using DFT.

Inderjit Kaur

Board 14

Effects of Bacterial Culture Growth Duration on Yield and Viscosity of Alginate Polymer Produced by Azotobacter vinelandii

Supervisors and collaborators: *Nurul Hidaya, Prem Singh, Dr. Harold Bull , Dr. Wei Xiao*

Alginate, a commercially important polysaccharide, is traditionally sourced from brown algae, whose availability and quality vary environmentally. Bacterial production offers a controlled, reproducible

alternative. This study compared alginate from Azotobacter vinelandii grown for 48 or 72 hours. Seventy-two-hour cultures produced higher yields and 46.5-fold greater viscosity.

Jack Honeyman

Board 15

Synthesis of Electron Deficient Nanohoops via Triangular Gold Scaffolds

Supervisors and collaborators: *Dr. Miguel A. Soto*

Incorporating electron deficient groups into curved, cyclic architectures, templating the structure with triangular gold macrocycles. With this approach, we expect to generate discrete, shape persistent macrocycles in which multiple electron-deficient aromatic panels are arranged around a central cavity.

Jameson Wiebe

Board 16

Community Impact: Exploring the role of citizen science in monitoring bird-building collisions (working title)

Supervisors and collaborators: *Dr. Leanne Grieves (supervisor)*

Comparing and contrasting the results and methodologies of two collision monitoring programs in Saskatoon (Grieves Lab/campus and BFS/downtown) during migratory periods in order to provide recommendations for utilizing citizen science in future BWC research and monitoring and mitigation programs.

Jaylen Kennedy

Board 17

Hip bone mineral density and geometric properties in adolescent ice-hockey players

Supervisors and collaborators: *Phil Chilibeck and Taylor Leonhardt*

Although ice-hockey has low ground reaction force compared to other sports, hockey involves unusual hip movements which is theoretically beneficial for inducing bone formation. Using dual energy X-ray absorptiometry we analyzed bone mineral density and bone geometric properties in adolescent hockey players compared to adolescents engaged in other sports.

Jesse Parker

Board 18

Stratospheric Aerosols Affects on Lunar Eclipses

Supervisors and collaborators: *Mathew Toohey and Adam Bourassa*

Trying to create a method to measure the stratospheric aerosols in the atmosphere from volcanic eruptions based on the measure of brightness and colour of the moon during lunar eclipses while using the SASKTRAN2 radiative transfer model developed by ISAS.

Josh Cameron

Board 19

Exploring the interactions between E. coli curli and human amyloid beta peptides

Supervisors and collaborators: *Aaron White*

E. coli lives in human guts, where it produces the protein curli. Curli is similar to amyloid beta, the human protein linked to Alzheimer's disease. I am mutating E. coli to increase curli production. Afterwards I will purify curli. From there, curli can be tested for interactions with amyloid beta.

Kevin Kolbinson

Board 20

Road Closures: Impacts of disrupted transport on the chemical composition of pollen walls

Supervisors and collaborators: *Teagen Quilichini*

Two-photon microscopy was used to watch pollen grains and surrounding supportive cells form. Using mutants that block traffic of pollen wall precursors, the impacts of disrupted transport on the movement of different wall constituents was revealed. Combined with synchrotron mid-IR spectromicroscopy, this research will reveal key steps that build the pollen wall.

Laura Korbo

Board 21

Investigating the role of ATP synthase inhibitory factor-1 (IF1) in a murine hemangiosarcoma model

Supervisors and collaborators: *Dr. Gurpreet Aulakh and Dr. Andrew Freywald*

I am investigating the role of IF1 in an immunocompetent murine model and characterizing the established H5V cells used for induction of hemangiosarcoma.

Lauren Smith

Board 22

Moving Minds: A Scoping Review of Walking Interventions in Mild Cognitive Impairment, Early-Dementia and Alzheimer’s Disease

Supervisors and collaborators: *Valerie Caron and Alison Oates*

A scoping review investigating present literature on walking interventions in mild cognitive impairment, dementia and Alzheimer's disease.

Lucas Le

Board 23

Engineering Mutualism Speaker Series: Developing and Evaluating a Course on Social and Cultural Factors in Engineering Design

Supervisors and collaborators: *Dr. Lori Bradford*

This project explores how social and cultural factors can be better integrated into engineering education and design. I developed the Engineering Mutualism Speaker Series, featuring interviews with six experts, an online Canvas course, and pre- and post-course surveys to evaluate changes in engineering students’ perspectives during Fall 2026.

Martin Ugwu

Board 36

Neuromuscular Activation Differences Between Flywheel and Hex Bar Squats in Trained Individuals

Supervisors and collaborators: *Phil Chilibeck, Angelica Lang*

This project examines differences in lower-body and trunk muscle activation between flywheel and hex bar squats in trained individuals. Using surface electromyography, participants completed both squat variations at standardized intensities to compare how each resistance-training method recruits key muscles involved in strength, performance, and rehabilitation.

Max Guest

Board 25

Performance of Gesture-based Typing Methods

Supervisors and collaborators: *Allen Yeh*

This study will investigate the speed and accuracy of different gesture inputs on full size software keyboards.

Mia Dionne

Board 26

The Science of Molecular Cages

Supervisors and collaborators: *Dr. Amy Stevens*

Two pyrene-functionalized PN cages were investigated for their preliminary photophysical properties and potential as fluorescent biosensors. Both showed strong, oxygen-sensitive fluorescence and significant solvent dependence. SAXS characterized DNA nanostructures and DNA-functionalized gold nanoparticles, providing structural insight for future integration of PN cages into DNA-based biosensing platforms.

Nanditha Prasad

Board 27

Exploring a Potential Molecular Marker of PNI and its Role in Breast Cancer Recurrence

Supervisors and collaborators: *Dr. Anand Krishnan*

Perineural Invasion (PNI) is associated with Cancer recurrence and metastasis. This project explores one of the potential molecular markers of PNI, Hemopexin and whether it plays a role in Breast Cancer Recurrence using in-vitro PNI model.

Ode Chloe Ferrao None Nyangui

Board 28

Fluid rock interaction in major and trace elements in VMS and effectiveness of rhizon sampling in regards to REE in VMS.

Supervisors and collaborators: *Man-Yin Tsang and Derek Leung*

My project has two parts, first analyzing geochemical data of rock and fluids from hydrothermal vents in Ozu Ogasawara island arc to find out trends that will give insight on the partitioning of major and trace element. Second, conduct a lab research using rhizon sampler and sea water to determine if REE will effectively pass through or will be stuck in the membrane of the sampler.

Olivia Robinson

Board 29

Height Depends on How You Slice it: Effects of Subsampling Point Cloud Data

Supervisors and collaborators: *Scott Noble, Keith Halcro*

The canopy height of wheat is an important characteristic related to yield and above-ground biomass. Although this measurement can be taken using LiDAR (Light Detection and Ranging), the specifics of the most effective method remain under debate. In this study, the viability and reliability of three different methods for determining wheat canopy height using LiDAR data are evaluated.

Paige Banda

Board 30

Let's Not Sit Together: Self-Group Distancing Among East Asian Workers

Supervisors and collaborators: *Dr. Jennifer Ho*

This project investigates the intra-racial dynamics of East Asian professionals, specifically self-group distancing as a coping response to racial discrimination. It explores the manifestations and motivations of these dynamics, and the organizational contexts and individual factors which influence self-distancing behaviour.

Pushti Desai

Board 31

Comparative Characterization of Postpartum Endometrial Epithelial Cells in Dairy and Beef Cows

Supervisors and collaborators: *Dr. Dinesh Dadarwal, Sai Kumar, Natalie De Leon*

This project investigates why dairy cows experience prolonged postpartum uterine disease compared to beef cows. Using endometrial epithelial cells and blood samples, we are examining gene expression, uterine microbiota, bacterial cultures, and metabolic indicators to identify mechanisms linking metabolic stress, inflammation, and uterine recovery.

Richard Bassey

Board 32

KnowledgeBridge: Aiding in Knowledge Transfer Between Domain-Naïve Developers and Domain Experts

Supervisors and collaborators: *Banani Roy, Alam Ajmain*

Domain-specific scientific software is used by scientists in many different fields of study to aid them in their research. To create reliable and maintainable software for these domains, an adequate understanding of the scientific domain is required. To address this, we developed KnowledgeBridge, a tool to help to bridge the knowledge gap faced by domain-naive developers and domain experts with little or no software engineering experience.

Sasha Prut

Board 33

Accumulated Degree Days, Post-Mortem Submergence Interval, and Pigs: A Winter Drowning Victim Case Study Provides an Understanding of Forensic Taphonomy in Fluvial Systems

Supervisors and collaborators: *Dr. Iain Phillips*

A winter case study from an Edmonton drowning victim provides us with an understanding of how human bodies bloat in complex weather conditions, such as those in Saskatchewan. Pig cadavers were used as models for calculations to determine Accumulated Degree Days and Post Mortem Submergence Interval, as well as previous studies.

Sophie Love

Board 34

Medical Devices and Equipment Challenges in Remote Indigenous Communities

Supervisors and collaborators: *Duncan Cree, Lori Bradford, Chris Zhang, Akinola Ogbeyemi*

A scoping review of mobility devices and hearing support usage on rural reserves

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Taryn Moehler

Board 35

Influence of Lower Limb Asymmetry and Shoulder Strength Bilateral Asymmetry on Peak Force Generation

Supervisors and collaborators: *Taryn Moehler, Jada Duchene, Andrea Fernandez, Ryan Beatson, Kenzie B. Friesen*

The purpose was to assess single leg jump performance asymmetry during SLH tests and shoulder strength bilateral asymmetry during ASH tests to see their relationship with peak force generation during the volleyball jump. As a result, it was shown that symmetry does not influence force development during the volleyball spike.

Thomas Cratty

Board 24

JayTitan: A Point-of-Care Bladder Cancer Diagnostic Device

Supervisors and collaborators: *Franco Vizeacoumar, Frederick Vizeacoumar, Yue Zhang, Wahid Khan, Hossein Keshmiri Far*

A non-invasive bladder cancer screening device that detects cancer-specific circular RNAs in urine. A disposable capsule filters and lyses the sample, triggering RT-RPA amplification and molecular beacon fluorescence detection, read by a sealed, reusable optical reader delivering a binary positive/negative result.

Treydon Olfert

Board 37

Applying Chording to Analog Keyboards

Supervisors and collaborators: *Yen-Ting (Allen) Yeh, Carl Gutwin*

Analog keyboards allow for alternatives to hotkeys by dividing the depth a key can be pressed into different levels. The more levels there are, the less accurately people can distinguish them. To increase this, we had participants add a second finger to their inputs and chord on release.

Yahir Fernando Pérez Oliva

Board 38

Lipids Nanoparticles for the Pulmonary Delivery of mRNA

Supervisors and collaborators: *Naga Kola Suresh, Aneesh Thakur*

Optimization of Lipid Nanoparticles with different components

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Session 3

1:30 to 3:00 PM

Abby Peace

Board 4

The Effects of Chronic FAAH Inhibition on Appetite and Metabolism in C57/B6 Mice

Supervisors and collaborators: *Dr. Robert Laprairie*

The endocannabinoid system is involved in homeostasis and contributes to processes related to obesity. The enzyme FAAH degrades anandamide, an endocannabinoid that increases appetite and body weight through activation of the CB1 receptor. FAAH was chronically inhibited in mice to understand its effect on food and water consumption, weight, and excretion.

Adeola Adeleke

Board 38

The physiological influence of actin in a MNC recovery

Supervisors and collaborators: *Dr. Thomas Fisher, Kirk Haan*

In this project, we are looking at the role and actions of actin in its recovery after hypertrophy.

Alaafia Plumptre

Board 20

Newcomer feelings and commitment to reconciliation: An Autoethnography

Supervisors and collaborators: *Laurel Forshaw*

An Autoethnography that will explore what my commitment to reconciliation is as a newcomer/immigrant

Anjana Samarasinghe

Board 32

FHB-Rater & Rust-Rater Apps

Supervisors and collaborators: *Lingling Jin, Ian Stavness*

Build an app centred around capturing photos of wheat heads and there flag leaves to analyze them with ML models to find diseases such as FHB and Rust.

Christopher Adepoju

Board 5

Digital communities and governance in the milieu of crackdowns

Supervisors and collaborators: *Dr. Joshua Shaw*

Illuminating how communities establish, enforce, and contest norms alongside platform rules and guidelines, and formal state institutions. It contributes to ongoing debates concerning governance, legitimacy, and authority in the digital age.

Dana Turk

Board 7

The CIM Bulletin Digitization Project

Supervisors and collaborators: *Donna Beneteau*

CIM has been working with library archivists to make historical mining and mineral information available to present day researchers, by digitizing and compiling back copies of its printed bulletin for use in an online archive.

Diya Patel

Board 6

Evaluating CB1R C-Terminal Decoy peptides in their ability to attenuate β-Arrestin-Mediated desensitization and downregulation of Cannabinoid 1 Receptor

Supervisors and collaborators: *Dr. Robert Laprarie (supervisor), Dr. Haley Anderson, Bobak Shadpoor, Dr. Vivek Kumar*

Cannabinoid receptor 1 mediates several key processes including pain and neuronal excitability, making it a great therapeutic target. Chronic receptor activation leads to receptor desensitization and internalization, causing tolerance. This project evaluates decoy peptides designed to bind β-arrestin, in their ability to preserve CB1R surface expression and sustain beneficial signaling.

Doreen Patel

Board 37

Inside a Sleeping Seed: Using Synchrotron X-ray Fluorescence Imaging to Study Secondary Dormancy in Canola Seeds (Brassica napus)

Supervisors and collaborators: *Teagen D. Quilichini, and Collaborators: Agriculture and Agri-Food Canada.*

This study examined the putative role of micronutrients in secondary dormancy determination in canola seeds. Two lines with contrasting dormancy potential were compared using synchrotron X-ray fluorescence microscopy. This approach revealed elemental distributions across seed coat, embryo and endosperm subcompartments, allowing micronutrients associated with cell wall structure and potentially influencing water uptake to be interrogated.

Erica Andres

Board 8

Pharmacodynamics of Nine Synthetic Cannabinoid Receptor Agonists at CB1R and CB2R

Supervisors and collaborators: *Dr. Robert Laprairie, Dr. John Howland*

Synthetic cannabinoid receptor agonists (SCRAs) are a novel class of psychoactive substances showing high prevalence in illegal markets. Unlike THC, a partial agonist of CB1R and CB2R, SCRAs can be full agonists of these receptors. Nine different SCRA compounds were tested in vitro for their pharmacodynamics at CB1R and CB2R.

Faris Alharbi

Board 9

Bird-Building Collisions: Taxonomic correlates of Passerine mortality in a Canadian prairie city

Supervisors and collaborators: *Dr. Leanne Grieves*

As bird populations decline due to the expansion of human settlements, assessing the environmental drivers of bird-window collisions has become a key area of study. A large gap remains in our understanding of taxonomic differentials in collision rates. This study will evaluate the taxonomic correlates of Passerine bird-window collisions.

Graeme Hopkins

Board 10

Paleoecology and Ichnology of Quaternary Sediments in Saskatchewan, Canada

Supervisors and collaborators: [To be confirmed]

The ichnospecies Taenidium barretti has previously been reported from sediments of the Haultain Formation outside of Saskatoon, Saskatchewan. Here, additional ichnotaxa and plants are described from the Quaternary Haultain and Floral Formations. Collections were made in the City of Saskatoon and the wider region.

Hannah Kostuk

Board 11

Spaced Repetition for UI Expertise Development

Supervisors and collaborators: *Dr. Carl Gutwin*

This project explores the efficacy of spaced repetition for learning keyboard shortcuts. We developed a custom online system which utilizes flashcards to compare the learning and retention of keyboard shortcuts between practice spaced out over time, or done all at once. Learning curves, speed, accuracy, and user perceptions are measured.

Hong Wang

Board 12

Supporting Agricultural Research Through UAV Data Analysis and Software Engineering, Agriculture and Agri-Food Canada (AAFC) Internship and USask Computer Science Professional Internship Program (CSPIP)

Supervisors and collaborators: *Sally Vail, Ian Stavness*

This internship project combined UAV-based crop phenotyping, data analysis, machine learning, and software engineering to support agricultural research. The work included developing analytical workflows for crop phenotyping and yield prediction, and deploying, testing, and maintaining research software platforms for agricultural image management and analysis.

Isabelle Monsman

Board 13

Exploring the Signalling Pathway of Mesencephalic Astrocyte-Derived Neurotrophic Factor (MANF)

Supervisors and collaborators: *Dr. Anand Krishnan, Bhadrapriya Sivakumar*

This project focuses on deriving the mechanism by which MANF supports peripheral nerve regeneration. We used co-immunoprecipitation assay and shRNA knockdown to identify the binding partners of MANF and its role in peripheral nerve regeneration.

Janelle Proctor

Board 14

The role of RNA binding protein dysfunction in synaptic pathology in neurons

Supervisors and collaborators: *Dr. Michael Levin*

I examined how heterogenous nuclear ribonucleoprotein A1 (A1) knockout impacts synapses of primary mouse embryonic neurons in vitro. I performed RT-qPCR to measure mRNA abundance of synaptic genes, and western blotting and immunostaining to assess changes in synaptic protein abundance and localization linking A1-induced synaptopathology to neurodegeneration in multiple sclerosis.

Jehan Kashem

Board 15

Single-Cell Transcriptomic Analysis of Malignant Cell Stemness in Pancreatic Ductal Adenocarcinoma

Supervisors and collaborators: *Dr. Lingling Jin*

Cancer stem cells play a role in cancer refractory and burden due to their therapeutic resistance and role in tumor metastasis. This project integrates multiple publicly available scRNAseq datasets composed of samples from normal pancreatic tissue and primary pancreatic ductal adenocarcinoma (PDAC) to analyze transcriptomic patterns and relationships between specific proteins and cellular processes in relation to malignant cell stemness.

John Miller

Board 16

Grammar-like expressions

Supervisors and collaborators: *Ian Mcquillan*

We study and investigate the theoretically properties of extensions of regular expressions, which are textual pattern matchers, with grammar-like rewriting rules to expand the pattern matched.

Joyce Wang

Board 17

Folding Under Pressure: GNB1L Sustains the PIKK Response to Telomere Replication Stress in Pancreatic Cancer

Supervisors and collaborators: *Franco Vizeacoumar*

GNB1L is a TTT complex co-chaperone required for PIKK protein stability. TERT+ pancreatic cancer cells experience high telomeric replication stress and depend on intact ATR/ATM signaling. GNB1L loss destabilizes these PIKKs, causing replication catastrophe selectively in TERT+ cells, suggesting GNB1L as a synthetic lethal target.

Kien Nguyen

Board 18

In vitro and in vivo assessment of Leptospira Interrogan's Leptospiral immunoglobulin-like protein (Lig) using Lipid Nanoparticle (LNP)

Supervisors and collaborators: *Dhruv Patel, Aneesh Thakur*

The project aims to assess a largely overlooked protein Lig for its immunogenicity as a potential protein used for vaccine development

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Laura Ferguson

Board 19

Photon Localisation: A Comparative Study

Supervisors and collaborators: *Ricardo Rojas Castellanos (co-presenter), Kayla Oltman, Joshua G. Fenwick, Rainer Dick*

We compare different measures for photon localization in terms of two-dimensional Gaussian wave packets.

Lisa Cottyn

Board 2

Light through the layers: leaf transmittance & internal structure

Supervisors and collaborators: *Dr. Peters*

this research project aimed to see if the intercellular structures and layers of a leaf related to the bidirectional spectral transmittance shape. To do this, 98 leaves were scanned with a spectrometer and then thinly cut to be viewed and photographed under a microscope.

Lukis Castillo

Board 21

How Big is Big Enough? Evaluating Model Stability and Sample Size Dynamics in Linear, Logistic, and AdaBoost Simulations

Supervisors and collaborators: *Dr. Li Xing*

This simulation study evaluates the predictive stability of linear, logistic, and AdaBoost models across sample sizes from 30 to 5000. It uses train-test splits and Bonferroni-adjusted pairwise t-tests to analyze metric variance and determine optimal sample size requirements.

Manjusha Bheesetti

Board 29

Doll Therapy in Long-Term and Residential Care Settings: A Scoping Review and Practice Guideline Development

Supervisors and collaborators: *Dr. Roslyn Compton, Dr. Schroder Sattar*

This scoping review maps evidence on doll therapy for older adults in long-term and residential care. Searching six databases with no date restriction, findings will inform an evidence-based clinical practice guideline addressing safe, ethical, and effective doll therapy implementation for older adults with and without dementia.

Matt Scrivens

Board 22

Generating Salmonella typhimurium mutants and testing their survival in water

Supervisors and collaborators: *Dr. Aaron White*

Salmonella typhimurium water survival genes were identified and knocked out using Lambda Red techniques. The mutant's were then put into water and sampled to test their survival.

Melissa Wilson

Board 23

Inactivation of Campylobacter jejuni on Common Food Surfaces by Plasma Activated Water Treatment

Supervisors and collaborators: *Dr. Kaidi Wang, Dr. Obiora Agu, Dr. Mehdi Nemati, Dr. Lifeng Zheng*

Surface decontamination with plasma activated water (PAW). PVC, HDPE, and stainless steel surfaces are commonly found in poultry processing environment. C. jejuni is emerging major culprit of foodborne illness and requires novel interventions.

Nashia Shahid

Board 25

Impacts of Urban Microclimates on Pollinator and Insect Community Dynamics in Saskatoon

Supervisors and collaborators: *Professor Varuni Jayasooriya*

This investigation examines how Saskatoon's urban microclimates affect the diversity and behavior of pollinators and insect communities.

Olivia Elder

Board 26

Effects of Tau Protein on Cognitive Performance in Alzheimer's Disease Model: Spontaneous Location Recognition in Mapt-/- Rat

Supervisors and collaborators: *Supervisor: John Howland; Collaborators: Marzieh Sedighipour Chafjiri, Rachel Dignean, Aiden Glass, Kaylen Young, Kenny Ta, Kirk Mulatz*

A tau knockout rat strain undergoes intracerebroventricular injection of Streptozocin to develop an Alzheimer's Disease model to examine the effects of tau gene knockout against Alzheimer pathology. The rats are tested in a Spontaneous Location Recognition task to assess pattern separation between novel and familiar object locations within testing environment.

Olivia Numedahl

Board 27

Lattice Models of R-loop Geometry and Topology

Supervisors and collaborators: *Chris Soteros, Aloysius Meyer, Matthew Schmirler, Rob Scharein, Jeremy Eng, Margherita Maria Ferrari*

During DNA transcription, three stranded structures composed of a DNA-RNA hybrid and a lone DNA strand called R-loops can form. Using polygons in a tubular sub-lattice of the simple cubic lattice to model R-loops, we ask questions about what effect DNA sequence and supercoiling have on R-loop geometry and topology.

Parham Golshenas

Board 28

Expression, Purification, and Crystallization of the Prolidase Δ101 Mutant

Supervisors and collaborators: *Shangyi Xu, Dr. Takuji Tanaka*

This project focuses on the purification and crystallization of the Prolidase Δ101 mutant to obtain high-quality protein crystals. The work aims to optimize purification and crystallization conditions, enabling characterization of the mutant's three-dimensional structure and providing insights into how the Δ101 mutation affects protein stability and function.

Rebecca George

Board 31

Keep Me in Haptic Touch

Supervisors and collaborators: *Carl Gutwin, Alice Loizeau*

Investigating the possibility of communicating information through haptic touch alone. We developed a wristwatch style prototype that uses four actuators to convey haptic rhythms and animations. These vibrotactile signals can be associated with specific meanings that the user can interpret.

Sarah Martin

Board 24

Generation and Characterization of Camelid Nanobodies for Applications in Biomedical Research

Supervisors and collaborators: *Dr. Adelaine Leung (WCVM), Dr. Mary Angani (MRC LMB), Dr. Chris Tate (MRC LMB)*

Nanobodies are a type of antibody fragment derived from camelids (e.g. alpacas). Unlike traditional antibodies, nanobodies are very small, highly stable, and able to bind tightly to regions of proteins that are otherwise difficult to study. This poster details nanobody generation and the applications of nanobodies in science and medicine.

Sarah Trevor

Board 33

Documenting Indigenous and Settler Land Use in Saskatchewan's UNESCO Redberry Lake Biosphere Region

Supervisors and collaborators: *Dr. Cheryl Troupe, Sara Pilon*

Our community project investigates environmental change and sustainability efforts in the 44,000-hectare UNESCO RLBR from the early nineteenth century to the present day. Stage one (2024-2025) entailed historical data collection while stage two (2025-present) involves oral history gathering. This historical environmental database is being organized for research and future community use in the Biosphere’s Interpretive Centre.

Stuti Thakkar

Board 3

Iron acquisition pathways in the emerging One Health multidrug-resistant and opportunistic pathogen, Morganella morganii

Supervisors and collaborators: *Christine Joyce Francisco, Tanasha Iftekhar, Camille Hamula, Ninad Mehta, and Jessica R. Sheldon*

Morganella morganii lacks siderophore biosynthesis genes, prompting questions about its iron-acquisition strategies. Transcriptomics and growth assays show repression of putative uptake systems under iron-replete conditions and reveal that the organism can use heme, ferric citrate, serum iron, and xenosiderophores, supporting a flexible, multi-pathway strategy for uptake of the metal.

Taryn Stock

Board 30

The Effect of Thiolutin on Phosphorylated Heat Shock Protein B1 Localization and Actin Cytoskeletal Dynamics in Myometrial Cells

Supervisors and collaborators: *Dr. Daniel MacPhee*

Heat shock protein B1 is a chaperone that is increasingly expressed throughout animal pregnancy and labour. This project aims to investigate the effects of the drug Thiolutin on HSPB1 phosphorylation, actin cytoskeleton organization, and focal adhesion dynamics in uterine smooth muscle cells to provide insight into this mechanism of pregnancy.

Toluwanimi Famuyiwa

Board 34

Protein-protein Interaction of Type II Secretion System in Klebsiella pneumoniae

Supervisors and collaborators: *Dr Jenny-Lee Thomassin*

My research is about how proteins interact in the type II secretions system of Klebsiella pneumoniae and how this fits into the current depiction of the type II secretion system all in a bid to better understand the ways in which the type II secretion works

Tori Dauvin

Board 36

Assessing the need for pediatric gait analysis in Saskatchewan: A mixed methods needs assessment

Supervisors and collaborators: *Dr Valerie Caron*

Assessing the need for pediatric walking assessment services in Saskatchewan through surveying healthcare providers on the current context in the province, barriers, and preferences going forward. Using both open and closed ended questions to provide quantitative and qualitative data to guide future developments in gait services.

Victor Zhang

Board 35

Multiple Sclerosis-Relevant Cell Stressors Induce Dysfunction of Heterogeneous Nuclear Ribonucleoprotein A2/B1

Supervisors and collaborators: *Jay Gabriel B. Larga, Patricia A. Thibault, Michael C. Levin*

The RNA binding protein hnRNP A2/B1 is closely related to hnRNP A1. hnRNP A1 dysfunction, characterized by cytoplasmic localization, contributes to neurodegeneration in multiple sclerosis. We examined whether administration of MS-relevant cell stressors cause a change in the nucleocytoplasmic localization of hnRNP A2/B1 and subsequent neurodegeneration in primary mouse neurons.

Presenter Index

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