eureka! *Undergraduate Research Symposium 2022*

9:00 - 9:15 a.m. — Welcome & Opening Remarks

9:15 a.m. — Student Research Talks

9:15 — **Jasmine Dhatt | Biological Sciences**
The Effects of Short Chain Fatty Acids on Colorectal Cancer and T cell Interactions

9:30 — **Rebecca Erin Sugars | Nursing**
Exploring Physical Activity Guideline Adherence in Canadian Immigrant Youth from the Perspective of Community Service-Workers: A Qualitative Exploratory Study

9:45 — **Heidi Nwosu | Cell Biology**
The Effect of Microbial Protein FadA on Canonical Wnt/β-catenin Signaling in Genetically Instable Colorectal Cancer Subtypes

10:20 - 11:00 a.m. — Undergraduate Networking Session
Featuring: **Mitacs Globalink**

11:00 a.m. — Poster Presentation Sessions

Room A

- **Peter Anto Johnson** | Utilizing virtual simulation gaming to promote conflict resolution, team-building, and salutogenesis during prolonged space exploration
- **Zhi Ying Kuan** | Crystallization trials on the BRCA1/BARD1 RING heterodimeric complex
- **Davidson Noby Joseph** | On Illumination of k-dimensional Faces of the n-dimensional Cube

Room B

- **John Christy Johnson** | Use of Artificial Intelligence in Detection of Fevers in COVID-19
- **Ellen Hayhoe** | Mapping in-vivo organ-specific glycan binding preferences using genetically encoded multivalent Liquid Glycan Array (LiGA)
- **Shruti S. Kandpal** | Death Fears: A Qualitative Analysis in Young Adults

12:00 - 1:00 p.m. — Keynote: A Weaving of Indigenous Science and Botanical Research
Featuring: **Dr. Warren Cardinal-McTeague**

1:30 p.m. — Student Research Talks

1:30 — **Katherine Souter | Neuroscience**
Investigating fine control of cranial base development by Bmps

1:45 — **Robert Joseph George | Applied Mathematics**
Numerical Analysis for Real-time Nonlinear Model Predictive Control (NMPC) of Ethanol Steam Reformers

2:00 — **Imre Papp | Neuroscience**
The role of ANKRD11, a neurodevelopmental disorder risk gene, in brain development

2:15 - 2:45 — Eureka Journal Panel
Featuring: **Eureka's Editorial Team**

3:00 p.m. — Poster Presentation Sessions

Room C

- **Steel McDonald** | Sex-Specific Metabolomic Biomarkers Indicative of Adverse Mental Health Outcomes in Syrian Refugees
- **Matthieu Zolondek** | Species-specific behavioral changes upon exposure to UV light and to a pollutant in three Alberta leech species

Room D

- **Jingyi He** | Animal Assisted Therapy and Alternative Animal Assisted Therapy: A Systematic Review
- **Kamal Kandpal** | The Effectiveness of the Cholera Vaccine as Tested Through HDI, Natural Immunity, Attack Rate, and Death Rate
- **Kritika Taparia** | Frequency and utility of bone marrow examination in relapsed/refractory immune thrombocytopenia

4:00 - 4:30 p.m. — Awards & Closing Remarks

APIRG ISSS The Interdepartmental Science Students' Society