Thesis Defense Seminars

**CPSC** MSc Final Seminar: “Gaining more from Tweets: Knowledge, Actions, and Requirements Elicitation by a Hybrid Method of Natural Language Processing” by Mohammad Navid Masahat (Supervisor: Dr. Guenther Ruhe) on **Monday, November 14 at 10:00am** on Zoom. Please contact the Computer Science Department for zoom details (cpsc@ucalgary.ca)

**GEOS** MSc Final Seminar: “Geochemical fingerprinting approaches to determine the origin of fluids produced from Duvernay Formation wells in west-central Alberta, Canada” by Kevin Grimeau (Supervisor: Dr. Bernhard Mayer) on **Friday, November 18 at 9:00am** in ES136.

**BISI** PhD Oral: “Examining uncertainty in environmental DNA analyses in freshwater lotic systems” by Jori Harrison (Supervisor: Dr. Sean Rogers) on **Friday, November 25, 2022** in MS427

**GEOS** MSc Final Seminar: “Bayesian estimation of nonlinear centroid moment tensors using multiple seismic data sets in the Kiskatinaw Seismic Monitoring and Mitigation Area” by Mahdi Hamidbeygi (Supervisor: Dr. Jan Dettmer) on **Wednesday, November 30 at 9:00am** on Zoom. Please contact the Geoscience Department for zoom details (geoscience@ucalgary.ca)

Seminars & Events

**GEOS** November Teaching Discussion Series, we welcome interested people from across the Faculty of Science to attend: “Assessing the Level of Inquiry in Lab Assignments” Discussion Facilitator: Rudi Meyer **Tuesday, November 15, 2022 at 11:00am** in ES136.

**MTST** Fall 2022 Lunch at the Mathematical and Computational Finance Laboratory (MCFL) “Affine GARCH option pricing models, stochastic interest rates, and diffusion limits” Zhouzhou Gu (Department of Mathematics and Statistics, University of Calgary) **Tuesday, November 15, 2022 at 12:00pm** in MS569.

**NANS** “Exploring Rare-Earth-Based Nanomaterials for Optical and Magnetic Applications” Eva Hemmer (Department of Chemistry and Biomolecular Sciences, University of Ottawa) **Tuesday, November 15, 2022 at 1:00pm** see attached pdf.

**PHAS** Sigma Xi Seminar Series: “Searching for Massive Black Holes in Small Packages; How to find black holes that don’t want to be found” Matthew Taylor **Wednesday, November 16, 2022, 4:30 pm MST (-7UTC)** Hybrid event, Zoom. Please contact the Physics and Astronomy Department for zoom details (phasoffice@ucalgary.ca) OR attend in-person BI 211

**PHAS** Introducing the Physics GeMs. This group is for gender minorities in Physics and Astronomy—cis women, Two Spirit, agender, non-binary, gender non-conforming, or transgender people. We aim to support and promote the presence and equity of gender minorities in the Physics and Astronomy department. We will host an event on **November 17, 2022 at 3:30 pm** in the EEEL Building, room 445, with pizza and games. For inquiries, email Pam Freeman

**NSERC-CWSE** presents online workshop series: Science for Humanity “Session 4: Our Interconnectedness” **Thursday, November 17, 2022 at 3:00pm**, Panel Discussion Panel Discussion with Dr. Laleh Behjat, Dr. Jennifer Jakobi, Dr. Shohini Ghose. See attached pdf for more details
Faculty of Science EDI Coffee Chat “End Imposter Syndrome in Your Workplace. Facilitated by Pamela Freeman (PhD student in PHAS). See attached paper. **Thursday, November 17 at 10:00am** in BI211

GEOS Gallagher Colloquium Series: “Can mine tailings become massive carbon sinks?” Bethany Ladd, University of British Columbia Date: **Thursday, November 17, 2022**, Networking Reception: 5:00 - 6:20 p.m. MT Presentation: 6:30 - 7:45 p.m. MT Hybrid event. Please contact the Geoscience Department for zoom details (geoscience@ucalgary.ca)

Faculty of Science invites you to join a celebration of LGBTQ+STEM Day Film Screening of ‘The Imitation Game” followed by a Panel Discussion. **Friday, November 18 at 2:30pm** (hybrid event). For more details and registration, see attached pdf.

MTST Eric Milner’s Graduate Scholarship Colloquium presented by Mishty Ray “What is the Langlands program?” **Friday, November 18, 2022 at 3:00PM** Hybrid Event. In Person in MS 431 OR please contact the Mathematics and Statistics Department for zoom details (mathadmin@ucalgary.ca)

One Health Research Symposium at the [2022 RSC Celebration of Excellence and Engagement](#) (COEE). **Thursday, November 24, 2022, 9:00 am – 3:00 p.m.** Macleod Hall, Telus Convention Centre Register by Wednesday, November 16, 2022. This event is free for UCalgary faculty, staff and students.. Lunch will be provided, please email sci.ad.admin@ucalgary.ca on how to register

**Opportunities**

**Canadian Space Agency: Enhancing Industry/University Collaboration with CSA Funding for Highly Qualified Personnel Training (EIUC)** aims to support research projects at Canadian universities for a project that has received a grant under the NSERC - Alliance Grants Program. Ultimately, this initiative seeks to support research projects that will contribute to the development of new scientific knowledge and space technologies, while making it possible for a larger number of students (undergraduate, graduate and postgraduate) to acquire hands-on experience in an industry setting. Each project could be eligible to receive a yearly amount matching the grant received yearly from the NSERC Alliance program, up to $100,000 per year for a maximum duration of 5 years. To be eligible, projects must demonstrate their link to one of the priorities identified in [Space Strategy for Canada](#) or the recently announced [Canada’s Strategy for Satellite Earth Observation](#), or must further the research in the field of quantum technology in the space sector. The CSA may to prioritize projects related to the following research disciplines: quantum technology in the space sector, adapting to climate change with space-based data, innovative technology in the space sector including advanced robotics, deep space food, deep space health and understanding space weather.

You have until **December 16, 2022** to submit your application to be considered in the first round of funding. Please note that an [RFAA](#) will be used for institutional approval for this competition. [Click here](#) to access the EIUC AO and obtain information on how to apply.

**Azrieli Accelerator Catalyst Grants** are intended to catalyze new collaborative research related to neurodevelopment, neurodevelopmental conditions, and/or neurodiversity. Proposals should articulate plans for how this funding will increase the applicant’s (or team’s) competitiveness for larger scale external funding opportunities and include plans for knowledge translation and/or knowledge engagement. Funding is up to $50,000 for one year. Applications are due **December 1 by 5pm**. For more details and to apply, please visit their [website](#).
Alberta Innovates Advance – NSERC Alliance 2022/2023 Stream II will invest in projects in alignment with Alberta’s technology and innovation strategies. This stream is targeting the emerging technologies of Information and Communications Technologies (ICT) and Advanced Materials and Manufacturing Technologies (AAM). Individual proposals can request up to $150,000/year for 2 years. See here for further information. Applications will be accepted until March 31, 2023. Full applications for AI and NSERC must be submitted in RMS and approvals received at least 3 business days prior to desired date of submission. RSO Contact: Alisha Kadam

Reminder: Wise Planet strives to create a diverse, inclusive, equitable and just society by training women and other underrepresented groups in STEM to be change leaders equipped to address the major, shared challenges our societies face. Now accepting applications for Cohort 3. To learn more about the program please contact Ariane Cantin and Thuntida Ngamkham. Nominations will come from the Dean. Interested applicants should indicate their interest to scidean@ucalgary.ca prior to the application deadline November 14, 2022.

Reminder: ERA: Clean Energy Transition Partnership is now open for applications. This is a transnational initiative. Project proposals require a project consortium consisting of at least three eligible applicants from at least three separate countries/regions participating. RSO LOI Deadline: November 18 at noon. Visit the website for details.

Reminder: Natural Resources Canada: Clean Fuels Fund – Establishing Biomass Supply Chains
The Establishing Biomass Supply Chains component includes three different project streams:
- Non-Indigenous Projects (Stream 1)
- Meaningful Indigenous-led Projects Stream (Stream 2)
- Majority Indigenous-led Projects Stream (Stream 3)
Each stream has separate eligibility criteria, different submission timing, different funding levels and contribution repayment requirements. Please see the program guide here, and the applicant form here.
RSO Internal Deadline: November 18 at noon
RSO Contact: Tempest Emery

Reminder: MITACS Globalink Research Award (GRA) Thematic Call for applications is now open. The GRA application package is available online. Deadline November 25, 2022 at 3PM MT.

Reminder: UCalgary International Researcher Partnership Workshop Grant 6 grants of $10,000 each are available from UC International to support partnership workshops for researchers at two or more international institutions to identify, initiate, or advance new projects and funding opportunities. Funding supports two workshops – one at UC and one at the international partner institution. Application deadline: November 30, 2022 4:30pm. Contact Heather Clitheroe for assistance in preparing applications. Details and application available online.

Reminder: NSERC and German Research Foundation joint call on sustainable processes and chemistry The proposed Canada-Germany collaborative research projects must focus on basic and fundamental research and are expected to generate new knowledge and address one or more research challenges related to environmental sustainability. Canadian academic researchers may receive up to $100,000 per year for up to three years from NSERC to support their participation in the collaborative research project while German researchers may receive funding from DFG. This call for proposals includes a two-stage application process whereby Canadian researchers must first submit a modified Alliance International Collaboration grant application to NSERC by December 7, 2022 (RMS approvals should be obtained 3 business days in advance of submission).
Reminder: Alberta Innovates: Agri-Food and Bioindustrial Innovation Program (ABIP) supports the development and advancement of technologies that increase productivity, enhance competitiveness, boost the value of agriculture and forestry commodities, and lower greenhouse gas emissions. This is a continuous intake program. Expressions of interest are submitted using the SmartSimple online intake system. If invited to full proposal, approvals from RMS must be obtained by noon, three business days before intended submission.

Reminder: Earth Science for Society (ESfS) The 10th Exhibition will take place on November 27-29 at MacEwan Hall. This is a free, fun, educational, and dynamic geoscience outreach event in which students, families, youth groups, and the public are given an opportunity to explore the wonders of Earth science. Interactive, hands-on exhibits are showcased in four themed pavilions. The organizers are seeking volunteers to help out. If interested, please visit https://esfscanada.com/volunteers/.

The IMU Committee for Women in Mathematics (CWM) invites proposals for funding of up to €3000 for activities or initiatives taking place in 2023, with deadline December 23, 2022. Proposals should aim at establishing or supporting networks for women in mathematics, and/or organizing research workshops (fostering women collaborations), and/or other ideas for researching and/or addressing issues encountered by women in mathematics. See attached information.

Opportunities – Awards

For any award, including those listed below, if you are planning on submitting a nomination for yourself or someone else, and would like support in developing the nomination package, please contact Danielle Demiantschuk as early as possible. Other opportunities can be found on the FOS awards site, and in the RSO awards database.

Governor General’s Innovation Awards To be competitive for these awards, nominated innovators must be 30 years or younger, truly exceptional, transformative, and positive in their impact on the quality of life in Canada. Details here. Deadline: November 18, 2022.

NSERC Awards for Science Promotion recognize individuals and groups who are inspirational in the way they promote science to the general public. Details here. Deadline November 25, 2022.

UCalgary Equity, Diversity and Inclusion Awards: Celebrate inspiring students, faculty, postdoctoral scholars, staff and collaborative teams working to advance a more accessible, equitable, diverse, and inclusive university. Details here. Deadline: November 30, 2022.

Calgary Awards, offered by the City of Calgary, celebrate and recognize outstanding achievements and contributions made by Calgarians. There are four main categories of awards. The next round will open on January 4th. Details here. Deadline: February 1, 2023.

Reminder: Killam Annual Professor Awards – recognize five faculty members who have demonstrated excellence in research, teaching, and service. Each award carries $10,000. Details here. Deadline: December 15, 2022

Reminder: Killam Visiting Scholar Award – provides sponsorship ($50,000) of a distinguished scholar who will make significant contributions to academic life at the UofC through a visit during the winter or fall term (2022-2023) Details here. Deadline: December 15, 2022

Opportunities – Health Sciences

Reminder: Alberta Innovates LevMax-Health Program Fall 2022
The LevMax-Health Program specifically leverages high-quality, Alberta-based applications from Tri-agency competitions (NSERC, SSHRC, CIHR) with strong potential to advance Digital Health research and innovation in
Alberta. This specific funding opportunity has four thematic areas for consideration: talent; research; commercialization; health system transformation.

LevMax-Health Program objectives are to: support research and innovation clients in Alberta to advance Digital Health; leverage partner relationships to advance Digital Health innovation in Alberta; and increase the number of projects using real-world data to develop Digital Health technologies.

Potential applicants must have applied to a Tri-agency competition in the period between April 1, 2022 to September 30, 2022 and met eligibility but have been deemed unsuccessful.

**RSO Internal Deadline: November 15, 2022 at noon**

**RSO Contact:** Katie Cupello.

### Opportunities – Postdocs and Graduate

**Mitacs** DAAD - German Academic Exchange Service and Mitacs will present a webinar on Internship programs in Germany during 2023 for students in the Natural Sciences and Engineering on **Monday, November 21st, 2022 from noon to 1 pm EST**.

Graduate-level students will hear about DAAD's RISE Professional, a program offering Master's and Doctoral level students the chance to carry out an internship in a German workplace of anywhere between 10 weeks and 6 months. This year's application deadline **December 15, 2022**. [Register here.](#)

**Sarah Baker Memorial Fund** Graduate students and postdoctoral fellows at Canadian and American post-secondary institutions who work on conservation-related research projects that help advance Yellowstone to Yukon’s (Y2Y) mission and vision are eligible.

Up to $5,000 CAD is available for the 2022-23 funding cycle, awarded mid-December 2022. Y2Y may, at its discretion, split the award among two or more recipients. Details [here.](#) The deadline to apply is **November 27, 2022 at midnight MT**. Contact: Ellen McKay

**Sessional instructor positions in the Department of Geoscience** for Winter 2023. The application deadline for all postings is **November 18th, 2022**.

- **GLGY 305** [Introduction to Dinosaurs](#)
- **GLGY 333** [Igneous, Metamorphic and Ore Rocks and Processes](#)

**Reminder: Borealis AI Graduate Fellowship** is an annual Fellowships Program which awards 10 graduate students a $10,000 fellowship for their exceptional research aspirations, and to support their goals as they pursue a Ph.D. at a Canadian university in machine learning (ML) or artificial intelligence (AI). They are now accepting applications for our 2022-2023 Fellowships Program up until **November 20 at 9:59 PM MT**.

**Reminder: Ivan Finlay Leadership Award** recognizes students who have effected positive change while in volunteer leadership role(s) in either campus organizations or community organizations. There are up to six awards available for the 2022 award period, each with a prize of $1,000. Details [here.](#) Deadline: **November 20, 2022**.

**Reminder: CIHR Summer Program in Aging (SPA) 2023** is an intensive 5-day capacity-building program with the aim of providing graduate trainees with advanced training that crosses disciplines, offers networking opportunities, and disseminates best practices in research. SPA has been held yearly across Canada since 2006 on a different strategic theme each year. The program brings together up to 40 research trainees and numerous academic mentors to participate in interactive learning sessions over the course of one week. The strategic theme for SPA 2023 will be Longer-living older adults: Multidisciplinary approaches to a growing area of research on aging.
Congratulations!

Dr. Paul Barclay recently became an Elected Optica Fellow, in recognition of his pioneering work in the field of diamond quantum nanophotonics and optomechanics, and revealing new physical phenomena using nanophotonic resonators.

Heather Clitheroe for her presentation at the Canadian Board for International Education conference (CBIE 2022) “Where are you going and who do you work with?”: Strategies to Engage and Facilitate Faculty-Led Research and Academic Collaborations - Yukino Mori Senior Manager (Interim), Global Engagement, SFU International, Heather Clitheroe International Coordinator, Faculty of Science, University of Calgary.

Did You Know?

The Faculty of Science 2022 United Way Campaign is underway. You have the chance to visit the mountain islands...come to Cozy Island, Wonders of Fermentation Island, or Treasure Island for your chance to win! You can find more details here.

All students, staff and faculty can view your paycheque stub in advance of payday. Login to the My.UCalgary portal and navigate to All about Me. Under My Pay, select Payroll details If you find any discrepancies, speak to your supervisor.

W2023 Special Topics Courses for Science Grad students

CPSC 601.30 High Performance Scientific Computing and Visualization will be offered (Tu-Th 9:30 – 10:45, ST 057). A CPSC course that is open to anyone who knows how to program in C/C++. Modern scientific computing and data science workflows are increasingly relying on the capabilities of parallel and distributed computing architectures for high performance. This course will introduce students to data management principles and programming paradigms that are central to these workflows. Students will be exposed to multithreading in C++, GPGPU computing with CUDA, and programming distributed memory architectures via the Message Passing Interface (MPI). The focus will be on the use of these technologies to accelerate the performance of core techniques and to handle large datasets. Use cases will be drawn from various areas such as numerical linear algebra, image processing, machine learning, computer graphics, and data visualization. Additionally, students will be able to explore their own domain of interest via case studies and a term project. For more information please contact Usman Alim

SCIE 507.33 Emerging Technologies and Entrepreneurial Thinking in Evolving Energy Systems will be offered (Tu 2:00 – 4:45 pm, ENF 334). Open to graduate students in any program in the Faculty of Science. For more information please contact David Eaton
GEOP 699.01 Global Seismology will be offered (Tu-Th 11:00-12:15). In addition to geophysics grad students with an interest in seismology, this course may be of interest to mathematically-inclined geology grad students who have an interest in earthquakes and/or the Earth’s deep interior. For more information please contact David Eaton.

Science Research and Innovation Newsletter (SRIN) comes out every Monday. If you have a seminar notice, congratulations or awards for the newsletter please submit it by noon on Friday to sci.borg@ucalgary.ca to ensure it is added.