Thesis Defense Seminars

**CHEM** MSc Final Seminar: “Synthesis and Characterization of Azaheterocycle Containing Non-Fullerene Acceptors” by David Turnbull (Supervisor: Dr. Jeffrey Van Humbeck) on **Monday November 28, 2022 at 12:00pm** in EEEL 445.

**BISI** PhD Oral Exam: “A culturomics platform to identify antibiotic potentiators from the natural products of microbiota” by Rahgavi Poopalarajah (Supervisor: Dr. Joe Harrison) on **Tuesday November 29, 2022 at 11:00am** on Zoom. Please contact Please contact the Biological Sciences Department for zoom details (biosci@ucalgary.ca)

**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)

**GEOS** MSc: "Pyrite and pyrrhotite in a prograde metamorphic sequence, Hyland River region, southeast Yukon: Implications for orogenic gold" by Colin Padget (Supervisor: Dr. David Pattison) on **Monday December 5, 2022 at 1:00pm** on Zoom. Please contact the Geoscience Department for zoom details (geoscience@ucalgary.ca)

**CPSC** PhD: “Using Machine Learning Towards Decision Support for Epilepsy Refractory Cases” by Bijan Farhoudi (Supervisor: Dr. Frank Maurer) on **Tuesday, December 6, 2022 at 3:00pm** on Zoom. Please contact the Computer Science Department for zoom details (cpsc@ucalgary.ca)

**BISI** PhD Oral Exam: “Metabolic and protein engineering in plant isoprenoid metabolism” by Joseph Utomo (Supervisor: Dr. Dae-Kyun Ro) on **Thursday December 8, 2022 at 9:00am** Hybrid BI 211 or Zoom. Please contact the Biological Sciences Department for zoom details (biosci@ucalgary.ca)

**CPSC** Msc Oral exam: “Utilizing Natural Language Processing to Produce and Present Film: An Exploratory Analysis” by Kyle Jorgensen (Supervisor: Dr. Mea Wang) on **Monday December 12, 2022 at 10:00am** on Zoom. Please contact the Computer Science Department for zoom details (cpsc@ucalgary.ca)

**BISI** PhD: “Leishmania donovani Cathepsin B: Impact on Proteins and ncRNAs of Small Extracellular Vesicles, and on Infection Metabolism” by Camila Meira (Supervisor: Dr. Lashitew Gedamu) on **Friday December 16, 2022 at 10:30am** on Zoom. Please contact the Biological Sciences Department for zoom details (biosci@ucalgary.ca)

**GEOS** MSc Thesis: “The effects of water-rock interactions on the permeability of the Precambrian Basement in Southern Saskatchewan” by Taylor Smith (Supervisor: Dr. Benjamin Tutolo) on **Tuesday December 20, 2022 at 1:00pm** in ES 136

Seminars & Events

**GEOS** The CSEG Distinguished Lecture Tour is coming! This is a national lecture tour sponsored by the CSEG Foundation and presented by a member of a distinguished Canadian Society of Exploration Geophysicists (CSEG).
The 2022-23 lecture program welcomes Dr. Rachel Newrick to present her talk: “Geophysics – the future is so bright, we have to wear shades”, on November 30th at 1:00 pm in ES 136. See attached poster for further details.

**SSE** Schulich Innovates: “High Definition Mapping in Level 4 Autonomous Driving” by Dr. Hongzhou Yang (Department of Geomatics Engineering) on Wednesday November 30, 2022 at 12:00pm in ENG 207 or via Zoom

Register to attend

**NSERC-CWSE** presents online workshop series: Science for Humanity “Session 5: Humans of Science - Lessons In Chemistry with Bonnie Garmus and Special Guests” Thursday, December 1 1:00pm, The Science for Humanity workshop series will conclude with an online book club discussion with the book’s New York Times best-selling author. To register, please contact sci.ad.admin@ucalgary.ca for registration link. Content & Trigger warnings. See attached pdf for more details

**MTST** Fall 2022 Lunch at the Mathematical and Computational Finance Laboratory (MCFL) “Forecasting Stock Options Prices via the Solution of an Ill-Posed Problem for the Black-Scholes Equation and Neural Network Machine Learning” by Kirill Golubnichiy (Department of Mathematics & Statistics, University of Calgary) on Tuesday December 6, 2022 at 12:00pm in MS 569

**Opportunities**

**Emissions Reduction Alberta (ERA) Industrial Transformation Challenge**

*Note: This is a 2-stage competition consisting of an Expression of Interest (EOI) stage and a Full Project Proposal (FPP) stage. The FPP stage is by invitation only.*

The Industrial Transformation Challenge (ITC) is intended to support and accelerate the efforts of Alberta’s industrial sector to achieve net-zero greenhouse gas (GHG) emissions. This call welcomes EOI’s that will advance technology to the stages of field pilot, demonstration, or first-of-kind commercial implementation by project completion. Funding is open to applicants from across Alberta’s industrial sectors, including petrochemical, agriculture, forest products, manufacturing, energy, and more.

ERA will hold an informational webinar on Friday, December 2, 2022 at 9:30 a.m. Please register to attend.

**RSO Internal Deadline (EOI): January 16, 2023 at noon**

For more information, please contact Katie Cupello in RSO. For additional support, you may also contact Michael Blough, Manager, Strategic Opportunities, Office of the Vice President (Research).

**Innovation for Defence Excellence and Security (IDEaS) Program** advances promising technology quickly through a phased approach, and the present opportunity (Component 1A) helps to establish the innovativeness and impact of a solution and its ability to address a specific defence and security challenge. Innovators have up to six months to refine and advance their product and showcase it to Department of National Defence/Canadian Armed Forces.

**RSO Internal Deadline: December 15, 2022 - 12:00 PM**

RSO Contact: Tempest Emery

**Canada-Japan 3+2 Collaborative Call for Proposals**

Working together, the governments of Canada and Japan aim to foster and support collaborative industrial research and development (R&D) projects with a high potential for commercialization. This call for proposals is open to organizations from Canada and Japan who wish to form project consortia for collaborative projects focused on developing AI-based solutions for well-being, better living environments and social connection for aging populations.

**Research Services Office Internal Pre-Application Deadline: January 18, 2023 - 12:00 PM**

RSO Contact: Tempest Emery
Reminder: Campus Alberta Small Business (CASBE) program Stream II Albert Innovates has launched the 2022-23 CASBE program with two new matching opportunities: 1. NSERC Alliance Quantum Grants, and 2. Approved NSERC Applied Research and Technology Partnership grants (ARTPs) that align with the Alberta Innovates CASBE requirements. Although this is a continuous intake program, potential applicants should submit their applications as soon as possible. RSO Contact: Katie Cupello

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 UCalgary 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: 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.

Reminder: Alberta Conservation Association (ACA) Research Grants now accepting applications for the 2023/2024 funding year. Projects should focus wildlife, fish and habitat which inform the effective management of wildlife, fish populations, and habitat in Alberta carried out by professional researchers. To learn more visit ACA Research Grants. Application Deadline: December 1, 2022.

Reminder: Courage to Act is developing resources to ensure post-secondary students are safe from sexual harassment in their experiential learning placements. Students, recent graduates, staff, and faculty across Canada, they want to hear from you! You’re invited to contribute to their national survey: https://www.couragetoact.ca/elp before the closing date of December 2, 2022.

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: NSERC-CNSC Small Modular Reactors Research Grant Initiative The Canadian Nuclear Safety Commission (CNSC) regulates the use of nuclear energy and materials to protect health, safety, security, and the environment; to implement Canada’s international commitments on the peaceful use of nuclear energy; and to disseminate objective scientific, technical, and regulatory information to the public. The NSERC-CNSC Small Modular Reactors Research Grant Initiative is intended to support activities that will:

- Increase the scientific information available to support regulatory decision-making and oversight
- Increase capacity to regulate SMRs
- Enhance the capabilities of Canadian universities to undertake research related to SMRs
- Increase training and help produce a new generation of nuclear scientists, engineers and policy-makers.
Research proposals must address one or more of the specific research challenges and knowledge gaps mentioned here.

RSO Internal Deadline: December 8, 2022, 12:00 PM MT.
RSO Contact: Alisha Kadam

**Reminder: Genome Canada: Genomic Applications Partnership Program (GAPP) April 2023 (Round 25)**

Note: the funding deadline calendar posting for GAPP Round 25 has been updated to reflect Genome Canada’s revised deadlines

Genome Canada, in partnership with Genome Alberta (GAB), is seeking proposals for the Genomic Application Partnership Program (GAPP). The GAPP funds downstream research and development projects driven by challenges and opportunities identified by end-users such as industry, government, not-for-profits, or other receptor organizations. This is an ongoing competition and Expressions of Interest for Round 25 of the competition must be submitted to Genome Alberta by December 12th, 2022, for submission to Genome Canada in December. Interested parties are asked to contact Genome Alberta in advance of providing the EOI for submission, cc’ing ipd@ucalgary.ca to engage University of Calgary Research Services support.

**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.

**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.

**Peter Gruber Foundation Cosmology Prize** celebrates individuals whose achievements have produced fundamental advances in our understanding of the structure and evolution of the universe may be nominated. Details here. Deadline: December 15, 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 UoF through a visit during the winter or fall term (2022-2023) Details here. Deadline: December 15, 2022

**Opportunities – Social Sciences**

**2023 Social Sciences and Humanities Research Council Insight Development Grant Competition** support research in its initial stages. The grants enable the development of new research
questions, as well as experimentation with new methods, theoretical approaches and/or ideas. Funding is provided for short-term research development projects of up to two years that are proposed by individuals or teams. SSHRC welcomes applications involving Indigenous research, as well as those involving research-creation.

**RSO Internal Deadline: Monday January 30, 2023 at noon**

**RSO Contact: Stephanie Patrick**

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**RSO SSHRC Insight Development Grant Information Session**

**Wednesday, December 7 from 1 - 2:30 PM | ONLINE**

Please join Dr. Penny Pexman, Associate Vice-President (Research) and the Research Services Office on **December 7, 2022 from 1 – 2:30 PM** for a discussion of the SSHRC Insight Development Grant Program in advance of the February 2023 submission deadline. We will include an overview of the program, institute success rates, application and submission instructions, as well as tips and tricks. Panelists Dr. Lorelli Nowell (Nursing) and Dr. Ruth Pogacar (Haskayne) will speak to their experiences with the IDG Program. Presentation will be followed by an open discussion/Q&A period.

**Everyone is welcome. To join this session, please email Stephanie Patrick by December 5 to register.**

You will receive the Zoom link and password on December 6.

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**Opportunities – Postdocs and Graduate**

**PIMS** the Pacific Rim Mathematical Association (PRIMA) 2022 Congress is being hosted by PIMS, starting in less than 3 weeks. The conference will be **December 4-9, 2022**, at the Sheraton Wall Centre in downtown Vancouver. **Registration** is still open and graduate students at the University of Victoria, University of British Columbia, University of Calgary, University of Manitoba and University of Washington sites may also be eligible for a $50 discount, please contact your PIMS Site administrator for more details.

**Mitacs** The Canadian Science Policy Fellowship (CSPF) is now accepting applications from PhD holders interested in a year-long policy position, starting in September 2023, with a Canadian government host office. Approved fellows receive an annual salary of $70,000 to $80,000 from their host offices, as well as professional development and networking opportunities facilitated by Mitacs. Application deadline: **February 1, 2023 (11:59 p.m. PT)** For more information, please visit Mitacs [website](#).

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**Did You Know?**

**Reminder: 2022/2023 Annual Compliance Certificate** due by **December 5, 2022**. All project holders of externally and internally restricted funds at the University of Calgary are required to complete this on-line certificate.

For more information on the process, please refer to the [FAQ document](#). To assist you with the completion of the certificate, a [Summary of Changes document](#) outlining a list of policy changes/updates over the past year is available. As in the past year, the certificate will be completed on-line and can be accessed through the Research tab on your My U of C portal.
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.