Thesis Defense Seminars

**BISI** MSc Final Seminar: “Studying The Interaction of RACK-1 and GLD-1 in the Germline of Caenorhabditis elegans” by Sadaf Sangari (Supervisor: Dr. David Hansen) on **Thursday, August 4 at 1:00pm** in BI211.

**GEOS** PhD Final Seminar: “Free phase gas in shallow groundwater” by Tiago Morais (Supervisor: Dr. Cathy Ryan) on **Friday, August 12 at 9:00am** in ES136.

**MTST** MSc Final Seminar: “Doubly sparse Cox proportional hazards model with a graphical structure among predictors” by Elham Jamali (Supervisor: Dr. Xuewen Lu) on **Wednesday, August 10 at 10:00am** in MS478.

**BISI** MSc Final Seminar: “Explorations towards the production of novel biogenic nanomaterial using Rhodococcus aetherivorvans BCP1” by Nikhil Pradhan (Supervisor: Dr. Raymond J. Turner) on **Monday, August 22** Please contact the Biological Sciences Department for zoom details (biosci@ucalgary.ca)

**GEOS** PhD Final Seminar: “North American ornithomimids: morphology, taxonomy, morphometrics, and phylogenetics” by Rachel Nottrodt (Supervisor: Dr. Alex Dutchak) on **Tuesday, August 23 at 9:00am** in ES136.

**BISI** PhD Final Seminar: “Physical and chemical alterations to the intestinal mucus barrier during Giardia spp. Infection” by Elena Fekete (Supervisor: Dr. Andre Buret) on **Thursday, September 15 at 9:00am** in BI211.

Seminars

**BISI** “From death to immortality: Role of sphingolipids in metal toxicity and carcinogenesis” by Professor Wing-Kee Lee, Faculty of Medicine, University of Bielefeld, Germany. **Wednesday, July 27 at 10:00am** in BI211 (*Please note updated time)

**CPSC** “Ecoclimates: Climate-Response Modeling of Vegetation” by Dr. Wotjek Palubicki, University of Poznan, Poland. **Wednesday, August 3 at 2:00pm** in ICT516

Information for NSERC Discovery Grants & RTI Applicants

**Faculty of Science – NSERC DG and RTI Timelines** The timelines are available [here](#). Please contact our Research Facilitator [Rhian Gunn](#) if you have any questions or concerns.

Opportunities

**Pre-Announcement for Alliance Missions: Anthropogenic Greenhouse Gas Research**

Alliance Missions is returning with a new and exciting challenge to help address climate change, focused on Anthropogenic Greenhouse Gas (GHG) Emissions. This call will support the goals of the [2022 Federal Budget](#) that prioritizes Canada’s ongoing efforts to fight climate change and protect the environment by taking bold and immediate action to reduce greenhouse gas (GHG) emissions, while strengthening the Canadian economy with sustainable jobs and clean industrial growth.

The call will target interdisciplinary, collaborative research projects supporting net-zero GHG emissions targets. Projects must involve at least one partner organization that can be recognized for cost sharing.

**Approximate timeline:**

- August 2022: Call for proposals launch
• September 2022: Letters of Intent deadline
• November 2022: Application submission deadline
• March 2023: Project start date

Reminder: Natural Sciences and Engineering Research Council (NSERC) PromoScience 2022
NSERC’s PromoScience Program offers financial support for up to three years for organizations working with young Canadians to promote STEM understanding. NSERC invites applications that promote STEM to Canada's young people, particularly to those groups that are under-represented. Since only one proposal per department can be submitted, Internal Notice of Intent (iNOI) are due to Research Services by noon on Friday, August 19, 2022. A copy of the iNOI can be found here or on the funding calendar. The final internal deadline is Monday, September 12, 2022.

Reminder: Campus Alberta Small Business (CASBE) program Stream II Alberta 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: Caitlin Janzen

Opportunities – Awards
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. More information can be found on the awards website.

Sloan Research Fellowship: They seek to stimulate fundamental research by early-career scientists and scholars of outstanding promise. Details here. Deadline: September 15, 2022.

Royal Society of London Fellowships: Candidates must have made ‘a substantial contribution’ to the improvement of natural knowledge, including mathematics, engineering science and medical science. Details here. Deadline: September 30, 2022.

Stockholm Water Prize: (Stockholm International Water Institute): The Prize recognizes people and organizations who have made outstanding contributions to the sustainable use and protection of the world’s water resources, in both science and practice. Details here. Deadline: September 30, 2022.

Rolex Awards for Enterprise: The Awards encourages a spirit of enterprise in individuals around the world by supporting outstanding endeavors in areas that advance human knowledge and well-being with applications that fall into the following areas: the environment; science and health, applied technology, cultural heritage, and exploration. Details here. Deadline: October 17, 2022.

Simons Investigators in Mathematics, Physics, Astrophysics and Computer Science: supports midcareer outstanding theoretical scientists. Details here. Deadline: November 3, 2022

Traditional Fulbright Scholar Awards: These awards are open to Canadian scholars in all fields and are designed to enable emerging and established scholars, post-doctoral researchers, and experienced professionals to conduct research, teach, or undertake a combination of both activities for one semester or a full academic year at any university or research center of their choice in the United States. Details here. Deadline: November 15, 2022.
Opportunities – Postdocs and Graduate

CIHR Fellowship
CIHR’s Health Research Training Strategy aims to equip research trainees so that they emerge from their training as scientific, professional, or organizational leaders within and beyond the health research enterprise. Generating Research Leaders of tomorrow is a key objective for CIHR. Fellowships provide support for highly qualified applicants in all areas of health research at the post-PhD degree or post-health professional degree stages to add to their experience by engaging in health research either in Canada or abroad.

- **Award:** $40,000 per annum plus $5,000 research allowance
- **RSO Final Internal Deadline (Full Application):** Thursday, September 29, 2022 at 12:00 PM MT

Contact: rsotrainee@ucalgary.ca

The DAAD AInet Fellowship (German Academic Exchange Service (DAAD)) is awarded twice a year to a group of outstanding international early career researchers in the field of artificial intelligence. Awardees will be invited to join the Postdoctoral Networking Tour in Artificial Intelligence (Postdoc-Net-AI) - focus on Cyber Physical Systems, a two-step networking program that offers participants the opportunity to interact face-to-face with leading researchers in Germany, with the aim of initiating collaborations, and creating new research and career opportunities. [Details here.](#) Deadline August 1, 2022.

Reminder: Innovation Catalyst Grant is an entrepreneurial fellowship designed to support recent graduates (Master’s or PhD) in STEM disciplines, providing a 2-year runway to develop and commercialize innovative, science-based products and services that contain a hardware component. For further information, please contact Miranda Stahn at Innovate Calgary.

Reminder: Colton Medal for Research Excellence is a prestigious award for graduate researchers in the field of microsystems or nanotechnologies and includes a monetary prize of $4,500 and recognizes excellence in research leading to new understanding and novel developments in: Microelectronics; Photonics & Optoelectronics; Microelectromechanical systems (MEMS), Nanofabrication and Integration; Internet of Things (IoT) and Edge AI (artificial intelligence); Quantum; and Embedded software. Requires institutional nomination. [Details here.](#) Deadline: August 26, 2022

Opportunities – Health Sciences

Reminder: CIHR Project Grant Fall 2022 is designed to capture ideas with the greatest potential for important advances in fundamental or applied health-related knowledge, health care, health systems, and/or health outcomes by supporting projects of research proposed and conducted by individual researchers or groups of researchers in all areas of health. The best ideas may stem from new, incremental, innovative, and/or high-risk lines of inquiry or knowledge translation approaches.

- Registration is now open via ResearchNet. [Register by August 17, 2022.](#)
- Research Services’ final internal deadline for the full application is **9:00 am on Monday, September 12, 2022**

RSO Contact: Lindsey Hritzuk

Congratulations

Congratulations and job Well Done by Lauren DeDieu (MTST) and her team on hosting a new week-long overnight camp for girls. To read about the Math Attack Summer Camp for Girls please click [here](#) for the UToday article.
F2022 Special Topics Courses for Science Grad students

Please see our new (or relatively new) F23 graduate courses for your consideration. Please contact sci.grad@ucalgary.ca for information.

SCIE 699.01 Communication & Effectiveness This course develops skills in communication and effectiveness. Students learn about good visualization and science storyboarding. Using this framework, they write a research proposal and give an oral presentation. Students practice collaboration considering diversity in personality and culture. They reflect on career planning as they prepare a resume and CV. They consider their strategies to achieve their career goals, and strive to improve effectiveness skills, such as time management. Course outcomes are a research proposal for the Graduate Awards Competition, a resume, and a Three-Minute-Thesis (3MT) presentation. **Tuesday and Thursday, 9:30am to 10:45am in ENA 101.**
Prerequisite: Consent of the Faculty
Students who wish to register for this course should contact the Graduate Science Centre

GEOG 508 Watershed System Science An introduction to advanced concepts in hydrology and watershed analysis, including the impacts of a changing climate and human influence. Involves hands-on computer modelling and experimental labs, and a design project. This course provides students with a new technical elective designed with the intent to be a multi-disciplinary course that bridges the gap between undergraduate education and careers in water resources. **Tuesday and Thursday, 9:30-10:45am not including Lab times; Instructor: Tricia Stadnyk**

SCIE 601 Theory and Practice of University Teaching and Learning in STEM Emphasizing a research-to-practice approach, this course will engage students in readings and discussions about current research, theory and methodological approaches, and pedagogical approaches in Discipline-Based [STEM] Education (DBER) research. Course readings will be varied and include scholarly, practical, and popular readings in order for students to gain nuanced understandings of the social contexts and related issues and challenges of college and university STEM education. Course materials will also emphasize critical, antiracist and decolonizing frameworks to transforming postsecondary STEM education for the belonging of diverse students and cultural-scientific worldviews. While there will be seminal readings, aspects of the course will be co-designed with students’ interests and professional needs in mind. Activities will be geared towards designing environments for equitable postsecondary STEM education, broadening ideas about assessments and evidence of student learning, SoTL research and other topics that emerge from students’ interests and experiences. **Tuesday, 12:30-3:20pm; Instructor: Jennifer Adams**

W2023 Special Topics Courses for Science Grad students

Law 693.02 Law, Science, and the Regulatory State This course will provide students with a theoretical and practical understanding of how law and science operate in the Canadian regulatory state, with a particular focus on environmental law and policy. Substantively, the course touches on constitutional law, administrative law, and environmental law, as well as the norms and principles of the scientific method. The first part will provide a basic understanding of democratic governance in Canada, including the separation of powers and how laws and regulations are passed. This part will also provide an overview of the scientific method and the role that science has come to play in modern democracies. Part II is more substantive and sets out in detail which level of government has jurisdiction over which aspects of the environment. We will consider federal, provincial, municipal, territorial, and Indigenous governments and jurisdiction. Drawing on the concepts and principles from Part I, Part III will introduce students to some of the unique features of environmental law and policy and, applying a case study approach, will illustrate the various opportunities and challenges for science to inform and influence its development and implementation. The course will end with student presentations based on group work. A planned key feature of this course is the opportunity for interdisciplinarity: the course will be offered to J.D.
students but also graduate students in science and public policy. **Tuesday and Thursdays, 10 am to 11:45 am, Jan 30-April 14, 2023. Instructor: Martin Olszynski**

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