Science Research and Innovation Newsletter – October 25, 2021

**Thesis Defense Seminars**

**MTST** PhD Grad Seminar “Normal-Variance mixture model for calibrating loss given default (LGD) of a credit portfolio” presented by Charles Sam (Supervisor: Dr. Rohana Ambagaspitiya on **Wednesday, October 27, 2021, at 1:30pm**. Please contact the Mathematics and Statistics Department for zoom details (mathadmin@ucalgary.ca)

**GEOS** MSc Oral examination “Spatiotemporal variability in field characterization of gas migration around energy wells” by Neil Fleming (Supervisor: Cathy Ryan) on **Monday, November 1, 2021 at 12:00pm**. Please contact the Geoscience Department for zoom details (geoscience@ucalgary.ca)

**Seminars**

**BISI** Slice of Science- “Transitioning from Grad Student to Postdoc: Trials, Tears and Triumphs” By Dr. Courtney Toth (UofC alumni) on **Tuesday, October 26th at 4pm**. Thinking about becoming a postdoctoral fellow after graduation? Not sure what to expect? This talk will highlight my journey and present an honest perspective into the highs and lows of transitioning into a postdoc and beyond. We’ll also cover tips for how to find/secure the right appointment, how to set realistic goals and boundaries, and how to make the most of your fellowship. Please contact the Biological Sciences Department for zoom details (biosci@ucalgary.ca)

**PHAS** Calgary Optics and Photonics Student Society (COPSS) is presenting their second SmallTalk of the year. “Single fiber spectroscopy for monitoring cerebral oxygen saturation on freely-moving rodents” by Dr. Linhui Yu, Research Fellow at Mass General Hospital, Harvard Medical School on **Wednesday, October 27, 12:00-1:00pm**. Please register here for the zoom link.

**GEOS** G.O.L.D. (Geoscience Open Luch Discussions) next presenter- “Rock fabric control on natural fracture in fine grained deposits” by Zach Toews on **Wednesday, October 27 from noon to 1pm**. For more information on G.O.L.D., including an upcoming list of speakers, please see our website or email us at gold@ucalgary.ca. Please contact the Geoscience Department for zoom details (geoscience@ucalgary.ca)

**FofS** The Departments within the Faculty of Science would like to initiate an open dialogue and some constructive discussion and mutual learning in the areas of Equity, Diversity, and Inclusion (EDI). The first in a series of informal Thursday morning “coffee chats” on various topics is **Thursday, October 28th, from 10:00 to 11:00am**. The first topic of discussion will be the article **“How Diversity Works”** (5 page, 15 minutes read) from Scientific American. Please contact the Faculty of Science for Zoom details (sci.dean@ucalgary.ca).
**PHAS** Student Research Colloquium: “Modelling Neuromorphic Maze Solving” by MSc candidate, Elijah Adams (Supervisor: Dr. Claudia Gomes da Rocha) on **Thursday, October 28 at 2:00pm**. For more information see attached document. Please contact the Physics and Astronomy Department for zoom details (phasoffice@ucalgary.ca)

**MTST** CalgaryR is a community of data enthusiasts and endeavors working with R. Their November speaker, Dr. Stephana Julia Moss, PhD Epidemiologist, with the Calgary Critical Care Research Network with will be presenting “Meta-analyses in Medical Research: A Critical Appraisal and Brief Tutorial” on **Wednesday, November 3, 2021, at 5:30pm**. Dr. Moss will present a critical appraisal of the methodological approach of a published systematic review and meta-analysis that culminates with a brief tutorial that compares the statistical approach to meta-analysis in STATA and R. RSVP at [https://www.meetup.com/calgaryr/events/281143383/](https://www.meetup.com/calgaryr/events/281143383/)

**Opportunities**

**NSERC CREATE** Research Services is launching the 2021 intake for the NSERC’s 2022 Collaborative Research and Training Experience (CREATE) program, which supports the training and mentoring of teams of HQP (including PostDocs) from Canada and abroad by developing innovative training programs. Faculty members who would like to participate in the 2021 competition must submit an internal Notice of Intent to Rhian Gunn (Research Facilitator) by **Monday, January 10 by 4pm** for review and comment. iNOIs will be submitted to RSO on their deadline of January 14 on your behalf.

**Canadian Nuclear Research Initiative** Canadian Nuclear Laboratories’ (CNL) Canadian Nuclear Research Initiative (CNRI) supports collaborative Advanced Reactor research projects with third-party proponents in Canada with the goal is to accelerate the deployment of safe, secure, clean, and cost-effective nuclear reactors. CNRI has issued its annual call for proposals (CFP), and CNL will enter joint R&D projects in successful projects, with joint benefits shared between CNL and the applicant. **December 17, 2021 @ noon**: Research Services’ final internal deadline. More information on the timelines is available [here](#).

**Mitacs Elevate: Postdoctoral Fellows** The Mitacs Elevate call for proposals has been launched for postdocs in artificial intelligence, cleantech, quantum science, and biomanufacturing. Postdocs in these sectors can apply for two years of funding valued at **$80K/yr**. MITACs is also offering enhanced funding ratios in the Indigenous Pathways program and SME reduced cost offering (if you are collaborating with a small or medium-size enterprise or NFP, that organization pays only **25%** of the cost of the fellowship for the entire two years). More information is available on the [Mitacs’ website](#).

Applications open at the **end of November 2021**, and the **RSO Deadline for signatures is Friday, January 14**

**Arctic Institute of North America – Northern Scientific Training Program Scholarship**

Northern Scientific Training Program (NSTP) will help you to pay for transportation and living costs while you obtain practical fieldwork experience in the North. You will have the opportunity to develop interest and expertise on northern issues and improve your research skills. Students may apply for up to **$6,000.00** in funding per year.

**Deadline to apply is November 10, 2021**

For more information on the program, eligibility and how to apply, please consult the [Arctic Institute of North America website](#).

**NSERC Alliance Missions Grants** provide $100K to $500K/yr for two years to initiate research collaborations between Canadian researchers and partners from private, public and/or not-for-profit partner organization(s). These grants will cover **100% of the eligible costs** of research for a two-year period. Proposals should catalyze partnership development, ideally to the point that partners can subsequently apply for Alliance grants. Proposals should focus on addressing challenges that have emerged as a result of the pandemic and/or respond to new
economic opportunities. Projects can be based on challenges identified by partner organizations that require research or research expertise (see NSERC’s webpage for further details).

Applications will be accepted any time by RSO until their internal deadline of November 26, 2021. Internal RMS approvals should be obtained before Thursday, November 25.

**Imperial Oil – University Research Awards Program** are designed to encourage research at Canadian universities in areas of interest to petroleum, petrochemical and energy resource development in engineering, environmental, earth, chemical, and physical sciences. Full-time faculty members are eligible to apply for $10K to $25K. As always, total research budget should include 25% overhead that will be re-imbursed to researchers if they 'match' these funds with an NSERC Alliance Grant. Awards are made for one year and may be renewed annually for a maximum tenure of three years. Further information is under “Sustainability/Innovation and Research/University Research Awards” at Imperial, or go directly to University Research Awards. **Internal Deadline to RSO (using RFAA): December 13, 2021.**

**Killam Annual Professorships 2022 - Call for Nominations:** Science invites nominations for the Killam Annual Professorship for colleagues with demonstrated excellence in research, undergraduate and/or graduate teaching and evidence of service to the discipline or community. Nominations (including self-nominations) will be accepted until November 1, 2021. Submissions should include the nominee’s CV and a brief explanation of how the nominee meets the award criteria. Please send submissions to: Danielle Demiantschuk

**Killam Visiting Scholar Award - Call for Nominations:** Do you have a colleague, outside of the University of Calgary, who would benefit the Faculty of Science by coming to work with us? The Killam Visiting Scholar Award sponsors a distinguished scholar who will make a significant contribution to the academic life of the University of Calgary. The scholar is expected to participate in the research and teaching programs of the host department as well as engage in their own research. Currently, Dr. Richelle Allen-King is a Killam Visiting Scholar in the department of Geoscience conducting a skills course. Her main research interests are understanding and integrating the basic processes which control the fate and transport of contaminants in the environment, particularly in groundwater. Connect with Dr. Allen-King to learn more about her research or to say hi.

Science invites nominations for this award by November 1, 2021. Submissions should include the nominee’s CV and a brief explanation of how the nominee meets the award criteria. Please send submissions to: Danielle Demiantschuk

**Order of Canada - Call for Nominations:** This Governor-General’s award recognizes outstanding achievement, dedication to the community and service to the nation in all sectors of Canadian society. Their contributions can be varied, but they all enrich the lives of others and made a difference to this country. There is no deadline for submissions. For more information about who and how to nominate, please refer to the nomination guide and/or reach out to Danielle Demiantschuk.

**Women in Science and Engineering (WISE) Planet - Call for Nominations:** Faculty are encouraged to apply for a Women in Science and Engineering (WISE) Planet one year fellowship. A major part of the program is the Leadership Equity Action Plan (LEAP) Project. Applicants should consider their proposed LEAP Project in advance of the applying - and clearly show how this project will position them as a leader in their organization and will advance equity, diversity, inclusion or innovation (sustainability) in their organization or society at large. Applications are open until Nov 29th, 2021 and contact Cathy Ryan can provide more info.
Opportunities – Health

Emergency SCN Systematic and Scoping Review will encourage the development of implementable and scalable ideas that will improve the quality of emergency medicine care delivery within the Health Quality Council of Alberta’s six domains of quality. Research Services’ final internal deadline for the full application is noon on January 20, 2022. More information on is available here or from Lindsey Hritzuk.

AXA – Preventing Long-Term Exposure to Harmful Substances and Mitigating its Impacts (125,000€ for 2 years) in support of the AXA’s mission is to support outstanding researchers and improving peoples’ lives through innovative research in areas of Climate & Environment, Health, and Socio-Economics. RSO Final Internal Deadline (EOI): November 2, 2021 at noon. More details: here or from rsotrainee@ucalgary.ca.

CIHR Operating Grant: Indigenous COVID-19 Rapid Research Funding Opportunity addresses the health challenges of the COVID-19 pandemic for Indigenous Peoples by rapid and timely distinctions-based, and Indigenous community-led research and knowledge mobilization that is responsive to the unique circumstances and the current phase of the COVID-19 pandemic in First Nations, Inuit, Métis and Urban Indigenous communities in Canada. Recognizing that Indigenous communities are best positioned to identify the research, program or policy gaps, issues of concern, and solutions for their communities, this funding opportunity will provide funding for Indigenous-led, community-specific research that is meaningful and culturally-relevant and is necessary to understand and respond to the differential impact of COVID-19 on Indigenous communities. Research Services’ final internal deadline for the full application is December 2, 2021 at noon. More information is available in Funding Deadline Calendar or from Anna LeMarquand.

Opportunities – Social Sciences

American Society of Association Executives (ASAE) Research Foundation Opportunities

1. The Scholarly Research Grant Program aims to encourage collaborative research between members of the academic and practitioner communities to expand and advance knowledge in association management and leadership. Each grant of up to $15,000 is awarded to support proposals that investigate research questions central to association management.

2. The Sal Martino Grant for Diversity, Equity, and Inclusion Research aims to encourage collaborative research between members of the academic and practitioner communities to expand and advance DEI knowledge in association management and leadership. The grant provides up to $15K for proposals addressing DEI in nonprofit membership and member-serving organizations management and is intended to support the research activities of those working (or matriculating) in an academic community, association management professionals, and consultants/private contractors in association management. Contact: Caitlin Janzen

Timelines for both grants: November 26, 2021 @ noon: Internal RSO deadline for LOI.

Congratulations

Congratulations to Dr. Rachael Edino, PhD (Supervisor: Dr. Jennifer Adams, PhD) for being one of the inaugural recipients of the Provost’s Postdoctoral Award for Indigenous and Black Scholars. Her research topic Perspectives on Black Students’ Experiences in Sciences, Technology, Engineering and Mathematics (STEM) in Post-Secondary Institutions in Alberta will study the racial gaps in post-secondary STEM education in Alberta, with a goal of addressing the gap in literature around race in post-secondary STEM education in Canada.

Congratulations to Dr. Kyla Flanagan, PhD, who was awarded the prestigious McCaig-Killam Teaching Award. She has been an instructor in Biological Sciences for 13 years. The recognition of her teaching excellence with this prestigious award is a well-deserved honour. For more details, please click here.
Congratulations to **Gerardo Zegers** a PhD candidate in Geoscience (Supervisor: Dr. Masaki Hayashi) who has been named a 2021 Killam Laureate for his research on transformations in the permafrost of the Canadian Rockies. For more details, please click [here](#).

Congratulations to **Milanpreet Kaur** in Chemistry (Supervisor: Jeff van Humbeck) who was awarded the Arthur Bollo-Kamara Graduate Scholarship from the Association of Chemical Profession of Alberta (ACPA). The award recognizes academic excellence, service to the Chemistry and broader community and participation in arts and cultural events. Congratulations Milan on this well-deserved honor and thank you to the Association of the Chemical Profession of Alberta for supporting graduate education.

Congratulations to **David Yang** (Supervisor: Dr. Qingrun Zhang) and **Danika Lipman** (Supervisor: Dr. Thierry Chekouo) for Winning the Alberta Innovates Graduate Student Scholarship for 2021. Both are first year MSc students in STAT.

**Did You Know?**

Thesis Title Page: Please note that a student’s title on their Thesis Title Page must match exactly with their Thesis Approval form as per FGS policy. To make a change in title FGS requires confirmation by the student’s supervisor confirming the new title. Supervisors can email [thesis@uclagary.ca](mailto:thesis@uclagary.ca) to confirm the change.

That most of the microplastics in Calgary’s wastewater comes from biosolids. **Paige Jackson**, an undergraduate student in the Department of Biological Sciences with funding from the PURE program and NSERC spent her summer studying microplastics in a tertiary wastewater treatment facility. To find out more about her research please click [here](#).