Science Research and Innovation Newsletter – April 11, 2022

**Thesis Defense Seminars**

**CHEM**  MSc Final Seminar: “Anion transport by proteins: protein motifs involved in anion binding” by Mirna Damergi (Supervisor: Dr. Dennis Salahub) on **Tuesday, April 12 at 9:00AM**. Please contact the Chemistry Department for zoom details (chem.info@ucalgary.ca).

**BISI**  PhD Final Seminar: “Seasonally Related Metabolic Profile and Regulation During Growth and Reproduction in Goldfish” by Claudia Ladisa (Supervisor: Dr. Hamid R Habibi) on **Tuesday, April 19 at 9:00AM**. Please contact supervisor for Zoom details.

**CHEM** 601/603 Seminar Presentations (45 minutes long)

**Wednesday, April 20, 2022**: Please contact the Chemistry Department for zoom details (chem.info@ucalgary.ca)

- 08:30 “Spectroscopy matrices” (T. Sikkema)
- 09:15 “Theoretical and rational design for the metal double perovskites...” (H. Shahmohamadi)
- 10:15 “Understanding the role of N dopants of single atom N doped carbon for CO2RR” (C. Li)
- 11:00 “Room temperature superconductivity - Was it worth the wait?” (S. Nanji)
- 12:45 “Bunker fuel pollution: environmental impact and SO2 removal” (J. Jacobs)
- 13:30 “Enhancing photoelectrochemical water splitting by incorporating nanoparticles...” (L. Ly)

**Thursday, April 21, 2022**: Please contact the Chemistry Department for zoom details (chem.info@ucalgary.ca)

- 08:30 “Novel architecture of cathode materials for high durability Zn – air batteries” (A. Sikvakumaran)
- 09:15 “Structural manipulation of BiFeO3 thin films: A tale of miscuts and misfits” (B. Richtik)
- 10:15 “Machine learning applications for O reduction reaction & fuel cell...” (A. H. Bagherzadeh Mostaghimi)
- 11:00 “Utilization of the HKUST-1 Metal-Organic Framework...of CO2...” (O. Weerawadhena)
- 12:45 “Electrochemical conversion of methane to ethylene using a SOEC” (M. Pidburtnyi)
- 13:30 “Nanobubbles in Alcohol Systems” (N. Pathirann)

**GEOS**  PhD Final Seminar: “Geological susceptibility to hydraulic fracturing-induced seismicity in the Montney Formation” by Paulina Wozniakowska (Supervisor: Dr. David Eaton) on Tuesday, May 3 at 9:00am. Please contact the Geoscience Department for zoom details (geoscience@ucalgary.ca)
Seminars

**MTST** SAGE Research Seminar: “Iterated Data Sharpening in Local Regression” by Dr. W. John Braun (Department of Computer Science, Mathematics, Physics and Statistics, UBC, Okanagan) on **Tuesday, April 12 from 10:00am to 11:00am** in MS 431.

**MTST** The Mathematical and Computational Finance Laboratory-Lunch at the Lab series: “Numerical Approximations of Coupled Forward-Backward SPDEs” by Molla Hasib Uddin (Department of Mathematics & Statistics, UofC) on **Tuesday, April 12 from 12:00-1:00pm**. Please contact the Mathematics and Statistics Department for zoom details (mathadmin@ucalgary.ca)

**FoS** “Demystifying [publishing in] Nature” by Michael White (Senior Editor, Nature magazine) on **Tuesday, April 12 at 3:00pm**. Learn about the inner workings of a high-profile journal. This session is open to all faculty, graduate students, post-Docs and research staff members. There will be a 30-min ppt & Q&A. Registration: https://ucalgary.zoom.us/webinar/register/WN_tPb5DZkYSwzhXtCRAcAg

**ENSC** Environmental Science Open House and Elizabeth Dixon Symposium on **Thursday, April 14, 2022**.

**ENSC 502 Open House: Water-Energy-Food Nexus Security in Calgary. Presentations: 10:00am-12:20pm. Poster Session: 12:20pm to 1:00pm in The Forum Room, TITL building. Presentations: 1:00-3:00pm in The Forum Room, TITL Building. Please contact Schulich School of Engineering for details (schulichresearch@ucalgary.ca)

Opportunities

**Genome Canada: Genomic Applications Partnership Program (GAPP)** funds downstream research and development projects driven by challenges and opportunities identified by end-users. **Expressions of Interest** must be submitted to Genome Alberta by **April 18th, 2022**. Interested parties should contact Genome Alberta (rmercer@genomealberta.ca, and cc ipd@ucalgary.ca, mstahn@genomealberta.ca) BEFORE submitting an EOI. Detailed information can be found [here](https://www.genomecanada.ca/)

**Reminder:** Eyes High Postdoctoral Match-Funding Program Spring Competition is designed to support UCalgary faculty to recruit and support outstanding postdoctoral scholars. Match Funding Program **award partial salary support for postdocs** on a competitive basis for postdocs who will be new to UCalgary at the start of their appointment. Up to $25K/yr for up to two years, **Deadline: May 6, 2022**

**Reminder:** Transition Accelerator 2022 Transition Pathways Research Grant supports net-zero greenhouse gas emissions via small grants to support pathways scoping studies for Canadian university researchers. Apps can be multi-institutional and include societal partners. New applicants only. Up to $20K. RSO **Deadline for Full application: April 27, 2022, at noon**; contact: Stephanie Patrick

**Reminder:** Tri-Agency support for research trainees from Ukraine The federal government announced the launch of the **Special Response Fund for Trainees (Ukraine)**, which provides support to research trainees from Ukraine in the form of supplements to existing grants. Contact rsogrants@ucalgary.ca with any questions and Heather Clitheroe (International Coordinator) for advice and assistance.

**Reminder:** Egg Farmers of Canada Research Grant - a special call for proposals under the Agriculture and Agri-food Canada cluster program for which applied research projects must align with Egg Farmer research priorities, and the principal investigator must also work full-time in a Canadian institution or organization. RSO **Deadline for Full application: April 20, 2022 at noon**; contact: Stephanie Patrick
**Reminder: Alberta Land Institute 2022 Call for Proposals: Soil Health and Open Call**

1) Sustainable Agriculture: Soil Health (up to $75K for up to two years), funded in partnership with RDAR (Results Driven Agricultural Research; www.rdar.ca), and 2) Open Category (up to $50K/yr)

Prospective applicants should discuss with eran.kaplinsky@ualberta.ca before submitting.

RSO Deadline for Full application: **April 26, 2022** at noon; contact Stephanie Patrick

**Reminder: Oil Spill Response Challenge**
The GOC seeks solutions to protect and preserve Canada’s natural heritage and communities from oil spills via innovative and rapidly deployable solutions to effectively improve response time and/or increase recovery of oil spilled in diverse aquatic environments. Up to 10 applicants will proceed as semi-finalists in the challenge for up to $300K. RSO’s final internal deadline for the Stage 1 full application is **May 27th, 2022** at noon; Contact: Anna LeMarquand

**Reminder: Margaret Gunn Endowment for Animal Research (MGEAR)** provides up to $60K over two years for animal health research funding for significant research initiatives related to animal health and behaviour with special consideration given to projects with agricultural significance. Details are on the MGEAR webpage, and from Hector MacIntyre @ RSO (rsogrants@ucalgary.ca). **Deadline: 4:30 pm, April 15, 2022**

**Reminder: Parex Resources Innovation Fellowships - 2022-2023** for tenure track/tenured faculty members immersed in research and partnerships leading to start-ups or technology advancements, including five Parex Resources Innovation Fellowship and one Parex Resources Visiting Innovation Fellowship. $20K and 1 HCE Teaching Relief for applicants in Science. **Deadline: April 18, 2022, 8:00am** - more info [here](#).

**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.

**The Grawemeyer Award in Education** is intended to stimulate the dissemination, public scrutiny and implementation of ideas that have potential to improve educational practice and attainment. The award is designed to recognize a specific recent idea/study rather than a lifetime of accomplishment. Details [here](#). **Deadline: April 15, 2022.**

**Calgary’s Top 40 Under 40** features young business and community leaders who are excelling in their careers, are giving back to the community, and who, through personal and professional efforts, are raising the profile of Calgary. Details [here](#). **Deadline: April 30, 2022.**

**Adrien Pouliot Award** (Canadian Mathematical Society) recognizes individuals or teams of individuals who have made significant and sustained contributions to mathematics education in Canada. Details [here](#). **Deadline: April 30, 2022.**

**Order of Canada** recognizes outstanding achievements, dedication to the community and service to the nation. The Governor General of Canada is accepting nominations for the Order of Canada. There is no deadline; nominations may be submitted at any time.

**Opportunities – Postdocs and Graduate**

**Reminder: Banting Postdoctoral Fellowships – Letters of Intent (LOI)** for the tri-agency Banting Postdoctoral Fellowship Competition for funding to the very best postdoctoral applicants, both nationally and internationally, who will positively contribute to the country’s economic, social and research–based growth. Additional information is [here](#). **LOI Deadline: 4:00 pm MDT, May 1, 2022 (Sunday).**
**TITL** Professional Development of TAs workshop **Tuesday, April 19 from 10:30AM to 12PM.** This workshop works toward professional TA development. Participants will reflect on their TA experiences; discuss emerging teaching practices; identify teaching related goals, and explore resources for promote further development. [Register now](#)

**Reminder:** [Parex Innovation Postdoctoral Fellowships 2022-2023](#) are for postdoctoral fellows with a track record in innovation (i.e. translation of research results into societal impact, e.g. working with non-academic research partners, creating a start-up, working with innovation organizations, and engaging with government and not-for-profit organizations on policy development, etc.). $3K as a salary top-up; available to postdocs in Kinesiology, CSM, Science, Social Work, and SAPL. More info [here](#). **Deadline:** April 18, 2022, 8:00am

**Reminder:** [Human Frontier Science Program Fellowship](#) supports proposals for frontier, potentially transformative research in the life sciences. Applications for high-risk projects are particularly encouraged. The projects should be interdisciplinary in nature and should challenge existing paradigms by using novel approaches and techniques. Scientifically, they should address an important problem or a barrier to progress in the field. RSO **Deadline** September 26, 2022, at noon (12:00 p.m. MDT). Contact: rsotrainee@ucalgary.ca

**Congratulations!**

Congratulations to **Toni Sikemma** (Supervisor: Dr. Belinda Heyne) a MSc student in Chemistry whose image “Using quantum mechanics to develop a new generation of security ink” was the Top Winner for the [GSA 2022 Images in Research Competition](#).

Congratulations to recent [NSERC Alliance grant awardees](#) **Darren Derksen** (CHEM; “Increasing the Biodegradability and Environmental Compatibility of Plastic Materials”), **Belinda Heyne** (CHEM; “Catalytic modification of commodity plastics for next generation anti-microbial materials” with Dr. Laurel Schafer at UBC), **Kelly Munkittrick** (BISI; “Development of an adaptive monitoring and management framework for environmental substances of concern in municipal wastewater”), and **Guenther Ruhe** (CPSC; “Advanced Analytics for Operationalization of Textual Data”).

Congratulations to **Dr. Denis Leahy** (PHAS) who received funding from the Canadian Space Agency to use data collected by AstroSat to better understand how stars are formed. Click [here](#) for more information.

Congratulations to **Braden Strachan** (Supervisor: Dr. Karoly Bezdek) in MTST on winning the NSERC Master’s Scholarship effective May 1, 2022.

**Did You Know**

Academic staff members holding academic appointments (including sessionals) are eligible to submit reimbursement for professional expenses. The Benefit/Academic Year is July 1 to June 30 of the following year and claims for the current academic year (i.e. until June 30th) must be submitted online no later than two months following the end of the academic year (by Aug 31st). Up to two years PE can be carried forward for FTE continuing faculty members. Details are in the [PER Handbook](#).

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 to ensure it is added.