Applications are due March 31st for May or September Start October 1st for January Start

INTRODUCTION TO INSPIRE

The NSERC-CREATE to INSPIRE (Interdisciplinary Network for the Synchrotron: Promoting Innovation Research, and Enrichment) is a new synchrotron training program hosted at the University of Saskatchewan (USask). Funded by NSERC in April 2021, INSPIRE capitalizes on the Canadian Light Source (CLS) as a platform unique within Canada to train and mentor highly skilled graduates for a variety of careers. (See Appendix for additional information)

Invitation to apply. INSPIRE seeks applications from future INSPIRE Fellows and their supervisors to form the next cohort of graduate students and postdoctoral fellows in this unique program. If you seek to be part of this unique opportunity, here is what you need to know to apply.

INFORMATION FOR INSPIRE FELLOWS

You are a future INSPIRE Fellow if:

- You seek to be part of a vibrant and rapidly-evolving research training program associated with the Canadian Light Source as a unique national facility
- You are an entering or continuing graduate student (Master's, PhD) in an approved program at USask, or University of Regina (UR), or a postdoctoral fellow (PDF) at USask, UR or CLS
- Your current or proposed research interests involve synchrotron sciences:
 - o Advancing technologies of the accelerator and experimental beamlines, or
 - Applying synchrotron techniques to answer questions in your discipline
- You embrace opportunities to develop professional skills to prepare you for your future career
- You value an equitable, inclusive and diverse research training environment
- You appreciate interdisciplinary networking and mentorship opportunities

Requirements for INSPIRE Fellows:

- Research related to synchrotron sciences, undertaken with co-supervisors:
 - Technologies stream: Development of accelerator or beamlines and associated technologies
 - Applications stream: Employing synchrotron tools in diverse research fields, including materials science, health and life sciences, environmental science and agriculture, and natural resources and energy
 - Two co-supervisors to emphasize interdisciplinary approach
- Synchrotron courses: (https://artsandscience.usask.ca/synchrotron-sciences/training-program/graduate-students.php
 - o 3 cu core course teaching fundamentals in synchrotron sciences and techniques
 - 3 cu elective INSPIRE synchrotron courses from a variety of disciplines or an option approved by Program Executive committee
- Professional Skills Certificate (non-credit) through Gwenna Moss Centre for Training and Learning
 - o GPS 974: https://catalogue.usask.ca/GPS-974#Description
 - o GPS 984: https://teaching.usask.ca/events/graduate/984-thinking-critically.php#AboutthisCourse
- Research communication training with public outreach and advocacy
- Meetings: All INSPIRE Fellows will be expected to attend:
 - Core training in equity, diversity and inclusion (EDI)
 - o Joint CLS-INSPIRE events including a seminar series with external speakers, as arranged
 - o Annual Retreat with expert talks, student posters, networking

- Mentorship Circles with Fellows and specialists from outside of your area, to enhance connections and foster a supportive environment to discuss progress and future goals
 Attendance will be taken. Non-attendance for reasonable reasons, such as illness or synchrotron beamtime, should be requested in advance by e-mail to inspire@usask.ca.
- **Submit annual report:** to document course work, professional skills and INSPIRE event participation. The report will also capture publications, presentations, and other outputs and achievements. INSPIRE Fellows seeking an additional year of funding demonstrate that their research programs are still broadly in line with INSPIRE.
- Notify INSPIRE of career directions: so that INSPIRE can celebrate your achievements following graduation/completion.

Optional additional opportunities for INSPIRE Fellows:

- EDI Champions training: Elect to join a special mixed cohort with researchers
- **Mobility**: Apply for a travel subsidy for an international conference or to visit experimental facilities that complement those available at the CLS
- **Internships**: Apply for a funded 4 month internship with industry, after completing professional skills development training
- Leadership: Take the opportunity to lead, design and promote new opportunities within INSPIRE

INFORMATION FOR INSPIRE SUPERVISORS

You are a future INSPIRE Co-supervisor if:

- You will engage in research associated with synchrotron sciences, whether an expert or newcomer
- You embrace an interdisciplinary community and are interested in networking with researchers and trainees outside of your discipline
- You support your supervisee to engage in professional development and other INSPIRE activities
- You contribute to INSPIRE beyond co-supervision, as matches your expertise

Eligibility of INSPIRE supervisors

To receive INSPIRE matching funding, a trainee has two INSPIRE co-supervisors. One must be a faculty member eligible to supervise a graduate student in a program at USask or UR. The second does not necessarily need to be a faculty member or formally a co-supervisor under CGPS rules. Acceptable positions include CLS staff members, and other researchers of equivalent standing. INSPIRE co-supervisors may be from outside of Saskatchewan provided an appropriate level of engagement with the Fellow and INSPIRE can be demonstrated.

Responsibilities of INSPIRE Supervisors

- Support Fellows to engage with the range of INSPIRE activities
- Engage in the Interdisciplinary Network of INSPIRE through networking activities
- Participate in core EDI Training and show willingness to embrace EDI principles to foster an inclusive training environment.
- Attend Annual Retreat As a focal point of networking and presentation of progress, participation by both Fellows and supervisors is required
- Acknowledge INSPIRE on publications, presentations etc. resulting from *any* work involving the INSPIRE Fellow. Items should be reported to inspire@usask.ca. The following are acceptable wording:
 - o <Name> is a Fellow in the NSERC CREATE to INSPIRE;
 - <Name> acknowledges a Fellowship from the NSERC CREATE to INSPIRE
- Contribute synchrotron and complementary expertise. Some opportunities for engagement:
 - Mentor other Fellows as part of a mentorship circle synchrotron expertise not a requirement
 - o Teach an elective course or contribute to the core course
 - Host or contribute to events focussing on future careers

FUNDING OPPORTUNITIES FOR INSPIRE FELLOWSHIPS

INSPIRE Fellowship Level	Standard annual INSPIRE stipend from all sources	Maximum payable by INSPIRE (/year)	Bonus award for prestigious scholarship	Maximum duration of funding**	Maximum time in program at end date of funding***
MSc or other Master's	\$18,000	\$9,000	\$2,500	2 years	2 years since starting MSc
Ph.D.	\$21,000	\$10,500	\$2,500	3 years	4 years since starting PhD
Postdoctoral Fellow	\$44,000	\$22,000	\$5,000	2 years	2 years with INSPIRE; 5 years post PhD

^{**} All awards are for twelve months, with possibility of extension to maximum duration subject to satisfactory progress. *** Excluding documented leaves.

A. Matching Funding Fellowship: Up to 50% of a standard stipend may be requested, as detailed in the table. Funds must be matched from another source which must be secured at the time of the award. Scholarships or fellowships from other sources should be taken in preference. If the other scholarship is worth more than 100% of standard stipend, the INSPIRE contribution will be zero. Any changes to other funding sources, or changes in academic program, must be reported promptly. Awards are contingent on fulfilment of program requirements and submission of annual progress reports, as well as availability of grant funds.

In line with CGPS guidelines, prospective Fellows seeking funding should have a good academic track record, in general with a grade point average (GPA) of at least 80%. For entering Master's students and direct entry PhD students the GPA of the last 60 credit units is used while for PhD candidates with a Master's, the GPA of courses taken during a Master's is used. The 80% GPA may be reviewed on a case by case basis for students with extenuating circumstances which have impacted their grades. The executive committee may choose to waive the requirement.

For matching funding from INSPIRE, a Fellow must have two co-supervisors to enhance interdisciplinarity.

- **B. INSPIRE Bonus Award for Meritorious Fellows:** INSPIRE Fellows who are successful in external scholarship or fellowship competitions deserve special recognition. INSPIRE will provide a bonus award, as shown in the table, **subject to availability of grant funds**.
- **C. Zero Funding Fellowship**: Candidates with full funding elsewhere may apply to become a Fellow. If accepted, they are expected to fulfil requirements of Fellows. The minimum GPA may be waived if other criteria are deemed acceptable.

PROJECT ELIGIBILITY

Project descriptions should demonstrate strong relevance to synchrotron-based research. For stipend support, interdisciplinary collaborations and new directions are especially encouraged. Examples of research projects include:

- application of one or more synchrotron methods in any discipline, including environmental science and agriculture, life and health sciences, natural resource and engineering, and advanced materials; or
- development of accelerator, optics, detectors, methodologies or related technologies or approaches.

Research may involve synchrotron or related facilities outside of the CLS. Certain projects supported by CLS funds must include a CLS collaborator and must strongly support CLS objectives.

How to Apply: Deadline Noon March 31st for May or September start Oct 1st for January start

- 1. Trainees link with two co-supervisors to propose research of mutual interest. Trainees and supervisors submit a collaborative application to INSPIRE.
- 2. Trainees seeking an introduction to a prospective supervisor can send their background and interests to inspire@usask.ca and the INSPIRE team will attempt to match them with prospective supervisors.
- 3. Under certain circumstances, an application may be reviewed with no trainee candidate, with the intent to advertise. Email inspire@usask.ca prior to the deadline.

Instructions for submission

<u>Email PDF Document:</u> Send to <u>inspire@usask.ca</u> a single .PDF file, name TraineeName.Department.INSPIRE-Application.pdf. Include all documents in the following order:

- Completed "Application for INSPIRE Fellowship" (fillable form) includes:
 - o Co-supervisor names and description of their engagement/contribution to INSPIRE
 - o Title and lay summary of proposed research activity
 - o Trainee statement of intent and co-supervisor statement of benefit to student
- One page description of research activity and relevance to synchrotron-based research. Describe
 unique techniques, questions, applications, collaborations, specific funding. Use NSERC format:
 https://www.nserc-crsng.gc.ca/ResearchPortal-PortailDeRecherche/standards_eng.asp
- Trainee CV (2 page abbreviated format)
- CV for each Co-supervisor (2 page abbreviated format; not needed for CREATE co-applicant)
- Copy of Trainee Transcripts

Other Documentation Required: (separate from e-mailed document PDF – do not attach)

- Complete trainee registration form: https://www.surveymonkey.ca/r/VVD6MJX
- MSc and PhD candidates: submit application to College of Graduate and Postdoctoral Studies through the department of primary supervisor.
- PDF candidates: Arrange for one letter of reference to be sent by referee directly to inspire@usask.ca. Letter should not be from your proposed INSPIRE supervisor.

Evaluation Considerations

Applications will be considered by the INSPIRE Proposal Review Panel comprising diverse disciplinary backgrounds with CLS and trainee representation. The PRP will rank the proposals on the following criteria:

- 1. Scientific excellence of proposed research
- 2. Quality, track-record and engagement of the supervisors (CV, commitment and contribution)
- 3. Quality of the trainee¹ (CV, transcripts, statement of intent)
- 4. Synchrotron relevance, and balance²

¹For a zero funding request, the minimum 80% GPA and requirement for 2 co-advisors may be relaxed. Evaluation will still other factors including trainee intent.

²Domination of INSPIRE funding by individuals will be discouraged by the PRP. In such cases the PRP may recommend trainee admission but without INSPIRE funding.

Considerations of candidate selection for funding will include ensuring a diversity of research areas, disciplines and backgrounds. The selection committee members will be chosen to include diverse perspectives and will engage in unconscious bias training. INSPIRE will also strive to reduce barriers to equity, diversity and inclusivity as a goal of enriching the program in an effort to achieve excellence. We aspire to include members of

underrepresented groups, and to support all trainees to successful outcomes. For this round of applications, trainee applicants and their co-supervisors are invited to self-identify as a confidential part of their application (see survey links). We will monitor whether proportional representation of underrepresented groups change between applications and awards. This will inform our planning of future recruitment processes.

For more information regarding the program or application, send e-mail to inspire@usask.ca