2022 Summer Student Research Program (SSRP) Info Session

FEBRUARY 3rd, 2022,  12:00-1:00 pm

Faculty Coordinator: Dr. Ricky Turgeon
Opportunity for undergraduate students to gain research work experience in an academic setting over the summer term

- Paid work term while conducting research with faculty supervision
- Duration: Varies for each project (max 16 weeks)
- Pay: ~$8500 for 16 weeks (at current BC minimum wage, $15.20/h)
- Projects may be laboratory-based, virtual, or a combination of both
- Opportunity to showcase their research at the SSRP Poster competition
  - Winning undergraduate student attending the 2023 Canadian Society for Pharmaceutical Sciences (CSPS) Symposium

Check the Faculty website (https://pharmsci.ubc.ca/research/summer-student-research-program) for:
  - Eligibility criteria
  - Complete list of projects
  - Instructions on how to apply

Apply before 4:00 pm on Tuesday, February 15th, 2022
Although all eligible undergraduate students can apply to the SSRP, the Faculty has 2 different funding programs that project supervisor(s)-student pairs may be eligible for:

- **Indigenous Undergraduate SSRP (IU-SSRP):** Faculty provides funding for supervisors to hire Indigenous undergraduate students to work on a full-time basis on their research projects.

- **Enhanced Opportunities Undergraduate SSRP (EOU-SSRP):** Faculty provides funding for supervisors to hire eligible students from the following populations: Black or People of Color; Two Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Questioning, Intersex, Asexual person/people, plus; Persons with Disabilities; First Generation Students (i.e. the first person in your family to attend higher education).

- For those students who have self-identified as Indigenous or from underserved communities on the Application Form, this opportunity will be discussed at the supervisor-students interview phase of the application process.

- These funding programs are competitive and eligible to be listed as an honor in your CV.

- **We highly encourage students who self-identify within these categories to apply**
Application Process Overview

Students submit application package by **February 15th, 4:00 pm**

Applications are sent to project supervisor(s) for review

Project supervisor(s)/students interview phase

Successful project/student pairing is made

Work term commences on agreed start date

Additional application steps if student is eligible for IU-SSRP or EOU-SSRP funding streams:

**Successful project/student pairing made AND student is eligible for IU and/or EOU funding programs**

Pair submits IU and/or EOU funding application form by **March 17th, 4:00 pm**

Adjudication

Funding notifications by early April
External Funding Program - NSERC Undergraduate Research Awards (USRA-USRA):

- Provide students with financial support while gaining research experience that complements their studies
- Engaged in research full-time for 16 consecutive weeks
- NSERC subsidizes eligible faculty members to hire students
- Pharm Sci has been allocated 2 USRAs
- Research project must be in the natural sciences or engineering to be eligible
- Application process differs from Pharm Sci SSRP - students are responsible for seeking out and identifying faculty supervisors before completing application as a team
  - Note: PharmD students & other students in undergraduate health science professional degree programs not eligible
- Visit our Faculty’s NSERC USRA webpage for complete application instructions: https://pharmsci.ubc.ca/research/summer-student-research-program/nserc-undergraduate-student-research-awards-program
- Deadline to apply is March 3, 2022, 4:00 pm
Dr. Brent Page

Developing new anti-cancer therapies using state of the art chemical biology techniques
Jason Min and Larry Leung

Indigenous Student Safety in Pharmacy
Dr. Simon Wisnovsky

Identification of druggable targets for modulating cancer-associated glycosylation
Quantification of CRISPR/Cas9 base editing efficiency in a novel reporter mouse model
Dr. Thomas Velenosi

1. Computational methods for improving mass spectrometry-based lipidomics

2. Developing a stable cell line reporter model for evaluating chemotherapy effects on gene expression
Drs. Tessa Nicholl and Colleen Inglis

To evaluate the attainment of confidence, knowledge, competence, and perception of safety secondary to providing pharmacy-specific suicide prevention training in a supportive environment
Background

• Suicide is an ongoing health crisis in Canada
  o Underestimated average of 10 lives lost each day
• Devastating impacts to individuals and communities
• Pharmacists not routinely trained in suicide prevention
  o A potential missed opportunity to identify and support those at risk

• This research project will demonstrate that pharmacy-specific suicide prevention training will increase pharmacists readiness to identify, support, and refer patients who may present with suicidal ideations
  o Increase pharmacist confidence to have conversations with patients about suicide
Research Question

How did the provision of pharmacy-specific suicide prevention training impact participants and their readiness to identify, support, and refer patients who may present with suicidal ideations?
• To support the evaluation of participants’ attainment of confidence and knowledge in their ability to help patients at risk of suicide
  o Improved identification of patients at risk
• To participate in investigations of participants’ perspectives through individual and focus group interviews
  o To evaluate if the program implemented as intended by assessing program fidelity
  o To determine whether the suicide prevention training content was delivered in a safe environment
• To assess safety plan which will help guide best practices and necessary supports required for participants
SSRP Student Activities:

- Conduct a literature review
- Submit minimal risk application to UBC’s Behavioral Research Ethics Board
- Develop pre and post knowledge assessment for pharmacy-specific asynchronous suicide prevention training
- Develop pre and post training survey to evaluate participant attainment of confidence and knowledge in preventing suicide after synchronous training sessions
- Create electronic surveys, conduct individual participant and focus group interviews
- Collect and analyze quantitative and qualitative survey data
- Create a summary report of key findings
- Deliver a poster presentation and contribute to manuscript writing
Evaluation Tools

• Electronic surveys administered before and after sessions
  o To evaluate attainment of knowledge and confidence
  o Participant survey to assess the content and delivery process

• Participant interviews and focus groups
  o To evaluate the content and delivery process
  o Participant surveys to evaluate the safety of the teaching environment
  o Participant interviews and focus groups to assess safety of the teaching environment
Drs. Larry Lynd and Nick Dragojlović

Environmental scan of the in-vivo CAR-T innovation landscape
Faculty-Based Directed Studies

Clinical Directed Studies (coordinated by Lynda Eccott)
- PHRM 302 – DS in Clinical Pharmacy
  Supervised by pharmacists, mainly in local hospitals

Faculty-Based Directed Studies (coordinated by Marion Pearson)
- PHRM 300 – Special Topics (for unique projects)
- PHRM 303 – DS in Nanomedicines and Chemical Biology
- PHRM 304 – DS in Pharmacy Education
- PHRM 305 – DS in Molecular & Systems Pharmacology
- PHRM 306 – DS in Pharmacy Practice
- PHRM 307 – DS in Epidemiology and Health Outcomes
  Supervised by faculty members
Timeline for Directed Studies Summer Projects

Mid February
• Available projects posted on the E2P PharmD Hub site on Canvas (see separate pages for clinical and Faculty-based projects)

Late February
• Deadline for application
• Note that the application process is slightly different for clinical vs. Faculty-based projects
• For both, though, be prepared to provide a CV and a statement of interest and to participate in an interview

Mid March
• Deadline for selection
• Course registration by the Faculty (not self-registration)
Rho Chi Event “Demystifying Research”

Date: Feb. 4th, 2022

Time: 12:00 p.m.

Zoom Link: https://ubc.zoom.us/j/69165052344?pwd=UHJPZ203b2dFRkR3elZjeDFNRGVpUT09

Questions? Contact marion.pearson@ubc.ca
Dr. Adam Frankel

Yeast-based hPRMT2 assay development for high-throughput screening
Yeast-based PRMT2 assay development for high-throughput screening

Project questions:

Can *npl3-1* temperature-sensitive suppression…

1. … be used to screen for PRMT1 inhibitors (as proof-of-concept)?

2. … help to identify more active PRMT2 mutants?

3. … be used to screen for PRMT2 inhibitors?

Scott *et al.* (1998) *Genomics*
Questions?

Email us @ pharmsci.ssrp@ubc.ca