

Proposal for Collaboration within PoND

In order to improve collaboration and student mobility within the PoND program, we proposed in our first NSERC CREATE report to encourage students to complete at least 3 out of 5 collaboration activities listed below. In the PI's meeting held on January 9th, 2019, it was also decided that \$16,000 per annum will be allocated in the budget (approved by NSERC) starting in Year 3 for travel associated with research collaborations and student mobility.* This document outlines the proposal for the effective implementation of the collaboration activities and their benefit to the training of students. Research groups must report on collaboration activities (travel and meeting dates, training details, etc) annually through the web form that will be created for this purpose. This form should be completed annually by August 1st or whenever an activity is done.

PoND Collaboration Activities

1. A research visit of at least 1 month to another PoND lab.

Research visits to another PoND lab should be for a minimum duration of 1 month to count as fulfilling this collaboration activity. During research visits, the students will have the opportunity to expand their own research using new techniques or learn about a new area of research in the visiting lab. PoND travel grants to fund travel and accommodation costs will be awarded to support this collaboration activity.

2. Being trained in specialized techniques in another PoND lab.

Training in other PoND labs will give students an opportunity to get hands-on experience on specialized techniques outside the expertise of their research group. PoND travel grants to fund travel and accommodation costs may be awarded to support this collaboration activity if the training requires student travel, even if the travel is less than a month.

3. Regular participation at group meetings of another PoND lab or regular audio-video meetings with co-supervisor or another PoND PI to establish and review project targets.

We have scheduled 1 one hour during the 2019 Research Days for informal meetings between students and co-supervisors. Students and co-supervisors are encouraged to take this opportunity to establish plans for having regular meetings (including audio/visual meetings) in the future.

4. Participating in an average of 1 scientific brainstorming session/year (2 for Masters, 4 for PhD) to establish new collaborations and to learn about other PoND research (held twice a year starting at June 2019 Research Days).

The sessions will have the following purpose, format and outcome.

Purpose: To provide information on the core expertise in each group and to find areas for potential collaboration.

Format: Presentation by PIs of three slides each which answers the following questions:

- 1) What is my interest in drug delivery?
- 2) What is the core expertise in my group?
- 3) What expertise would I like to get from collaborations?

Each presentation will take 5 min (40 min total) with a general discussion of 30 or 40 min. Students should be given priority within the discussion and PIs wishing to discuss directly with other PIs should do so after the session.

Outcome: The person chairing the meeting will summarize research gaps and possible collaborations. PIs not present at the Research Day are encouraged to submit 3 slides with text or audio explanations to the Program Coordinator.

5. Producing an average of 1 paper or poster/year (1 for Masters, 2 for PhD) with co-authorship in different PoND labs.

In some cases, it is expected that fulfilling one or more of the other collaboration activities will foster research collaborations by trainees and lead to collaborative presentations and publications by students.

*Funding for research and/or training visits will be available to students on a first-come-first-served basis until the allocation of \$16,000 for a year is spent. Students' travel and accommodation expenses will be covered by the awarded grant to a maximum of \$1000 for travel and the required accommodation expenses up to 3 months per student. The student will be responsible for meal expenses. In order to apply for a research and/or training visit travel grant, the student should complete an application form (available on PoND website) and return it to the PoND Program Coordinator. The PoND co-directors will review the applications to decide on eligibility. Once a decision is made, the Program Coordinator will inform the student and the PIs involved in the collaboration travel. The student and PIs can then make arrangements for the visit.