Postdoctoral Fellowship in Synthetic Polymer Chemistry for Drug and Cell Delivery

Description

The Hoare Lab in the Department of Chemical Engineering at McMaster University (http://hoarelab.com) is seeking an individual for a Postdoctoral Fellowship (PDF). The successful candidate will be based at McMaster but will be a full participant in the NSERC CREATE Training Program for Controlled Release Leaders (ContRoL) (http://control-create.mcmaster.ca), a collaborative training program in controlled release technology involving researchers at nine universities in the Greater Toronto Area – Montreal corridor. The ideal applicant will have a strong background in polymer chemistry and be interested in advancing their knowledge through a variety of collaborative projects in the design of controlled release vehicles on multiple scales (from nano to bulk) and for multiple applications (including biomedical, agricultural, and food science).

Responsibilities

- Develop new project ideas and plans within the area of controlled release
- Perform experiments and provide training to others on synthetic polymer chemistry and characterization
- Prepare manuscripts and presentations to share research findings
- Supervise other researchers and interact with various lab members and collaborators within the ContRoL CREATE Training Program, including managing student exchanges between labs
- Manage safety documentation and laboratory protocols

Requirements

- Ph.D. degree in chemistry or engineering (chemical, materials, biomedical)
- Experience and expertise in designing and executing synthetic polymer chemistry protocols and/or polymer functionalization/bioconjugate chemistry protocols
- Strong leadership and communication skills and a demonstrated desire to enhance those skills through completing all the required professional development components of the ContRoL CREATE program (see https://control-create.mcmaster.ca/what-we-do/ - Training Matrix)
- Exceptional organizational skills with the ability to manage multiple projects
- Excellent documentation skills and attention to detail in data collection and management
- Ability to collaborate in a multidisciplinary team environment
- Willingness to engage in occasional short-term travel to attend ContRoL CREATE events (annual general meeting, workshops) and engage in laboratory and/or industrial exchanges

Assets: Experience with the following items will be considered strengths:

- Developing controlled release vehicles and protocols for in vitro/in vivo drug release studies
- Performing in vitro biological assays (live/dead staining, metabolic tests, spheroid studies)
- Supervising and/or instructing undergraduate/graduate students
- Writing collaborative research grants and developing collaborative research projects

Apply: Interested candidates should submit a CV and a cover letter indicating their interest in the position as well as their role in the ContRoL training program to Dr. Todd Hoare (hoaretr@mcmaster.ca). Please put "CREATE PDF" in the subject line. Interviews will begin immediately, with a potential start date between May-December 2022. We thank all applicants for their interest, but only those selected for an interview will be contacted. We seek qualified candidates who share our commitment to equity, diversity, and inclusion and welcome applicants from equity-seeking groups.