Postdoctoral Fellow Positions in Organ-on-a-Chip Engineering
Department of Mechanical and Industrial Engineering, University of Toronto

Two Postdoctoral Fellow positions are available in the laboratory of Craig Simmons at the University of Toronto to contribute to the development, validation, and commercialization of a new organ-on-a-chip platform for vascularized tissue modelling.

As part of an interdisciplinary team of engineers and biologists, the Fellows will collaborate closely with an industrial partner to develop a market-ready high-throughput microfluidic device to model vascularized tissues in vitro, with particular focus on the blood-brain barrier. We are seeking highly motivated, results-oriented engineers and scientists who will thrive in a fast-paced environment and have particular interest in translation of organ-on-a-chip platforms to end users in the pharmaceutical and biotechnology industries.

One Fellow will be primarily responsible for prototype design and testing, characterization, and benchmarking of the performance and biocompatibility of the platform. The ideal applicant will have a Ph.D. in mechanical or biomedical engineering, with a strong background in product development and testing, microfabrication, fluid mechanics, and/or microfluidics device development. Additional experience with in vitro endothelial cell models is an asset.

The other Fellow will be primarily responsible for the development, implementation, and validation of biosensors to monitor cell function. The ideal applicant will have a Ph.D. in electrical or biomedical engineering or applied physics, with a strong background in microfabrication, electrical biosensor development, signal processing, and/or microfluidics device development. Additional experience with in vitro endothelial cell models is an asset.

Both positions require the ability to work effectively in a team-oriented environment, generate publications, contribute to grants and progress reports, and maintain meticulous records. Appointment will be made for one year with the option of renewal.

Start date: August 1, 2018
Salary: $45,000/year plus benefits
Term: One-year term with a possible renewal
FTE: 100%

Employment as a Postdoctoral Fellow at the University of Toronto is covered by the terms of the CUPE 3902 Unit 5 Collective Agreement.

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The normal hours of work are 40 hours per week for a full-time postdoctoral fellow (prorated for those holding a partial appointment) recognizing that the needs of the employee’s research and training and the needs of the supervisor’s research program may require flexibility in the performance of the employee’s duties and hours of work.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.

Qualified candidates should send a curriculum vitae, a statement of research interests and experience, and contact information of three references via e-mail to:

Craig A. Simmons, Ph.D.
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Institute of Biomaterials and Biomedical Engineering
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The deadline for application submission is July 31, 2018.