UNIVERSITY OF TORONTO

Date of Posting: July 10, 2018

PDF in Mechanical and Chemical Engineering for Applications in Synthetic Biology

The Pardee (www.pardeelab.org) and Sinton Labs (www.sintonlab.com) at the University of Toronto are seeking a postdoctoral fellow with expertise in mechanical engineering and/or chemical engineering. The proposed project aims to develop a fluid-handling device to manipulate synthetic biology reactions, control temperature and perform optical monitoring.

The group offers a collaborative mission-driven environment with diverse expertise and methods. The ideal applicant will have an engineering PhD from mechanical or chemical or related discipline. The position marries engineering method-side innovation with a deep understanding of the biological application – specifically the implementation and scaling of gene circuit-based reactions in benchtop, accurate, automated commercialization-ready units. Assets include: Robust and creative device engineering, hardware and mechatronic design, device integration across fluids-hardware-sensors-software, controls, electronics integration, device programming, process engineering, fluid handling, fabrication (e.g. CAD, 3D printing, laser cutting) and competence with basic molecular biology and biochemistry.

The role involves generating publications, contributing to grants and progress reports, mentorship of students, and the maintenance of meticulous records.

Minimum Salary: $50,000/year

Expect start date: August 15, 2018 or as soon as possible

Term: One-year term with a possible renewal

FTE: 100%

Job Closing: July 31, 2018

The normal hours of work are 40 hours per week for a full-time postdoctoral fellow (pro-rated 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.

To apply please send a curriculum vitae, a statement of research interests and experience, and contact information of three references via e-mail to keith.pardee@utoronto.ca and sinton@mie.utoronto.ca, with “PDF – MECH/CHEM” in subject line.