

Emergency Sessional Lecturer Position:

MGY360H1: Laboratory in Whole-Genome Sequencing and Analysis

The Department of Molecular Genetics, Faculty of Medicine, is seeking one Sessional Instructor/Lecturer for the Winter 2017 semester (January 2017 to April 30, 2017) for the course MGY360H1: Laboratory in Whole-Genome Sequencing and Analysis.

Description:

This is a laboratory course designed to introduce third and fourth year undergraduates to principles and practice of whole-genome sequencing. During the course, student teams sequence an entire eukaryotic genome and analyze it. Topics taught include: modern sequencing technology, yeast husbandry, genomic library construction and quality control, 'next-generation' sequencing, sequence assembly using a reference genome, principles of genome organization, mutation detection and interpretation. The work includes both "wet" lab components during the first half of the course and computational analysis for the last few weeks of the course.

The course is structured as a weekly three-hour laboratory session each Tuesday from 1-4 pm throughout the winter semester. Most sessions will be approximately one hour of lecture/discussion led by the instructor and two hours of hands on lab work. Some lab sessions will go a bit longer. The instructor is expected to attend all lab sessions, help prepare the lab beforehand, and to answer student questions. The approximate time commitment is 8 hours per week.

The estimated course enrollment is 40 students.

The course has been taught for several years. The successful applicant will be working with the guidance of professors who previously taught this course and will have the support of experienced teaching assistants. A laboratory manual, course slides, and other critical components have already been designed and used successfully. Minimal modification of these materials may be required to update them for use this year.

Qualifications:

The applicant should be experienced with concepts and methods in next-generation sequencing and the analysis of genome scale sequence data. The applicant should also be knowledgeable with basic yeast biology and yeast husbandry. Previous teaching experience is desirable but not required.

Rate of Pay:

The wage rate for a Sessional Lecturer is determined based on the schedule outlined in the [Collective Agreement](#).

Final availability of the position(s) is contingent upon enrolment, budgetary consideration and the determination of appointments as governed by the collective agreement.

Application Process:

Applications should include a single PDF with the following components in this order: 1) a [Sessional Lectureship Application Form](#); 2) a cover letter; and 3) a c.v. that includes evidence of expertise in genome sequencing, analysis, and yeast biology, as well as the name(s) of one or more qualified referees.

Please submit the applications electronically to:

Dr. Leah Cowen
Professor and Chair, Department of Molecular Genetics
mogen.chair@utoronto.ca

Closing date for receipt of applications:

October 31, 2016 at 3:00 pm

This job is posted in accordance with the CUPE 3902 Unit 3 Collective Agreement. In accordance with the *Employment Equity Policy*, the University of Toronto encourages applications from qualified women and men, members of visible minorities, aboriginal peoples, and persons with disabilities.