Sessional Lecturer - MGY360H1: Whole-Genome Sequencing and Analysis Laboratory
Job Field: CUPE 3902 Unit 3
Faculty / Division: Faculty of Medicine
Department: Molecular Genetics
Campus: St. George (downtown Toronto)
Job Posting: November 11, 2020
Job Closing: December 2, 2020, 11:59pm EST

Course number and title: MGY360H1: Whole-Genome Sequencing and Analysis Laboratory

Course 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 (online) for the last few weeks of the course.

Estimated TA support: 210 TA hours

Estimated course enrolment: 40

Class schedule: Tuesdays (1:00 p.m. to 4:00 p.m.)

Sessional dates of appointment: January 1 to April 30, 2021

Salary: $8,489.67 for Sessional Lecturer I; $8,869.25 for Sessional Lecturer I Long Term;
$9,085.58 for Sessional Lecturer II; $9,301.90 for Sessional Lecturer III, inclusive of vacation pay
Please note that should rates stipulated in the collective agreement vary from rates stated in this posting, the rates stated in the collective agreement shall prevail.

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

Description of duties:
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. Some interactions with students are expected to be done online this year.

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.

Application Procedure:
Applications should include a single PDF with the following components in this order: 1) the CUPE 3902 Unit 3 application form, available at: http://forms.hrandequity.utoronto.ca/#employment; 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

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This job is posted in accordance with the CUPE 3902 Unit 3 Collective Agreement.

It is understood that some announcements of vacancies are tentative, pending final course determinations and enrolment. Should rates stipulated in the collective agreement vary from rates stated in this posting, the rates stated in the collective agreement shall prevail.

Preference in hiring is given to qualified individuals advanced to the rank of Sessional Lecturer II or Sessional Lecturer III in accordance with Article 14:12 of the CUPE 3902 Unit 3 collective agreement.

Please note: Undergraduate or graduate students and postdoctoral fellows of the University of Toronto are covered by the CUPE 3902 Unit 1 collective agreement rather than the Unit 3 collective agreement, and should not apply for positions posted under the Unit 3 collective agreement.