Research Assistant
Institute for the Study of Teaching and Learning in the Disciplines & the Faculty of Science

The Simon Fraser University (SFU) Institute for the Study of Teaching and Learning in the Disciplines (ISTLD) invites applications for a Research Assistant for the Teaching and Learning Development Grant project “Designing lab groups in intro biology to support student learning & experience” to begin Oct 2018 or earlier.

Project Description: SFU students in first-year general biology labs work in groups – either student-selected or instructor-assigned. The goal of this project is to systematically evaluate the impact of lab group selection and composition on student learning (performance), confidence in lab skills, and perception of group work. We have collected pre- and post-data from ~500 students, and are ready to begin our analysis. Our findings will be used to improve our group-forming process in this course: to benefit student performance, confidence, and/or experience in this critical time of transition to university. We then aim to share our work more broadly through conference presentations and a journal publication.

Research assistant responsibilities include:
• Quantitative data analysis (documenting workflow, data cleaning, appropriate (statistical) analyses, drawing conclusions, data visualization);
• Meeting weekly (or as needed), in person or via Skype/Facetime;
• Summarizing findings in a written report; preparing a version of the report for publication in the science education field, including literature review to provide introduction and context;
• Supporting dissemination of project findings within and beyond SFU;
• Presentation at a conference depending on your availability/interest. (SABER conference in July 2019; conference costs will be reimbursed up to $1200).

Required qualifications and skills:
• Familiarity with quantitative data analysis packages/languages, such as R.
• Ability to select and implement meaningful analyses, including appropriate statistical treatment, and effectively communicate the work to a non-data-science audience.
• Academic research and writing skills, as demonstrated by prior completion of similar projects.
• Excellent interpersonal skills, including strong oral and written communication skills.
• Ability to work independently, productively, and creatively.
• An interest in evidence-based teaching and learning, and education in the sciences

Experience and skills that would be an asset:
• Completion of, or current enrollment in, a graduate program in a Science Education-related field, is an asset. However, equally welcome are applicants from outside of the teaching and learning world, who have relevant analytical skills/specializations (e.g. Data Science certificates, Discipline-Based Educational Research work, Learning Analytics project experience…).
• Experience with research/evaluation in (science) education: any/all of analysis, writing and editing with feedback, manuscript submission, presenting findings.
• Familiarity with data visualization packages (e.g. Tableau, D3, plotly).
• Qualitative research experience (summarizing and analyzing short-answer questions).
• Personal experience with undergraduate science lab courses and groupwork.

Rate of pay: $20 - $25/hr (Canadian dollar; incl. vacation and statutory holiday pay, no medical or dental benefits) - based on experience, qualifications and degree program. Total appointment: Minimum 190 hours.

To Apply: Applicants should submit: (1) a 1-page cover letter structured to address the interest, skills, and role responsibilities as listed above, and (2) a 1-2 page résumé that highlights relevant qualifications, experience, and dissemination of prior projects. These two items should be organized as one PDF attachment addressed to Megan Barker, and emailed to megan.barker@sfu.ca. Short-listed applicants will be asked to demonstrate their analysis skills with a mock, small-scale dataset, and then interview (in person or remotely).

Application deadline is September 10, 2018. Despite the posting being through SFU, the applicant need not be local to the Burnaby/Vancouver region, as we can meet remotely. Priority will be given to persons who are eligible to work in Canada. We appreciate all replies to this position posting, however, we will only contact short-listed applicants.