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**Post date:** January 10, 2022

Department of Civil and Mineral Engineering

Faculty of Applied Science and Engineering

University of Toronto

JOB POSTING: POSTDOCTORAL FELLOW, WELLBEING AND THE BUILT ENVIRONMENT

**Start Date:** March 1, 2022 or as soon as filled

**Duration:** One year term, renewable annually up to three years

**Primary Location:** University of Toronto, Department of Civil & Mineral Engineering, St. George Campus

**Alternate Locations:** Other buildings around the GTHA (specifically Hamilton)

**Salary:** $50-55K + benefits, depending on qualifications and experience. For details see employee PDF information here https://postdoc.sgs.utoronto.ca/

**Description**

This position will primarily support a new three-year project on Wellbeing and the Built Environment on U of T campuses. U of T is undertaking deep energy retrofits in buildings across campus to meet its aggressive greenhouse gas emission reduction targets. Through this process, the University has an opportunity to leverage their significant financial investment in retrofits to concurrently improve wellbeing and inhabitant satisfaction on campus. Thus, this project involves the development and piloting of a new holistic campus building performance assessment framework and accompanying metrics which integrate economic, environmental and social objectives. With the pilot, we endeavor to establish a relationship between inhabitant wellbeing and building environmental performance and features, a significant gap in building performance research. The customized data collection tools and protocols developed as part of this project will be deployed in three to five campus building retrofits over the three-year project period. The study participants will comprise students, staff and faculty. Anticipated outcomes of this project include: an understanding of how retrofits and other campus building features impact

inhabitant wellbeing and guidance on how to enhance this in future retrofits and new construction; hands-on experiential learning opportunities for students to collect and analyze indoor environmental quality (IEQ) and wellbeing data; enhancement an existing Digital Twin project through integration of these new datasets and use of these data by living lab courses and student services. Our UofT partners, Facilities & Services (F&S), the Dean’s

Advisor on Black Inclusivity, the Vice-Dean Undergraduate (VDU) Office, and our Industry Partner, the International Wellbeing Institute (IWBI) are integral in the development, analysis and refinement phases of the project to ensure ongoing use of the tools, framework and resulting data beyond completion of the project. A secondary part of this position will be assisting with aspects of the on-going Wellbeing and the Built Environment project in multi-family buildings, the precursor to the campus project described above.

Specific research tasks for this position will include working with another postdoctoral fellow and one to two PhD students on a literature review, development and deployment of new data collection protocols (e.g. survey, photovoice, indoor environmental quality data) in three to five campus buildings before and after retrofits; integration of the findings to evaluate the impacts of retrofits on campus inhabitants and preparing journal publications and project reports. Specific project management tasks include managing the project schedule and budget, developing a project data management plan, coordinating and preparing documentation for project team meetings, working with a web designer and mobile application designer on project deliverables, and other tasks related to general project coordination for this and the on-going Wellbeing in the Built Environment project in multi-family buildings.

**Position Requirements**

The applicants need to have a completed doctoral degree with a specialization in building science/design, building performance assessment, indoor environmental quality, environmental psychology, public health, and/or other closely-related subject areas. The applicants for this position should demonstrate their ability to:

* Conceptualize and execute research on occupant wellbeing, indoor environmental quality and building performance
* Develop and follow experimental and data analysis protocols that are responsive to data quality, security, documentation, and preservation requirements,
* Author high-impact journal articles and/or reports in related technical areas,
* Complete technical literature reviews, and
* Work independently and as part of a highly diverse community with students, faculty, and collaborators from varied backgrounds and a variety of age groups,
* Manage large, complex multi-year projects

And be able to demonstrate evidence of a commitment to equity, diversity, inclusion, and the promotion of a respectful and collegial, comfortable, and safe learning and working environment.

**Desirable Qualities**

The ideal applicant for this position would further demonstrate:

* Knowledge of building science and building systems, indoor environmental quality, occupant health and wellbeing.
* Knowledge of building performance assessment approaches including hands-on experience with various types of testing and monitoring.
* Knowledge of human subjects/research ethics protocols and conducting surveys.

**Application Procedure**

Submit a **maximum 2-page Cover Letter with a CV and a brief technical writing sample (no more than 2 pages)** to the following email address *marianne.touchie@utoronto.ca* with the subject line “*PDF position on Wellbeing and the Built Environment*”. Either your cover letter or your CV should indicate three references/contact information who can comment on your record with regards to the position requirements and desirable qualities. No content in the body of the message (other than the three attachments) will be considered. Please do not submit additional attachments (e.g., reference letters, transcripts, sample articles).

**Application Deadline:** Applications will start being reviewed February 1st 2022 and will be considered until the position is filled.

***Diversity Statement***
*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, LGBTQ2S+ persons, and others who may contribute to the further diversification of ideas.*

***Accessibility Statement*** *The University strives to be an equitable and inclusive community, and proactively seeks to increase diversity among its community members. Our values regarding equity and diversity are linked with our unwavering commitment to excellence in the pursuit of our academic mission.*

 *The University is committed to the principles of the Accessibility for Ontarians with Disabilities Act (AODA). As such, we strive to make our recruitment, assessment, and selection processes as accessible as possible and provide accommodations as required for applicants with disabilities.*

*If you require any accommodations at any point during the application and hiring process, please contact marianne.touchie@utoronto.ca.*

*All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.*