

Summer 2023 Sustainability Scholars Program Internship Opportunity

The UBC Sustainability Initiative (USI) is pleased to offer current UBC graduate students the opportunity to work on funded sustainability internship projects. Successful candidates work under the mentorship of a partner organization, and are immersed in real world learning where they can apply their research skills and contribute to advancing sustainability across the region.

- Visit the [Sustainability Scholars Program website](#) to learn [how the program works](#) and to [apply](#).
- Be sure to review the application guide on the Apply page to confirm your eligibility before applying.

Applications close at midnight on Sunday January 29, 2023.

Project title: Portfolio-Level Climate Hazard Exposure Screen for Select BC Health Facilities

Project Background & Overview:

British Columbia is already experiencing the effects of global climate change: average temperatures are increasing, variable and extreme weather is becoming more frequent, and sea levels are rising. Extreme weather events in 2021 showed how climate-influenced hazards like extreme heat and flooding can impact population health and the health system in BC, and these challenges are only expected to increase in coming years. It is therefore essential to understand and manage direct and indirect impacts on hospitals, long-term care homes and other types of health facilities, along with cascading impacts on patients, staff, and communities.

Health organizations in BC have made significant progress on health-focused climate adaptation and resilience in recent years, exemplified by the development of the Climate Resilience Guidelines for BC Health Facility Planning & Design, integration of resilient design strategies into construction and renovation projects, and assessment and prioritization of community health through the HealthADAPT project and related initiatives. This work aligns with organizational mandates and priorities, the Provincial Climate Change Accountability Act, the recently released Climate Preparedness & Adaptation Strategy, and upcoming frameworks and standards.

The Energy & Environmental Sustainability team (a collaborative representing Fraser Health, Providence Health Care, Provincial Health Services Authority, and Vancouver Coastal Health) is building on past successes and a growing knowledge base, and seeking ways to accelerate the transition to a low-carbon, climate resilient and environmentally sustainable health system.

Project description

To date, climate risk and resilience work for new and existing health facilities has mostly been completed on a site-by-site basis. The intention of this proposed project for the UBC Sustainability Scholars Program is to employ a more systematic approach and evaluate numerous sites at the same time via the use of a portfolio-level climate hazard exposure screen.

A climate hazard exposure screen involves the identification of climate change-related hazards that are relevant to a particular site. The exposure (degree to which a site is exposed to climate hazard) depends on largely on location, site layout, and design. Determining exposure involves looking at both historical occurrences (e.g. past flooding events) and possibilities under future climate conditions (e.g. changing floodplains due to sea level rise). Information sources might include provincial or municipal hazard maps, extreme event reports, and future climate projections, among others.

A portfolio-level climate hazard exposure screen follows a similar procedure to a site-specific exposure screen; however, the exposure screen is completed simultaneously for groups of buildings and/or sites in similar geographical regions, rather than for an individual site. Outcomes will generally include a list of climate change-related hazards relevant to the studied sites, and potential impacts to be considered at the sites moving forward.

This exercise will help equip decision-makers with the information they need to identify and prioritize future climate change adaptation projects, to maximize efficiencies and emphasize co-benefits. The four health organizations will utilize this information in future climate risk assessments, for project planning and design, and in broader adaptation planning efforts.

Project scope

The scope of the project will be a selection of health facilities, including acute and long-term care, across the health regions of Fraser Health, Providence Health Care, Provincial Health Services Authority, and Vancouver Coastal Health. The total number of sites to be screened and level of detail is flexible – the Scholar will work with the Manager of Climate Risk & Resilience to determine what is feasible within the program timeframe.

The portfolio-level climate hazard exposure screen seeks to answer four main questions:

1) What is the context?

Gather foundational information for the sites by reviewing provincial/municipal government resources, community health and vulnerability assessments, and similar.

2) What climate-related hazards are relevant to each site?

Source and synthesize spatial hazard information (e.g. floodplain maps) and future climate projections using existing resources (e.g. Moving Towards Climate Resilient Health Facilities for Vancouver Coastal Health) and publically available data portals (e.g. Pacific Climate Impacts Consortium, Climate Data Canada).

3) What types of impacts might occur at a given site as a result of climate-related hazards?

Build upon the existing knowledge base of climate impacts to health facilities (from past projects, the literature) and identify applicability to the climate hazard exposure screen.

4) Based on the above, what resilient design objectives might apply at the site and/or what kind of adaptation projects might be prioritized in the future?

Build upon the existing knowledge base of resilient design objectives (from past projects, the literatures) and identify applicability to the climate hazard exposure screen.

Where applicable, the Mentor will look for opportunities for the Scholar to join meetings with facilities staff and others, in order to ground-truth findings and refine outcomes.

Deliverables

- A final report containing a summary of the work completed
- A final report for the online public-facing [Scholars Project Library](#).
- A final workbook/database with the climate hazard exposure screen process and results for each site

Time Commitment

- This project will take 250 hours to complete
- This project must be completed between May 1 to August 15, 2023
- The Scholar is to complete hours between 9 am and 5 pm, Monday to Friday, approximately 17 to 20 hours per week.
- Remote working options are available. It would be beneficial for the Scholar to work at 520 W 6th Ave in Vancouver at least once a week.

Required/preferred Skills and Background

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Experience conducting stakeholder engagement events, including facilitation skills, is an asset
- Familiarity with research methodologies and survey techniques
- Familiarity conducting focus group research
- Strong analytical skills
- Ability to work independently
- Deadline oriented
- Project management and organizational skills
- Demonstrated experience in climate risk and resilience
- GIS training or experience and asset

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Additional information

This project requires interdisciplinary thinking and creativity, but there is flexibility on the Scholar's area of study. A background in health topics would be useful but is not required.

Remote working options are available. It would be beneficial for the Scholar to work at 520 W 6th Ave in Vancouver at least once a week. It anticipated that all work can be completed with basic software and free applications, though GIS software could be utilized if the Scholar has an interest in that area.

Applications close **midnight Sunday January 29, 2023**

Apply here: [Click here to apply](#)

Contact Karen Taylor at sustainability.scholars@ubc.ca if you have questions

Useful Resources

We are holding a special **resume preparation workshop for prospective Scholars** on January 23, 2023. [Click here for details and to register.](#)

Below are some links to useful resources to help you with your resume and cover letter (there are many more online). Some of these resources also provide information on preparing for your interview.

<https://students.ubc.ca/career/career-resources/resumes-cover-letters-curricula-vitae>

<https://www.grad.ubc.ca/current-students/graduate-pathways-success>

<https://www.grad.ubc.ca/cover-letter-cv-resume-templates-ubc-career-services>