

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 March 12, 2023.

Project title: Research to understand the impact of climate change on health care facilities now and in the future

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 project is to employ a more systematic approach to understanding exposure at a portfolio level. In this project, the Scholar will build upon existing work of the Energy & Environmental Sustainability team by applying an (existing) exposure screen framework to two or more new sites.

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 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 include two or more health facilities 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 project will follow four main tasks:

- 1) Working with the project mentor, identify a prioritized list of sites to examine. Sites may range from regional hospitals to long-term care facilities. Depending on the time available and the Scholar's interests, two or more sites may be chosen.
- 2) Review existing work of the Energy & Environmental Sustainability team, including the existing exposure screen framework, to understand how it can be applied to additional health facilities.

SUSTAINABILITY SCHOLARS PROGRAM

- 3) Review existing spatial data and future climate projections to identify climate-related hazards of relevance to each of the chosen sites. This may include provincial/municipal government resources, community health and vulnerability assessments, and publically available data portals (e.g. Pacific Climate Impacts Consortium, Climate Data Canada).
- 4) Based on past projects and the literature, generate a list of impacts that might occur at a given site as a result of climate-related hazards.

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 with the climate hazard exposure screen process and results for the selected sites

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
- Familiarity with research methodologies and survey techniques
- Comfortable engaging with strangers or people in senior positions to gather complex information
- 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 an 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 March 12, 2023**

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

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

Useful Resources

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>