

Summer 2022 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](#) to confirm your eligibility before applying.

Applications close at midnight on Sunday January 30, 2022.

Project title: Advancing sustainable health care innovations through a policy and engagement strategy

Project Background & Overview:

The healthcare sector is responsible for approximately 5% of Canada's total greenhouse gas emissions. One of the environmentally sustainable opportunities for health systems to improve starts with anesthetic gases.

Anesthetic gases are essential to providing comfortable and safe surgery. Yet these agents are also recognized greenhouse gases (GHGs) and contribute to the environmental impact of healthcare.¹ The release of anesthetic gases represents a major challenge to environmental sustainability in healthcare. To address this issue, institutions can be a part of the change to improve the environmental performance of the operation room. Clinicians and the administrators who support them have a critical role to play in reducing the environmental impact of anesthesia. Many environmental initiatives involve practice change, which must be led by clinicians and strongly supported by administrators. In addition to leading practice change, clinicians and administrators have a role in advising on and advocating for organizational and facility change – to spread and normalize practice change, and to enable it through shifts in organizational policy, purchasing practice, infrastructural development, and/or facilities management.

CASCADES is a multi-year capacity-building initiative to address healthcare's contribution to the climate crisis. The project is led by The University of Toronto's Centre for Sustainable Health Systems in partnership with the Healthy Populations Institute at Dalhousie University, the Planetary Healthcare Lab at the University of British Columbia, and the Canadian Coalition for Green Health Care. In addition to capacity-building through continuing professional development and community engagement, CASCADES seeks to support health professionals in the development of new - or the refinement of existing - tools and strategies that can improve the sustainability of health services and systems. One of the innovation projects that CASCADES is working on identifies how anesthetic gases contribute to climate change.

¹ Langbein T, Sonntag H, Trapp D, Hoffmann A, Malms W, Röth EP, et al. Volatile anaesthetics and the atmosphere: atmospheric lifetimes and atmospheric effects of halothane, enflurane, isoflurane, desflurane and sevoflurane. *Br J Anaesth.* 1999 Jan;82(1):66–73.

Project description

CASCADES has developed an innovation “test case” in Western Canada, working with a small team of experts to mitigate the environmental impact of anesthetic gases through the development of a prototype playbook that serves as a step-by-step guide for innovation implementation and assessment. The playbook will be used for widespread implementation and to inform policy – for what is now considered a best practice in sustainable health care. The goal of this project is to develop a framework that will provide recommendations for widespread implementation of this innovation across health systems in Canada. The project will include stakeholder interviews, conducting a comprehensive environmental scan and the development of a framework to support implementation.

Project scope

1. Methodology and question set

- a. Develop methodology and question set for interviews and survey
- b. Conduct one-hour interviews with individual(s) or small focus groups from 6-10 academic institutions across the four geographic regions: Western Canada, Central, Montréal, Atlantic Canada.

2. Environmental scan

- a. Conduct a comprehensive environmental scan across the ten provinces to understand the opportunities to mitigate the environmental impact of anesthetic gases on a province wide level.
- b. Develop a survey based on environmental sustainability behavior change opportunities and challenges in Operating Rooms that will inform professional development training materials—understand barriers and patterns. Survey can be distributed by the Canadian Anesthesiologists’ Society.

3. Analyze and summarize information

- a. Based on regional focus groups and survey results, analyze and summarize findings into a framework that will guide innovation implementation. Integrate findings from policy scan into framework to provide specific recommendations based on province.

4. Develop a national spread framework

- a. Summary of current practices relating to anesthetic gases
- b. Provincial recommendations based on environmental scan and best practices
- c. Summary of barriers and challenges to implementation

Deliverables

- A final report summarizing research findings and recommendations
- A presentation to the CASCADES Management Committee.
- A final report containing a summary of the work completed
- A final report for the online public-facing [Scholars Project Library](#).

Time Commitment

- This project will take **250** hours to complete.
- This project must be completed between **May 2 and August 12**.
- The scholar is to complete hours during the standard business week, approximately **17 - 20** hours per week.

Required/preferred Skills and Background

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Familiarity with research methodologies and survey techniques
- Community engagement experience
- Familiarity conducting focus group research
- Strong analytical skills
- Ability to work independently
- Deadline oriented
- Project management and organizational skills
- Familiarity with WordPress, Drupal, or other website content tools
- Demonstrated experience in policy analysis.
- Comfortable interacting with strangers to conduct public/in person surveys
- Experience with financial modelling and analysis
- Experience or interest in health care environmental sustainability is an asset.

Applications close **midnight Sunday January 30, 2022**

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 19. [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>