

Graduate Internship Opportunity

Summer 2025

PROJECT TITLE

Developing Guidance for Indigenous Land Defenders and Grassroots Organizers Investigating Air Pollution from Industrial Activity

HOST ORGANIZATION

[Research for the Front Lines \(R4FL\)](#)

Project Background

Research for the Frontlines (R4FL) is a network that supports the research needs of frontline communities and grassroots movements that are fighting for environmental and climate justice across so-called Canada. Indigenous Land Defenders and other community organizers are seeking help investigating environmental pollution from industrial activity, and R4FL aims to expand the technical resources we provide to support their research needs.

In 2024, R4FL was approached by multiple grassroots groups requesting assistance with researching pollution from nearby industrial operations. In the process of supporting the research needs of these frontline folks, we compiled a set of resources that we hope will be broadly useful to impacted community members who want to lead research on contaminants in their local environments. Building on this work, we are seeking a Sustainability Scholar to expand these resources, focusing specifically on air sampling techniques and laboratory analysis of specific contaminants. The Scholar's work will help make air sampling more accessible to communities, equipping them with tools to conduct their own investigations and take action.

Project Description

The Scholar will conduct a research project that synthesizes available methods for air sampling in community-led investigations. This work will involve reviewing different air sampling techniques and available collection equipment, as well as assessing laboratory analysis options. The project will also outline key considerations for communities designing their own air sampling initiatives, such as training requirements, budget implications, laboratory options, and environmental factors like seasonality and weather conditions.

The research process will include a review of technical documents, commercial laboratory service options, and existing guides for community-led environmental investigations. The Scholar will also engage with relevant experts, such as R4FL mentors, researchers, and knowledgeable contacts in their own networks, to ensure the findings are practical and well-informed.

The Scholar will work with R4FL coordination staff to refine research objectives, establish clear milestones, and ensure that the project remains aligned with community needs. Regular check-ins, approximately every two weeks or as needed, will provide an opportunity for feedback and support.

Research Focus & Deliverables

The Scholar's work will focus on addressing two key research questions:

1. What type of sampling plans, sampling techniques, collection devices, and laboratory analyses can be recommended to communities seeking to measure air pollution from industrial activities?
2. What key factors should communities consider when choosing between different approaches to investigating air pollution (e.g., training requirements, laboratory options, budget considerations, seasonality, and weather conditions)?

The research will involve reviewing technical documents, analyzing existing guides for community-led environmental investigations, communicating with commercial laboratories, and consulting relevant experts.

The final deliverable will be a comprehensive report for R4FL, designed as a practical resource to assist community-led environmental investigations. It is anticipated that this work may be valuable to a broader audience. Therefore, we will support the Scholar in developing the final deliverable in a format that can be made openly accessible to those interested in investigating air pollution.

Time Commitment & Work Structure

The Scholar will have the flexibility to structure their work independently while meeting periodically with R4FL staff to discuss progress. The project scope may be adapted based on emerging research needs or to align with the Scholar's expertise and interests.

This internship requires 250 hours of work, to be completed between May 1 and August 15, 2025.

Preferred Skills & Background

We are looking for candidates with some of the following skills and experiences:

- Strong project management and organizational skills

- Ability to work independently and meet deadlines
- Background in applied or natural sciences, with knowledge of air sampling and environmental science
- Experience in ecotoxicology, exposure science, environmental risk assessment, analytical chemistry, or industrial hygiene
- Familiarity with air sampling equipment, including evacuated canisters and sorbent tubes
- Experience working with commercial laboratories, including familiarity with chain-of-custody forms and detection limits
- Experience with design of scientific research, including sample size determination and controlling for variability
- Strong record-keeping and documentation skills

While prior knowledge of a broad range of topics in environmental science related to air pollution is preferred, we also welcome applicants with a strong scientific background who feel they can contribute toward this project. The project focus may shift slightly by May 2025 to align with evolving research needs or the Scholar's expertise and interests.

Additional Requirements

This internship position is remote, so the Scholar must be comfortable working independently and collaborating virtually.

Compensation & Application Details

- **Dates:** May 1—August 15, 2025
- **Compensation:** \$31.80/hr for 250 hours of work (aligned with UVic Research Assistant pay rates)
- **2nd Intake Deadline:** March 7, 2025
- **To apply:** Visit www.uvic.ca/sustainability-scholars
- **Cover Letter:** Address your cover letter to Research for the Front Lines
- **Questions?** Reach out to Laurel Currie (sustainability-scholars@uvic.ca)