



## **Canada-Finland Bioenergy Researcher Exchange Program**

**What:** An exchange program between bioenergy early career scientists in Canada and Finland

**Where:** Yukon College, Whitehorse, Yukon and Natural Resources Institute Finland (Luke) in Joensuu, Finland.

**Who can apply:** PhD-students or scientists holding a PhD degree not older than five years, employed by a university or research organization in Canada or Finland

**Included:** Travel to each research station and accommodation are provided free of charge. Salary, allowances and other cost during exchange may require self-funding.

**Timing:** 4-6 weeks at each field station; May - Dec 2018

**Deadline to Apply:** March 23, 2018

### **Introduction**

To encourage pan-northern research collaboration and foster Canadian-Finnish Arctic research cooperation, Polar Knowledge Canada (POLAR) and Karelia are offering early career scientists the opportunity to take part in an exchange program between Yukon Research Centre in Whitehorse, Yukon, and Luke Natural Resources Institute in Joensuu, Finland. Selected scientists will conduct bioenergy research at both stations and establish links between Canadian and Finnish research institutions.

The two stations combined provide an opportunity for comparative studies under different forest and climatic regimes. Research projects taking place at Yukon College will ideally focus on small-scale biomass combined heat and power (CHP) production and/or wood chip production. Research projects in LUKE Joensuu will ideally focus on local heat and electricity production from forest biomass for remote towns and communities. Selected scientists are required to have previous experiences on the above subjects.

## The Research Stations



Yukon Research Centre  
Whitehorse, Yukon



Luke Natural Resources Institute  
Joensuu, Finland

The Yukon Research Centre (YRC) at Yukon College has a long-standing reputation for completing high quality, innovative research projects with a variety of research partners, including First Nations, communities, industry, government, NGOs and academia. The YRC, led by Clint Sawicki, Associate VP of Research Operations and Bronwyn Hancock, Associate VP of Research Development, have extensive experience managing research projects, and have consistently supported projects that investigate distinctly northern questions by applying science and traditional knowledge to offer truly innovative, northern solutions. Yukon College is well-positioned as a base for visiting researchers with their YRC building developed as a multipurpose lab; including a Class 2 Biohazard lab facility, space for receiving and securing samples, and office space for visiting researchers.

Researchers and specialists working at Luke provide new solutions towards the sustainable development of the Finnish bioeconomy and the promotion of new bio-based businesses. Together with its partners Luke is working towards building a bioeconomy-based society. Forest biomass for energy has been an important research focus at Luke, and its predecessor the Finnish Forest Research Institute, since the 1950's. Luke has also been actively coordinating and participating in numerous major EU-funded bioenergy research programs and projects.

### Who Can Apply?

PhD-students, or scientists holding a PhD degree not older than five years are eligible to apply. The applicant must be employed by a university or other research organization in Canada or Finland. Applicants from Canada must submit their applications to POLAR at [info@polar.gc.ca](mailto:info@polar.gc.ca). Applicants from Finland must submit applications to Karelia at [international@karelia.fi](mailto:international@karelia.fi). Applications must be submitted in English.

Applicants may identify a potential exchange partner in their applications, or may apply with a project and be matched by the host organizations with an appropriate partner. One candidate from each nation will be selected for the 2018 program.

## **Selection Criteria**

Applications will be selected based upon:

- Experience or involvement in northern-based bioenergy research
- Merit of the proposed research project

Considered an asset

- Experience with community engagement
- Proposed projects that involve the community in the research process and/or science communication are strongly encouraged
- Preference will be given to northern-based and Indigenous applicants. However, all applicants are encouraged to apply.

## **Expected outcome**

The program is designed to enhance science and technology knowledge, and strengthen Canadian-Finnish research links in the following ways:

- Sharing of field methods and research knowledge
- Introduction to the other country's research community and priorities
- Advancing further bilateral bioenergy research collaboration and networks
- Creating a channel for bilateral exchange of best practices

## **What to include in application?**

The application should include:

- Completed application form
- Research plan (maximum 3 pages) containing sections on -
  - o Research interests
  - o Outline of research project and field work plan, and how the project will benefit from taking place at both research stations
  - o Research funding currently assigned, or potentially allocated, for the project
  - o The research team's northern or Arctic field experience
- Resume of the early career scientist
- A letter of support from the project leader

Applications must be received not later than March 23, 2018. Canadian applicants must submit to [info@polar.gc.ca](mailto:info@polar.gc.ca) and Finnish applicants to [international@karelia.fi](mailto:international@karelia.fi).



Polar Knowledge  
Canada

Savoir polaire  
Canada

*Polar knowledge Canada (POLAR)* is a Canadian government agency established on June 1<sup>st</sup>, 2015. POLAR's mandate is to advance Canada's knowledge of the Arctic and strengthen Canadian leadership in polar science and technology.



**YUKON RESEARCH CENTRE**  
Yukon College

Yukon Research Centre (YRC) at Yukon College is here to answer northern research questions, support and advance local innovation, and provide research services to visiting researchers. The YRC works in partnership with government, First Nations, industry, entrepreneurs, and communities to solve northern problems with northern expertise.



*Karelia University of Applied Sciences* is a well-recognized actor in education and in national and international research, development and innovation activities. Karelia operates in two campuses in close proximity of Joensuu city center in easternmost Finland.



*Natural Resources Institute Finland (Luke)* is a government owned R&D organization with 1300 employees (50 professors and 650 researchers). Luke's mission is to be a trailblazer and a scout to the bioeconomy and sustainable future.