Ontario Genomics-CANSSI Ontario: Postdoctoral Fellowship in Genome Data Science, 2021

Sponsor

Ontario Genomics and the Canadian Statistical Sciences Institute (CANSSI Ontario).

Program

Postdoctoral Fellowship in Genome Data Science

For More Information

Please see the posted guidelines [1].

Description

Ontario Genomics and the Canadian Statistical Sciences Institute (CANSSI Ontario) have accounced a partnership to establish a joint Postdoctoral Fellowship in Genome Data Science.

This partnership aims to help solve challenges in genomic epidemiology and statistical genetics, with applications that address infectious diseases being prioritized. This partnership aims to increase capacity in genomic epidemiology and statistical genetics by attracting, retaining, and developing Highly Qualified Personnel (HQP)?in Ontario with expertise in quantitative fields such as statistics, computational biology, bioinformatics, computer science, epidemiology, engineering, genetics, or mathematics. This award will support a post-doctoral fellow pursuing research that deepens our understanding of genomic epidemiology and statistical genetics, with applications studying infectious diseases or which uses genomics for pathogen surveillance or host-virus genetic interaction being of special interest.

Ontario Genomics is a not-for-profit organization leading the application of genomics-based solutions to drive economic growth, improved quality of life and global leadership for Ontario. Ontario Genomics plays a vital role in advancing projects and programs by supporting the development of their proposals, helping them access diverse funding sources, and finding the right industry partners to take this research out of the lab to apply it to the world's most pressing challenges. Since its inception in 2000, Ontario Genomics has raised more than \$1.27 billion for genomics applied research in Ontario and directly supported more than 9,100 trainees and jobs. We have 110+ active projects, 500+ impactful partnerships and have secured \$1.34 billion in follow-on investments.

CANSSI Ontario is the Ontario regional centre of CANSSI–a national institute offering the leadership and infrastructure necessary to increase and further develop statistical sciences research in Canada and promote the discipline. CANSSI Ontario seeks to support data-intensive, interdisciplinary research and strengthen the network of statistical and data scientists in Ontario and across Canada.

Eligibility

The Fellowship offers two-year salary support for up to \$50,000 per year for postdoctoral fellows undertaking full-time research at a CANSSI Ontario member university or at any of their affiliated research institutes (the University of Guelph is a CANSSI member University). Candidates are responsible for selecting, contacting, and securing the commitment of two faculty members to jointly supervise them in their project, one being a statistical geneticist or genetic epidemiologist.

Applicants must be undertaking full-time research during the term of the postdoctoral fellowship at a CANSSI Ontario <u>member university</u> [2] or any of their affiliated research institutes.

Applicants must fulfill or have fulfilled all degree requirements for a PhD in the fields of statistics, computational biology, biostatistics, bioinformatics, computer science, epidemiology, engineering, mathematics, genomics or other related quantitative fields between January 1, 2019, and January 1, 2022. The window of eligibility could be extended by a cumulative maximum of three years if the applicant had their career interrupted for extenuating circumstances, such as parental leave, illness, health-related family responsibilities, mandatory military service, disruptions due to war, civil conflicts and/or natural disasters in the country of residence, socio-economic reasons/lack of research opportunities, etc. It will only be extended by the duration of the eligible delay(s)/interruption(s).

Canadian citizens, permanent residents of Canada, and foreign citizens are eligible to apply provided that their proposed host institution is a CANSSI Ontario member university or any of their affiliated research institutes.

All applications in the areas of statistical genetics or genetic epidemiology, developing new methodology or using existing methodology in innovative ways, may be considered. However, research projects in genomic epidemiology of infectious disease, using genomics for pathogen surveillance or host -virus genetic interaction are of particular interest. Funding eligibility of submissions will be assessed on the basis of scientific excellence and innovation by an adjudication panel.

Supervisor Requirements

Applicants are responsible for finding, contacting, and securing the commitment of two (2) mentors to jointly supervise them for the duration of the fellowship. The two proposed supervisors must be from different academic divisions at a CANSSI Ontario <u>member university</u> [2] or at their affiliated research institutes, where at least one is a faculty member with a PhD in statistics, biostatistics, epidemiology, computational biology, genomics, or computer science. The second supervisor can be from any other field. The expertise provided by the two supervisors should complement each other and provide the applicant with a broad perspective.

Both proposed supervisors must provide, in writing, their commitment to supervise and to guide the research work of the candidate. Only PDF files will be accepted, with a maximum size of 2 MB per file.

Funding Availability

\$50,000 per year for up to \$100,000 over 2 years.

Indirect Costs

0%

Project Duration

Up to two years.

Special Notes

Please note the faculty member is to hold the funds for payment directly to the Postdoc. This will be done by way of an MOU/Limited Term Agreement between CANSSI Ontario and the University.

Covid-19

Please note that research activities carried out in the context of COVID-19 need to adhere to the University of Guelph COVID-19 research principles, policies, guidelines and processes as they may be updated from time to time and communicated on the <u>Office of Research web-page</u> [3].

Deadlines

If College-level review is required, your College will communicate its earlier internal deadlines. Type Date Notes Internal Deadline Tuesday, November 23, 2021 -4:30pm Please send draft application and completed OR-5 form to the Office of Research Services at

research.services@uoguelph.c a [4].

Type External Deadline	Date Tuesday, November 30, 2021 -	Notes
	11:59pm	Application form to be completed via the <u>online portal</u> [5].

How to Apply

Applicants must assemble all of the following materials and documents and enter or upload them to the application form via the <u>online portal</u> [5].

Applicants will need to provide the contact information of their two (2) proposed supervisors. Each supervisor will be contacted to complete and submit their letter of support online. It is the applicant's responsibility to ensure that their application is complete and submitted online by the competition deadline.

1. Summary of Proposed Research Project

Length: up to 6 letter-sized pages. 2.54 cm (1 inch) top, bottom, left, and right margins. 12-point Times New Roman, black font. Single-spaced. No condensed type or spacing. Single PDF file.

Content: Using the following headings, describe the proposed research in enough detail to allow informed assessment by the adjudication committee members. This summary should be written in general scientific language.

Proposed research background: Present, concisely, your project's general objective(s) and its specific aims. Highlighting how your objective pertains to genomic epidemiology of infectious disease, using genomics for pathogen surveillance or host -virus genetic interaction, if applicable. Include the scientific background, significance, originality, and anticipated contribution to the advancement of knowledge; in other words, state what is the research problem, why this is an important research question, and why you are undertaking this project to address it.

Methodology: Describe and justify, for each of your project's specific aims, your choice of specific instruments, strategies, key activities, expected outcomes, and timelines, including, for example, methodological approaches and procedures for data collection. For a statistical research project, for example, provide an outline of the proposed theoretical and computational approaches and any specific techniques required to develop and evaluate proposed new analytic methods, including critical features in the design of simulation studies and in the application of the methods to available or anticipated study data. In other words, state why your proposed methodology is ideal to achieve each of your project's specific aims. Include any ethical considerations, such as the requirement for Research Ethics Board approval.

Supervisors and Roles: Describe how this project fits with ongoing work by the proposed supervisors and the roles of any collaborators in the project. Provide the rationale for selecting your proposed host institution and supervisors. Describe how the expertise of your two

proposed supervisors complement each other and how, together, they will provide the right combination for the success of your research project and training.

Candidate: Describe your role in the project and how it will prepare you for career goals in the fields of genetic epidemiology or statistical genetics. Explain the relationship and relevance of the proposed research to your long-term research goals. Describe how the proposed project relates to experiences and insights gained from earlier research experience.

2. Academic CV

Length: up to 4 letter-sized pages. 2.54 cm (1 inch) top, bottom, left, and right margins. 12-point Times New Roman, black font. Single-spaced. No condensed type or spacing. Single PDF file.

The CV should include the following headings, as applicable:

- Name and Affiliation
- Work Experience
- Academic and Training Background
- Significant Accomplishments (in point form, indicate which are considered the applicant's three to five most significant accomplishments, such as leadership roles, research achievements, applications of their research, influence on policy and practice, etc.)
- Selected Recognitions and Awards
- Selected Research Outputs (provide a link, where available), including, but not limited to:
 - Selected peer-reviewed publications and preprints
 - Selected datasets, software and research materials
 - Selected inventions, patents and commercial activity
 - Selected Research Funding

3. Letters of Support from Proposed Supervisors

Each applicant is responsible for contacting their proposed supervisors and ensuring that they each will provide a letter of support. This document must be on the institution's letterhead and signed by the supervisor. Letters must not exceed a maximum of two pages. A link will be emailed to each proposed supervisor from the on-line application portal for them to upload their letter as a single PDF.

Each letter must include,

- a brief paragraph summarizing the supervisor's research;
- a description of the fit between the supervisor's and applicant's research interests and how the applicant's proposed research will complement the supervisor's ongoing research aims;
- a clear commitment from the supervisor to support the applicant's research and professional development. This includes mentorship, collaboration, access to resources, and development of leadership potential.

For Questions, please contact

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Ontario Genomics

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CANSSI Ontario

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Office of Research

Devon Staaf, Senior Grants and Contracts Specialist Research Services Office <u>dstaaf@uoguelph.ca</u> [8] Alert Classifications**Category:** Funding Opportunities and Sponsor News

Disciplines: Health and Life Sciences Information and Communications Technology Physical Sciences and Engineering

Source

URL:<u>https://www.uoguelph.ca/research/alerts/content/ontario-genomics-canssi-ontario-postdoctoral-fellowship-genome-data-science-2021</u>

Links

[1] https://www.ontariogenomics.ca/eligibility-and-application-guide-for-ontario-genomics-canssiontario-postdoctoral-fellowship-in-genome-data-science-request-for-applications/

- [2] https://canssiontario.utoronto.ca/about/members_partners/
- [3] https://www.uoguelph.ca/research/
- [4] mailto:research.services@uoguelph.ca
- [5] https://survey.alchemer-ca.com/s3/50123613/Ontario-Genomics-CANSSI-Ontario-

Postdoctoral-Fellowship

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