Biostatistics Training Initiative
Junior Biostatistician Award

Applicant Guide
September 2019

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1. Introduction

Recent technological advances have led to big, complex datasets in cancer research which require powerful quantitative methods to enable the detection of important signals and to gain insight into causal mechanisms of disease. Biostatisticians who can work with these data, ensuring it can be used to develop the next generation of cancer treatments, continue to be urgently needed.

In an effort to increase Ontario's biostatistical capacity in oncology research, the Ontario Institute for Cancer Research (OICR) Biostatistics Training Initiative (BTI) has supported the training of the next generation of biostatisticians through internships and fellowship placements at Ontario cancer research centres since 2010. However, with minimal institutional investment in supporting statistical cores or the area of expertise, biostatisticians based at Ontario universities or research institutions face extremely high demand for their expertise.

2. Objectives

In an effort to continue to enhance biostatistical research capacity and help meet the high demand for oncology biostatistical support, the OICR BTI is piloting the Junior Biostatistician Award aimed at placing a recent biostatistician graduate at an Ontario host institution, guided by a principal applicant and biostatistics mentor. With support from the OICR BTI Junior Biostatistician Award, applicant team members will be expected to identify a recently trained biostatistician with the required technical knowledge and skillset required to collaborate with existing host institution researchers to support enhanced high impact research. Through this new placement, the Junior Biostatistician will engage in interdisciplinary, collaborative cancer research.

3. Definitions

Applicant team:
The applicant team will consist of one nominated principal applicant and one biostatistics mentor. The **principal applican**t must be a fully affiliated member/head/chair of a department, centre or institute located within a host institution (definition below). The **biostatistics mentor** must be a faculty member in biostatistics or statistics or a related field with a strong background in cancer research who can provide biostatistical mentorship and guidance. The biostatistics mentor is not required to be located at the host institution of the principal applicant, but must commit to regular supervisory and mentorship meetings throughout the course of the award.

Junior Biostatistician:
Junior Biostatisticians who are eligible for placements must have a graduate degree, or be expected to receive a graduate degree in biostatistics or statistics within six months of the award initiation, and cannot be currently employed full-time at an Ontario academic cancer research institution. It is encouraged, but not mandatory, that the Junior Biostatistician be a recipient of a previous BTI internship or fellowship award. While it is desirable that the Junior Biostatistician be identified at the time of the application, it is not mandatory since members of the BTI Steering Committee are available to assist the applicant team, after receipt of the award, in identifying suitable biostatistical candidates.

Host institution:

The host institution is defined as the institution that will administer the BTI funds and will be the location where the principal applicant and the Junior Biostatistician are situated. Eligible host institutions include any Ontario university, research centre or research institute with a focus on cancer research. OICR will establish a formal agreement with the host institution detailing the terms and conditions governing the Junior Biostatistician Award.

4. Amount and duration of awards

One Junior Biostatistician Award will be made available with a total available amount of $84,000 for up to one year. Funds must be used to cover salary, benefits and overhead costs for the newly hired Junior Biostatistician. The host institution **must commit** to providing salary and benefit support as well as overhead costs for the newly hired Junior Biostatistician for at minimum one additional year. At the end of the term, it is strongly encouraged that the host institution will commit to hiring the Junior Biostatistician on a permanent basis. **Applications who can provide this commitment will be reviewed favourably.**

The Junior Biostatistician supported by the BTI award is expected to attend at least one scientific conference/meeting and regularly attend and participate in the BTI Distinguished Lecture series (information available at https://oicr.on.ca/biostatistics-training-initiative/) to share experience, foster collaboration among fellows and explore/develop opportunities for working across multiple projects where appropriate. Award recipients will be guests at OICR's Scientific Meeting, which is held every two years. This can be counted toward the conference requirement.

5. Key dates and timelines

An electronic copy of the application is due by **5 p.m. EST on November 29, 2019** to teresa.petrocelli@oicr.on.ca. The successful applicant team will be notified by **December 20, 2019**.

It is expected that the Junior Biostatistician will be hired with a start date of April 1, 2020. Funds will be disbursed from OICR to the host institution in quarterly intervals starting April 1, 2020.

6. Application information

Eligibility requirements for applicants are described above. All sections of the application are mandatory. Using Microsoft Word or a similar program, complete all sections using 11-point Arial font and single spacing.

The following material must be submitted:
- **BTI Junior Biostatistician Award Applicant Form:**
  - ○ Applicant team contact information;
  - ○ Host institution administrative authority contact information, to be completed and signed by the applicant's host institution contact;
  - ○ **Junior Biostatistician biosketch and CV (if applicable)**: If a Junior Biostatistician is identified at the time of the application, provide a brief biosketch and attach a CV;

- o **A proposal (maximum of five pages)**: The proposal must outline the institutional need and potential impact of a Junior Biostatistician within the host institution. It must describe the local research environment and how the Junior Biostatistician will support ongoing and future oncology research initiatives, including involvement in OICRs strategic plan. In addition, the proposal must describe the training, mentorship and support mechanisms which will be provided for the Junior Biostatistician.

- **Letters of support:**
  - o Biostatistics or statistics mentor: committing to providing formal mentorship during the award term.
  - o Host Institution: committing to providing salary and benefit support for at minimum one additional year (FY2021-22) beyond OICR's support during FY2020-21.

7. Application evaluation

7.1 Steering Committee

A Steering Committee (SC) has been established to i) promote the program and solicit applications; ii) review applications and make funding decisions; iii) record and promote achievements of this program; and iv) conduct mid-term 'check-ups' to ensure research plans are on course and proper mentorship is being received. The committee consists of Co-chairs with expertise in biostatistics, and additional members with expertise in both oncology and biostatistics.

7.2 Evaluation criteria

SC members will evaluate applications on the following criteria:
- Potential for proposed position to enhance current research activities and create new collaborations which will result in high impact oncology research;
- Current and future institutional/departmental/research centre need for biostatistical support and evidence that a Junior Biostatistician can provide support to satisfy this need;
- Training and mentorship plan in place and demonstrated commitment to support a training environment for research and professional development;
- Existing infrastructure support and commitment of host institution;
- Potential impact of Junior Biostatistician on future oncology research in Ontario;
- Fit with OICR's Strategic Plan and translational research priorities, as outlined here: https://oicr.on.ca/reports/.

SC members will use the scoring guidelines below to evaluate applications. Only applicants with scores that are greater than 3.0 will be considered for an award. However, scores that are greater than 3.0 do not automatically guarantee an award.

Score	Description
4.7 – 5.0	Excellent with no weaknesses identified
4.2 – 4.6	Excellent with minor weaknesses identified
3.6 – 4.1	Very good with minor weaknesses identified
3.0 – 3.5	Very good with moderate weaknesses identified
2.4 – 2.9	Good with moderate weaknesses identified
1.7 – 2.3	Fair with moderate weaknesses identified
1.0 – 1.6	Poor with moderate to major weaknesses identified
Below 1.0	Poor with major weaknesses identified

8. Contact information

For any questions please contact teresa.petrocelli@oicr.on.ca