CANSSI Distinguished Postdoctoral Fellowship
Program Description

The over-arching goal of the program is to provide a comprehensive training experience to prepare postdoctoral fellows for success in a variety of careers. All aspects of the proposal will be judged through this lens.

In the first stage of the call, faculty submit proposals that include
- a research project supported by a co-mentoring partnership between two researchers at different institutions;
- a significant interaction/collaboration with a researcher/organization/group directly related to experiments, data, and application;
- a substantial experience in teaching/mentoring in order to develop communication and mentoring skills.

These first-stage proposals do not include any information on specific prospective fellows.

Supervisor and co-supervisor
The supervisor will be an associate professor or professor in statistics or biostatistics at a Canadian university with experience supervising PhD students and postdoctoral fellows. The co-supervisor will be employed at a Canadian institution. In the case that the co-supervisor is not in a university, a description justifying the proposed arrangement and describing the co-supervisor's capacity to supervise research of a postdoctoral fellow is required.

Research project
The research project will be in the statistics and inferential data science domain. Novel and substantial progress should be feasible within the timeline of the postdoctoral fellowship.   The roles of the Supervisor and Co-supervisor must be clearly defined, along with how they will interact with each other and the postdoctoral fellow.

Interdisciplinary/applied experience
The postdoctoral fellowship will include a significant interaction with a researcher, organization or group directly related to experiments, data and application. The proposed experience will contribute to the overall training of the postdoctoral fellow and fit well with the statistical research proposed for the project. The options can include having a Co-supervisor from another discipline. CANSSI may be able to facilitate opportunities such as an appointment to Statistics Canada. Faculty interested in such an opportunity should contact the Directors before preparing the proposal.

Teaching/training/education
The teaching/educational/communication activities should provide the postdoctoral fellow with the opportunity to gain important teaching and mentoring skills. The amount of activity is to be the equivalent of teaching one to two one-

semester, three-credit courses over two years, but there is considerable flexibility in the activities that could count towards this. Examples include:

- Teaching a three-credit one-semester course in each year of the program.
- Participating in a CANSSI sponsored summer training program.
- Mentoring teams of undergraduate or graduate students in project-based studies, e.g., SSC case study competition or summer Data Science Institute activity.
- Co-teaching with a team involved in developing or using innovative teaching methods, such as flipped classrooms or case-studies-based education.

Mentoring plan

The postdoctoral fellow will be involved with a wide range of activities. An important part of the proposal is to indicate a mentoring plan to ensure that the fellow's experience is valuable and positive. The Supervisor is ultimately responsible, but the proposal should outline the roles of all mentors. The plan should address:

- Development of skills and intellectual pursuits fitting a long-term career plan,
- Professional development and career preparation,
- Development of networking, collaboration, and partnership skills,
- Language and communication skills.
- The environment and opportunities for enriching the experience of the postdoctoral fellowship at the host institutions.

Budget Information

- Salary of $70,000 per year plus benefits (~$14,875)
- The CANSSI grant will be supplemented by the following contributions:
  o The host institutions (departments, colleges, and/or universities) will contribute $8,000-$16,000 salary total over the two years for the teaching component.
  o The supervisor, co-supervisor and interdisciplinary partners will contribute from 1 to 4 months salary plus benefits total over two years.
  o Research support of $3,000 per year (for computer, travel, supplies, etc.) provided by the supervisor, co-supervisor or their institutions.