Western BrainsCAN Transforming brain research.

Program Guidelines:
Computational Postdoctoral Fellowship Program

Competition: 2022 - Winter
Version: 6.0
Date: January 10, 2022

1.0 BrainsCAN

Western University's BrainsCAN initiative received a $66 million investment from Government of Canada's Canada First Research Excellence Fund (CFREF), providing a significant boost to ongoing research in cognitive neuroscience and imaging. These funds were awarded to enable researchers at Western University, along with their national and international academic and commercial partners, to conduct cognitive neuroscience research, to seek answers to fundamental questions regarding how we learn, think, move and communicate. The CFREF program aims to help Canadian postsecondary institutions excel globally in research areas that create long-term economic advantages for Canada. BrainsCAN was competitively selected for funding through this program for seven years starting in September 2016. The BrainsCAN initiative will accelerate Canada's ability to deliver effective solutions to the challenge of maintaining optimal brain function across the lifespan.

2.0 BrainsCAN Computational Postdoctoral Fellowship Program

One of the key goals of the BrainsCAN Computational Core is to train the next generation of scientists with the analytical skills necessary for understanding the neural computations that support brain function. Funds have been secured from the Computational Core to support postdoctoral fellows who do research at the intersection of neuroscience and computation. The BrainsCAN Computational Postdoctoral Fellowship program has been developed to attract the world's most promising early-career computational neuroscientists to Western University.

2.1 Important Dates

- Application deadline: **Feb 1, 2022**
- Expected results: **Apr 2022**

3.0 Funding Level and Term Length

3.1 Postdoctoral Fellowship

Postdoctoral fellows will receive $55,000/year (plus benefits) for 2 years. Applicants are strongly encouraged to apply for external funding, and salary will be higher if the applicant has received an external postdoctoral fellowship (see Section 9.3 for more details). Benefits include Employment Insurance, Canada Pension Plan, a health care spending account (to cover eye and dental care, prescriptions, etc.), and parental leave. Please note the BrainsCAN CFREF funding ends in 2023 and could impact fellowship length.

3.2 Statutory Benefits

As an employer in Ontario, Western University, together with its employees, must contribute to certain programs which are set out by federal or provincial statute. This includes the Canada Pension Plan which provides a minimum level of pension payments on retirement to all Canadian workers; Employment Insurance which provides benefits when a Canadian worker is not able to fully participate in the workforce; the Ontario Health Insurance Plan, which provides Ontario residents access to physicians, hospital and other health services; and the Workplace Safety and Insurance Board program, which provides workers in Ontario who are injured while on the job a stream of benefits and supports while they are unable to work due to the injury.

4.0 Applicant Eligibility

4.1 Western University Postdoctoral Scholar

The Western University Policies on Postdoctoral Scholars can be found at https://grad.uwo.ca/postdoctoral_services/index.html. These include criteria that the appointment is time-limited, for a period of up to four years with the possibility of a one-year renewal (for a maximum of five years), is viewed as preparatory for a full-time academic or research career, and is under the supervision of a faculty mentor and often as part of a larger research team.

4.2 Eligibility

Applicants of any nationality, coming from an institution anywhere in the world, are welcome to apply. In the application form, candidates are encouraged to describe any conditions (e.g., illness, parental, caretaking or bereavement leave, or environmental factors) that have had an effect on performance or productivity.

5.0 Research Proposal Eligibility

The research proposal must be relevant to the aims of BrainsCAN as elaborated in the BrainsCAN Research Alignment/Steering Document and the Computational Core as elaborated here. The innovative nature of the proposal will be evaluated and candidates are **required to propose projects that will link two or more labs**.

6.0 Proposed Advisors Guidelines

- Working with multiple advisors across multiple labs is required. The proposed advisors must hold eligible academic appointments (full-time tenured or tenure-track faculty at the Assistant, Associate, or Full Professor level) with a significant research component at Western University.
- The combined expertise of the proposed advisors must cover the spectrum of computation and neuroscience.
- An advisor can only support 1 application as a principal advisor AND 2 applications as a co-advisor per round.

- Each advisor must provide a Biosketch in the NIH format https://grants.nih.gov/grants/forms/biosketch.htm.
- ***A single letter of support must be submitted and signed jointly by all advisors.*** The letter of support should detail the space, facilities and personnel support available to the applicant, and justify the novelty and innovative nature of the project. Each letter should also include a statement of commitment to the professional development of the applicant as well as describe how Equity, Diversity and Inclusion (EDI) principles are embedded in their research environment.

7.0 Application Process

7.1 Application Forms

Detailed instructions for applicants are provided in the application form found on the program website.

7.2 Submission to BrainsCAN Computational Core

The completed application package, including all letters, must be received at mmur@uwo.ca by 11:59 pm (Eastern time) on the day of deadline.

7.3 Equity and Diversity Survey

Please complete and submit the Self-Identification Survey found at the BrainsCAN website. The personal information collected by this survey will be used for educational, administrative and statistical purposes only and will be stored by the BrainsCAN Administration Staff to maintain confidentiality. The form is completely voluntary and will not be used in the evaluation of the application. The survey can be sent separately to the application to Fay Harrison (BrainsCAN Executive Director and Equity & Diversity Co-Chair; fay.harrison@uwo.ca)

7.4 Troubleshooting

During the application development phase, prospective applicants are encouraged to contact the BrainsCAN team with any questions. *See section 10.0 below for contact details.*

8.0 Review Process

8.1 Review Criteria

Applications will be evaluated according to the following criteria. The first two criteria are assessed as a binary, yes/no, sufficient/insufficient decision. Note that failure to pass either of these two criteria will result in an unsuccessful application.

8.1.1. Alignment with BrainsCAN and Computational Core mandates

- The proposed research adequately aligns with BrainsCAN and Computational Core aims (yes/no).

8.1.2 Research Training Environment

- Quality of the research training environment will be assessed on a sufficient/insufficient basis.
    - The space, facilities and personnel support that is available to the applicant is appropriate for the proposed research goals.
    - An interdisciplinary research environment that engages two or more labs.
    - The proposed advisor(s) demonstrates a commitment to the development of the applicant's research project (funding, facilities, equipment, etc.) and professional development.
    - Host lab demonstrates a track record of excellent research impact appropriate for the career level of the Principal Investigator. Criteria for recognition of work can significantly vary by discipline, but might include publications (quantity, quality and citations), patents, record of external funding, record of training of HQP, and indices of ability to communicate research effectively.

8.1.3. Achievements and Activities of Candidate (Overall weight - 40%)

- Honours, Awards and Academic Distinctions (5%):
    - The number, importance and breadth of the candidate's official recognitions and special distinctions relative to their education, training, and work experience.
    - The length of time required to complete academic programs and any indications of special academic distinctions received.
    - Relevance to research and whether the recognition is regional, national, or international.
- Publications and Research Achievements (35%):
    - The number and quality (impact) of publications, conference abstracts etc., and the applicant’s contribution to the work.
    - Research funding entries where the applicant was formally recorded as applicant or co-applicant.
    - Evidence of research achievements relative to opportunities to date. Bear in mind that opportunities to publish may vary according to research discipline and life course (e.g., health professional career, time spent raising children, etc.).

8.1.4. Research Potential (Overall weight - 40%)

- Evidence that the candidate exhibits the characteristics and skills that correlate with research career achievement.
- Research potential of candidate within the computational neurosciences (20%):

- Relevance of work experience and academic training to the field of computational neuroscience in general, and to the proposed research in particular.
- Initiative and autonomy of the candidate.
- Candidate's ability to think critically and creatively.
- Candidate's ability to develop and/or perform complex analyses.
- Candidate's ability to communicate results.

- Proposed research (20%):
  - Significance of proposed research to the field of computational neuroscience.
  - Clarity and logic of the proposed project.
  - Quality and feasibility of the proposed project.
  - Can the candidate complete the proposed research, given their education, experience and interests?
- Reviewers will be encouraged to use the referees' assessments in evaluating research potential, and to consider the length and nature of relationship between applicant and referee.

8.1.5. Research/Training Plan and Environment (Overall weight – 20%)

- Clarity and logic of the candidate's plans for a research career within the computational neurosciences and the relevance of the proposed training.
- How the training the candidate expects to acquire will contribute to their productivity and to their research goals, and how this award will enable them to establish themselves as independent investigators.
- Alignment between the applicant's research skills and the training opportunities expected to be provided by the proposed host lab(s).

9.0 Post-award Processes

9.1 Award Acceptance:

The award must be accepted within 15 working days of the date of offer or the award may be cancelled and potentially offered to the next fundable applicant.

9.2 Funding Start Date

Successful applicants must begin their award by Dec 1, 2022. For individuals who do not yet hold a doctoral degree, awards will only begin after proof is provided that the recipient has completed all the requirements of the PhD program, including the oral examination. For foreign applicants coming to Canada, awards may only begin after proof of an entry visa into Canada is provided.

9.3 External Funding and Salary Top-up Details

All BrainsCAN Postdoctoral Fellows are encouraged to pursue external funding (e.g., NSERC, CIHR, or SSHRC postdoctoral fellowship), if eligible, in their first year of funding. Postdoctoral Fellows (existing BrainsCAN, and others at Western conducting BrainsCAN-relevant research) receiving a Tri-council fellowship or another external fellowship worth $40,000 CAD or more per year will receive, for each of the years of their external award, a salary supplement from BrainsCAN to bring their total salary to $60,000 (plus 13% benefits).

Any BrainsCAN PDF that receives external funding greater than $40,000 will automatically receive the salary increase of $5000/year for the duration of the external award. **Please forward the award details to brainscan@uwo.ca upon receipt**.

9.4 Recognition and Reporting

All BrainsCAN Postdoctoral Fellows should acknowledge the support of CFREF and BrainsCAN in all related presentations and publications. Successful applicants will be required to complete progress reports outlining how this grant enriched their research, contributed to transforming their research field, and developed their career. These reports will be coordinated through the BrainsCAN Project Manager.

9.5 Frequency of applications

An applicant can submit a single application per program call (competition). Provided the applicant meets the eligibility requirements, there is no limit to number of competitions to which an applicant can submit an application.

10.0 Contact information

The competition is administered by BrainsCAN's administrative team (brainscan@uwo.ca). For specific questions please contact Ryan Salewski, Project Manager (ext: 86801; ryan.salewski@uwo.ca) or Marieke Mur, Comp Core HQP Manager (ext: 85058; mmur@uwo.ca)