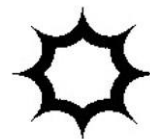


PROGRAM DETAILS
Transformational Research: Canada 2019
Alzheimer's & Related Diseases

**NEW for 2018/2019:**

For the Transformational Research: Canada 2019 program no preliminary data is required; instead it can be collected as an initial milestone with well defined, quantifiable go/ no go criteria. The structure of the project and budget should match the quality of the preliminary data.

Expanding the type of complementary approaches eligible for funding to other lifestyle interventions including but not limited to: speech therapy, cognitive therapy, music therapy, social interaction, if these applications meet our other scope criteria and have specific supportive evidence/justification (from published literature or unpublished data) to warrant further investigation.

Encouraging applications that bring in other fields such as: AI, big data, machine learning, data science, and computer science.

Background

The Weston Brain Institute (the "Institute") supports research that accelerates the development of therapeutics for neurodegenerative diseases of aging. To help achieve this, the Institute addresses gaps and inefficiencies in the funding market by supporting high-risk, high-reward translational projects, while leveraging world-class business and scientific expertise in a fast and flexible granting process.

Neurodegenerative diseases of aging are among the least understood and most undertreated diseases today. Diseases such as Alzheimer's and Parkinson's are placing a large and increasing burden on society. If ignored, the social and economic costs to manage these diseases will rise significantly within a generation.

Meeting this challenge requires pioneering approaches to accelerating treatments. The *Transformational Research* Program was created to provide significant support for larger, longer projects.

Important things to know about the Institute

- **We do not fund basic (also known as fundamental) research.** We only fund translational research.
- **We do not fund complementary approaches**, with the exception of diet, physical activity, sleep, nutritional supplements, speech therapy, cognitive therapy, music therapy, and social interaction, as outlined on page 3.

The Weston Brain Institute welcomes any inquiries concerning this program announcement. Please contact the Institute at info@westonbrain.org or +1 (416) 967-7979.

- **Funds are provided contingent on meeting milestones.** If your project is awarded, funds are provided in tranches when experimental milestones are successfully completed.
- **Our application process is interactive.** You may receive feedback on your applications and, if necessary, be asked to make modifications. We also encourage you to reach out if you have questions about our funding programs.
- **Many projects are declined at the Letter of Intent (LOI) stage.** Only ~15% of LOIs are invited to the Proposal phase, so that applicants and reviewers spend their time on Proposals that have an excellent chance of being funded. Proposal funding rates have ranged from 30-50% for the Transformational Research program.
- **We provide more than funding.** Our grantees may also benefit from things like the expert advice from our scientific advisors, industry exposure, networking, and international collaboration opportunities.

Institute definitions

A full list of our definitions is available on our [website](#).

- **Neurodegenerative diseases of aging:** Alzheimer's disease, frontotemporal dementia, dementia with Lewy bodies, multiple system atrophy, Parkinson's disease, progressive supranuclear palsy, vascular contributions to the listed diseases, and prodromes to the listed diseases [e.g., mild cognitive impairment as prodromal to Alzheimer's disease; REM sleep behavior disorder as prodromal to Parkinson's disease].
- **Translational research:** Applied research towards developing therapeutics for the prevention and/or treatment of human disease. For example, for small molecule drug development, this includes target validation to phase IIa clinical trials. Basic/discovery research, including but not limited to understanding disease mechanisms and discovering genes implicated in disease, is not in scope.
- **Tool:** An item that accelerates development of therapeutics, e.g., imaging techniques or reagents, biomarkers, and diagnostics.
 - Tools must have direct impact on the translational development of therapeutics (as defined by the Institute, i.e., target validation to phase IIa clinical trials) for neurodegenerative diseases of aging and will be valued only on their ability to do this.
 - Any value the tools contribute to basic research will not be taken into consideration. For example, tools will not be valued for their ability to identify new targets or understand disease mechanisms.
 - Projects covering only the discovery/identification of a tool are out of scope.
- **Therapeutic:** A pharmacological approach (including small molecules, biologics, cell therapies and vaccines, including drug repositioning and repurposing), medical device, surgical intervention, or magnetic or electrical brain stimulation. Therapeutics can be for symptomatic relief, disease modification, or prevention. Complementary approaches such as, acupuncture, music, and social interaction are not considered therapeutics. Identification of novel therapeutics is in scope (e.g., high throughput compound screens); however, identification of novel therapeutic targets, including genes implicated in disease, is not in scope.
- **Clinical trial:** Research in which one or more human subjects are prospectively assigned to one

or more interventions to evaluate the effects of those interventions on health-related biomedical or behavioral outcomes.

- **Clinical trial sub-study:** A study investigating a question not addressed by the main trial and which may involve obtaining additional measurements and data collection from a sub-group of all participants from the main trial.

Section 1 Scope

The Transformational Research: Canada 2019 program provides funding to support transformative, novel, high-risk, high-reward translational research that accelerates the development of therapeutics for neurodegenerative disease aging.

Projects must meet two conditions to be eligible:

1. Be translational research that helps accelerate the development of therapeutics for neurodegenerative diseases of aging
 - a. Translational research using humans or human samples/data is in scope, except for clinical trials or clinical trial sub-studies which should be submitted to the Early-Phase Clinical Trials or Rapid Response programs.
2. Be the development of a therapeutic, and/or tool, and/or select complementary approaches (as described on page 3)

The Transformational Research program will have multiple calls per year, alternating between two different disease groups (outlined below). Applicants should apply to the disease group best suited to their project.

Alzheimer's & Related Diseases:

- Alzheimer's disease
- Frontotemporal dementia
- Mild cognitive impairment
- Vascular contributions to the above
- Prodromes to the above

Parkinson's & Related Diseases:

- Parkinson's disease
- Progressive supranuclear palsy
- Dementia with Lewy bodies
- Multiple system atrophy
- Vascular contributions to the above
- Prodromes to the above

The Institute encourages applicants to contact us (+1-416-967-7979, info@westonbrain.org) with any questions regarding the program, including whether a potential idea is in scope.

Funds available per project

Transformational Research: Canada 2019 - Encouraging applications at all funding levels from \$200,000 to \$1,500,000, without need for preliminary data.

- The budget and structure of the grant should be commensurate with the quality of the preliminary data. For example, a project requesting \$1.5m where the results will not be apparent until the 3rd year should have excellent preliminary data. A project requesting \$1.5 with initial steps designed to show feasibility and produce pilot data, followed by a go/no-go decision would not need the same level of preliminary data (and may not need preliminary data at all), nor would a \$300,000 project.

- If preliminary data is not available at the time of submission, it can be collected as initial milestone(s) with well-defined, quantifiable go/no-go criteria.
 - Specific criteria (e.g., achieve required specificity, sensitivity, recruitment, target engagement, etc.) should be met to allow the project to proceed.

Expanding complementary approaches section to also include other lifestyle interventions.

Accepting applications on complementary approaches and lifestyle interventions if these applications meet our other scope criteria as listed below.

Based on the success of the of the 2018 pilot allowing interventions of diet, physical activity, sleep and nutritional supplements, other kinds of “complementary” or “lifestyle” interventions are now eligible. This includes but is not limited to speech therapy, cognitive therapy, music therapy, and social interaction. Projects are eligible for funding through the Rapid Response, Transformational Research, Early Phase Clinical Trials programs and Big Ideas programs. Applications on these topics are eligible if they meet our disease and project scope criteria above and the following criteria:

- Includes specific supportive evidence/rationale (published literature or unpublished data) to justify further investigation.
- Similar experimental design is used to test the approach as would be implemented to test therapeutics, including appropriate control groups.
 - Any interventional trials should address, as best as possible, the potential confound of placebo effect.
- Measures outcomes relevant to neurodegenerative diseases of aging (as defined by the Institute).
- Interventions are being investigated in relevant human cohorts and/or appropriate disease models (e.g., cell culture, *in silico*, or animals).
- Has direct impact on accelerating the development of treatments for neurodegenerative diseases of aging. Treatments can be for disease modification, symptomatic relief, or prevention.

Examples of projects that are considered out of scope for this program call, but could be considered in scope for future programs:

- An exercise intervention aimed at reducing obesity, blood pressure and resting heart rate in subjects with subjective cognitive impairment.
- Testing whether a 12-month paleo diet intervention improves cognition in healthy older subjects.

Examples of projects that are considered in scope:

- *In silico* screen of a library of nutritional supplements to select those that reduce amyloid plaques.
- Testing whether a 12-month paleo diet intervention improves MoCA scores or amyloid deposition in subjects with mild to moderate AD.

If you are interested in applying with a project that incorporates complementary approaches and/or

lifestyle interventions, you are encouraged to contact Matthew Sacheli (+1-416-967-7828, matthew.sacheli@westonbrain.org) to discuss whether your project is in scope.

Section 2 Funding Specifications

Total funding: The Institute is able to fund many grants through this program, and historically has not turned down Proposals due to the lack of funding. Grants are contingent on the receipt of high quality applications.

Funds available per project:

Transformational Research: Canada 2019 - Encouraging applications at all funding levels from \$200,000 to \$1,500,000, without need for preliminary data.

- The budget should be commensurate with the structure of the project and the quality of the preliminary data. For example, a project requesting \$1.5m where the results will not be apparent until the 3rd year should have excellent preliminary data. A project requesting \$1.5 with interim steps with results would not need the same level of preliminary data, nor would a \$200,000 project.
- If preliminary data is not available at the time of submission, it can be collected as initial milestone(s) with well-defined, quantifiable go/no-go criteria.
 - Specific criteria (e.g., achieve required specificity, sensitivity, recruitment, target engagement, etc.) should be met to allow the project to proceed.
- Funds will be granted only for direct costs that are appropriate and justifiable for the work proposed.
- Funds cannot be used for equipment or computer purchases unless prior written approval from the Institute has been obtained.
- Funds cannot be used for administrative or indirect costs or for salaries for people who already receive salaries from their institutions.
- Travel expenses to scientific conferences/meetings to present work can be included in the budget.
- Each item and its cost must be clearly described in the budget (at the Proposal stage only).
- The amount granted may not be for the full amount requested if the review committee only recommends part of the grant for funding.
- Up to 35% of the funds can be used for unique international resources (e.g., in-licensing IP, supporting a co-applicant or collaborator).

Any grant provided by the Institute pursuant to this Program shall be directed to the institution and not to any individual. Responsibility for the planning, direction, and execution of the proposed project will rest solely with the Applicants.

Multiple institutions: In the event of collaboration between multiple institutions, it is the responsibility of the Principal Applicant to distribute/manage funds appropriately.

Full or partial support of projects: The Institute can support a full project or parts of any project. If the application is for part of a larger project, the criteria for granting will be applied only to the part of the project proposed. Applicants should make clear what part of the larger project the Institute funding would support.

Conditional funding and milestones: Grants are conditional on grantees meeting pre-determined milestones and providing deliverables, including submission of progress reports and participation in Institute sponsored Research Days. Continued support is not automatic and is contingent upon the grant progress being favourably reviewed by the Institute.

Supplemental funding: The Institute encourages grantees to seek additional funds to further their work. The Institute has no guaranteed policy for renewal or continuation of grants. The Institute may, at its discretion, seek to further support clearly successful projects. Grantees are also eligible to apply for funding through other Institute programs.

Section 3 Application Process

The application process consists of two stages: Letters of Intent (LOIs) and Proposals. To apply, applicants must submit an LOI to the Institute. Selected applicants will then be invited to submit a Proposal.

The LOI stage of the application process is a significant stage of evaluation. Typically, only a small proportion of applicants are invited to submit full proposals, and of those, many will be funded. This ensures that LOIs are easy to submit so that good ideas are not missed, while ensuring applicants taking the time to write full Proposals have a very good chance of being funded. In past Transformational Research programs, ~15% of applicants submitting LOIs were invited to submit Proposals, and 30-50% of submitted Proposals were funded.

Each LOI will be peer reviewed by a scientific review committee. Applicants whose LOIs meet the rigorous review criteria will be invited to submit a Proposal. Budgets are only required at the Proposal phase. Proposal instructions and feedback from our scientific review committee will be forwarded along with the invitation. Complete Proposals will be peer reviewed by a scientific review committee. No appeal process is currently available.

The grant agreement must be completed within 6 weeks of notification of selection; otherwise the Institute reserves the right to cancel the grant.

Section 4 Review Criteria

Criteria considered when reviewing LOIs:

- **Innovation:** Does the project challenge or advance current paradigms? Will the work refine, improve or be a new application of theoretical concepts, approaches, methodologies, instrumentation or intervention?
- **Experimental approach:** Are the overall strategy, methodology and analyses well-reasoned and appropriate to accomplish the specific aims of the project?
- **Impact:** If successful, will the project accelerate the development of therapeutics for neurodegenerative diseases of aging in a significant and sustained way?
- **Fit:** Is the project, including its scale and scope, appropriate for this program?
- Other as needed

Additional criteria considered when reviewing Proposals:

- **Experimental approach:** Are potential problem areas adequately considered and addressed?
- **Development plan:** What are the steps after this study to continue development if successful?
- **Risk appropriateness:** Is the scientific risk (likelihood that the hypothesis will not be supported) commensurate with the potential reward of the project if successful? Has executional risk (likelihood that the project cannot be completed) been addressed as much as is reasonable?
- **Team and environment:** How well-suited are the team and environment for this work? Does the work take advantage of unique features of either?
- **Budget and timeline:** Are the proposed budget, milestones and length realistic yet aggressive for the research proposed? These are secondary considerations after the other criteria have been weighed.
- Other as needed

Section 5 Eligibility of Applicants

For this program, the Institute is only able to accept LOIs and Proposals from institutions (or individuals affiliated with and applying through or on behalf of institutions) that are Canada Revenue Agency qualified donees located in Canada. Funds can also be used to support the Canadian portion of collaborations with members from other geographies. Applicants may appear in any role on any number of projects.

Eligible Principal Applicants must be at or above the level of Assistant Professor or equivalent. Co-applicants and Collaborators must be at the post-doctoral level or above, and can be working outside Canada.

Proposals submitted to this Program must be approved by the institution on whose behalf or through which the Proposal is being submitted. However, LOIs do not need to be approved in this manner.

Section 6 Reports and Assessments

Grantees must complete the following if a grant is awarded. Templates for reports will be provided by the Institute:

- **Milestone Reports.** Payments are tied to successful completion of project milestones mutually agreed upon by the Applicants and the Institute. A milestone report is due prior to each scheduled payment being made.
- **Progress Reports.** A progress report includes a written report with budget and, if requested by the Institute, a telephone discussion with the Principal Applicant and/or data underlying the research (solely for use in assessing progress). Progress reports are due annually unless otherwise notified by the Institute.
- **Research Day.** At least one Applicant on the grant must attend Research Day(s) to report on the progress of the project and have the opportunity to meet other funded researchers. Applicants will attend one Research Day per year, unless otherwise notified by the Institute. Additional key personnel may also attend if approved by the Institute. Please include travel expenses for one person to Toronto for a one-day, overnight trip to Toronto the budget.
- **Foundation Member Visits.** With prior consent of Applicants, Foundation members may wish to visit researchers to see project work underway. These visits are not mandatory, and

the Institute hopes that grantees will welcome this opportunity.

- **Financial Accountability.** Grantees are expected to account for the moneys expended under any Institute grant; any moneys spent either not in accordance with the approved research project or prior to pre-approval of any material change in the project are both recoverable and subject to restitution by the grantees to the Institute and may be cause for immediate termination of funding. Any funding provided beyond what is needed for the agreed upon research must be returned to the Institute.

Section 7 Confidentiality

The Institute treats all LOIs, Proposals, research projects and associated research information (collectively, the “Confidential Information”) in confidence using reasonable care in protecting such Confidential Information from disclosure to third parties who do not participate in the grant review process and Institute assessments. All Confidential Information will be used by the Institute and its scientific review committee for the purposes of reviews and assessments, and will be shared only in accordance with the sharing policy as set out herein. Notwithstanding the foregoing, Confidential Information shall not include any information that:

- a) was generally known to the public prior to the effective date of this Program announcement;
- b) becomes generally known to the public through no unlawful or unauthorized act by any recipient of Confidential Information; or
- c) was independently developed by the Institute or its scientific review committee without reference to the Confidential Information.

If the Institute or any of its scientific review committee members is requested to disclose Confidential Information pursuant to a legal or governmental proceeding, the Institute shall give the Applicant or other owner(s) of such Confidential Information notice of such disclosure request as soon as is reasonably practicable.

Section 8 General Information

Institutions and individuals affiliated with and applying through or on behalf of institutions (collectively, “Applicants”) should carefully discuss the Program announcement and the terms of this document with the appropriate office at their institution before submitting an application. The submission of an LOI or a Proposal does not bind either the Institute or the Applicants by any commitment to provide or receive funding, respectively. Successful Applicants will be required to agree to terms substantially similar to those contained in this document and the Institute reserves the right to alter, delete or add additional terms in the grant agreement between the successful Applicants and the Institute.

The Institute reserves the right to accept or reject any or all applications at its discretion and to negotiate the terms of the specific grant agreement with Applicants.

The Institute, at its sole discretion, may change the timeline of the application process.

Section 9 Other

Liability and Indemnity

Each Applicant pursuant to this Program acknowledges and agrees in responding to the Program announcement that the Applicant shall have no claim against the Institute, and its respective representatives, related companies or affiliates, should such Program response be unsuccessful for any reason. Each Applicant hereby remises and releases the Institute, its representatives and affiliates, from any cause of action, complaint, or claim in connection with the RFA process and its outcome.

The Institute's role in grants awarded pursuant to this Program is that of a funder. The Institute is not the sponsor of funded projects. As such, the Institute will not assume any liability associated with funded projects and each Applicant who is ultimately awarded a grant pursuant to this Program releases the Institute from any and all liability with respect thereto and further indemnifies the Institute, and its respective representatives and affiliates, from any claim or loss whatsoever associated with the applicable grant.

Intellectual Property Policy and Intellectual Property Agreements among Collaborators

The Institute acknowledges that any intellectual property ("IP") that arises from research funded through this Program, including discoveries, is not the property of the Institute.

The Institute requires that researchers and collaborators agree on any material IP issues prior to submission of a Proposal.

Publication and Sharing Policy

The Institute expects results of funded research to be published as rapidly as possible in open access scientific literature or other forms of publication that are readily available to the general public and/or research community. Such publication should be consistent with high standards of scientific excellence and rigor, and provide sufficient detail so the research community can benefit from the findings from or in connection with the funded project.

A lay person abstract of the research proposal must be submitted prior to funding. A lay person abstract of the research results must also be submitted no later than 9 months from the date of grant expiration. These abstracts may be made available to the public by the Institute.

Any presentation, releases, papers, interviews, publication or other forms of communication dealing with the awarded project or the results from the awarded project must acknowledge the funding provided by the Institute, in a manner proportionate to the contribution of the Institute. Any other use of the Institute's intellectual property, including its name, logo or trademark requires prior written permission of the Institute.

All tools or reagents (i) funded by and (ii) that result from funded projects should be made readily available to the research community either freely or at reasonable prices within 9 months of study completion. If sharing of such tools or reagents will jeopardize the Applicant's right to secure patents or copyrights necessary to protect the Applicant's ownership, then they should be made available as soon as these rights have been secured. The Institute may let the public know of these tools or reagents so



other researchers know they are available.

The Institute encourages sharing of data and making raw data publicly available where possible.

The Institute requires any clinical trial awarded under any of its funding programs be registered with clinicaltrials.gov, [PD Trials.org](http://PDTrials.org), or other appropriate public registry.