WESTON BRAIN INSTITUTE

LETTER OF INTENT
Canada: Rapid Response 2017
PD-Related Diseases

DEADLINE: **Tuesday, May 9, 2017, 2:00 p.m. EDT**
Applicants will be notified of Proposal invitations in July 2017.

This Letter of Intent is an example only. Do not complete this paper application.
Please submit the Letter of Intent online through the Institute's grant management system at https://weston.smartsimple.ca/welcome/neuroscience

Application Number:

Principal Applicant:

Project Title:

Applicant Details

	Team Members	Organizations	Primary Contact Information	Role in Project	Estimated Time Spent on Project
1.	Salutation: First Name: Last Name:	Primary Organization: Position Title: Other Affiliations/ Position Titles:	Address: Phone: Email:	☐ Principal Applicant ☐ Administrative Supervisor ☐ Co-Applicant ☐ Collaborator	%
2.	Salutation: First Name: Last Name:	Primary Organization: Position Title: Other Affiliations/ Position Titles:	Address: Phone: Email:	☐ Principal Applicant ☐ Administrative Supervisor ☐ Co-Applicant ☐ Collaborator	%

Note: Projects are not limited to two team members as laid out on this sample application form; projects may include as many team members as needed for the successful execution of the project.

Application Overview

1. Keywords to describe the proposed work:

The Institute defines neurodegenerative diseases of aging to include:

- Alzheimer's disease
- Dementia with Lewy bodies
- Frontotemporal dementia
- Multiple system atrophy
- Parkinson's disease
- Progressive supranuclear palsy
- Vascular contributions to the above diseases (not stroke-mediated vascular disease)
- Prodromes to the above diseases, including
    - Mild cognitive impairment as prodromal to Alzheimer's disease
    - REM sleep behaviour disorder as prodromal to Parkinson's disease

Proposed projects may relate to any disease(s) but must have impact on the diseases above and will be adjudicated based on their potential impact on these diseases.

The Institute defines translational research to be:

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 II clinical trials. Basic/discovery research, including but not limited to understanding disease mechanisms and discovering genes implicated in disease, is not in scope.

The Institute defines therapeutics to be:

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. Complementary approaches such as exercise, acupuncture, music, dietary and nutritional supplements are not considered therapeutics. Therapeutics can be for symptomatic relief, disease modification, or prevention.

Identification of novel therapeutics is in scope; however, identification of novel targets is out of scope.

The Institute defines tools to be:

Items 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 for neurodegenerative diseases of aging. 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 help identify new targets.
- A strong rationale and hypothesis must be provided for the development of a tool, including how the tool will have a direct impact on translational research as defined by the Institute (i.e., target validation to phase IIa clinical trials).
- Projects covering only the discovery/identification of a tool are out of scope.

About specific tools:

For biomarkers,

- Post mortem tissue can only be used for validation (not identification) of biomarkers. For example, "omics" studies on post mortem tissue are generally out of scope.
- If the project covers biomarker identification,
  - biomarker identification alone is not in scope:
  - The identification must be a finite process that is directly linked to a validation process, and the project must also cover at least a portion of the validation of the identified biomarkers.
  - All the data necessary for identification and validation of the biomarkers must already be available/collected.
  - All the data necessary for validation must also be available/collected unless there is sufficient justification to collect new samples (e.g., samples cannot be stored).
  - Validation of markers must occur in a well-defined clinical cohort.

For cognitive assessment tools,

- Must have a strong hypothesis and already have available a dataset to validate the assessment.
- Requires discussion of why the new assessment would be better than existing ones.

The identification of genes implicated in disease is not in scope.

2. What type of tool(s) or therapeutic(s) is being developed as the primary goal of the project?
*(Please select only one - tool or therapeutic – that is being **developed** as the primary goal of the project, e.g., do not select "Animal model" unless you are developing a new animal model.)*

Tool	**Therapeutic**
☐ Animal model	☐ Biologic
☐ Assay/screen	☐ Cell therapy
☐ Biomarker	☐ Electrical brain stimulation
☐ Cell line	☐ Magnetic brain stimulation
☐ Clinical assessment instruments	☐ Medical device

☐ Diagnostic
☐ Imaging technique or reagent
☐ New method of drug delivery
☐ Probe
☐ Other *Please specify:*

☐ Small molecule
☐ Surgical intervention
☐ Vaccine
☐ Other *Please specify:*

3. If a tool is being developed, please specify the type of tool being proposed in the project. If you are not developing a tool, please type "None".

4. If a therapeutic is being developed as the primary goal of the project, what phase(s) of development does the project cover?
(Please select only those that apply. There is no benefit to selecting more phases than fewer phases.)

☐ Target validation
☐ Assay development
☐ Screening and hits to leads
☐ Lead optimization
☐ Safety and toxicity in animals

☐ Efficacy in animals
☐ Phase I clinical trial
☐ Phase II clinical trial
☐ None
☐ Other *Please specify:*

5. Research will have a significant impact in which neurodegenerative disease(s) of aging?
(Select only those that apply. There is no benefit to selecting more diseases than fewer diseases.)

☐ Alzheimer's disease
☐ Frontotemporal dementia
☐ Dementia with Lewy bodies
☐ Multiple system atrophy
☐ Parkinson's disease
☐ Progressive supranuclear palsy

☐ Vascular contributions to the listed diseases (not stroke-mediated vascular disease)
☐ Prodromes to the listed diseases (please also check the disease(s) to which your condition is a prodrome)

6. Relevance of proposed work to the Institute's mandate: using the Institute's definitions (above), explain how the primary tool or therapeutic being developed in this project (as identified in question 2 above) is translational research, and will accelerate the development of therapeutics for neurodegenerative diseases of aging. For tools, this requires addressing how the tool will have direct impact on accelerating translational research on therapeutics*. (maximum 200 words.)*

7. What type of tool(s) and/or therapeutic(s) is being developed aside from the primary goal of the project?
(Please select only the tool(s) and/or therapeutic(s) that are being developed as a main goal of the project; do not select items that are being used as part of the project, e.g., do not select "Animal model" unless you are developing a new animal model. There is no benefit to selecting more items than fewer items.)

Tool
- ☐ Animal model
- ☐ Assay/screen
- ☐ Biomarker
- ☐ Cell line
- ☐ Clinical assessment instruments
- ☐ Diagnostic
- ☐ Imaging technique or reagent
- ☐ New method of drug delivery
- ☐ Probe
- ☐ Other *Please specify:*

Therapeutic
- ☐ Biologic
- ☐ Cell therapy
- ☐ Electrical brain stimulation
- ☐ Magnetic brain stimulation
- ☐ Medical device
- ☐ Small molecule
- ☐ Surgical intervention
- ☐ Vaccine
- ☐ Other *Please specify:*
- ☐ None

---

8. Have you applied to the Weston Brain Institute previously with similar proposed work? If so, specify the previous LOI title and program applied to. Please briefly explain how this LOI is different than the previously submitted work.
(This information will not be used to assess the application.)

☐ Yes *Please specify:*
☐ No

---

9. Have you applied to other funding agencies with the same proposed work?
(This information will not be used to assess the application.)

☐ Yes *Please specify:*
☐ No

---

10. Is this your first time applying for a neuroscience grant from the Weston Brain Institute?
(This information will not be used to assess the application.)

☐ Yes
☐ No

---

11. Is this your first application for a research grant specifically in the area of neurodegenerative diseases of aging?
(This information will not be used to assess the application.)

☐ Yes
☐ No

The adjudication committee for this program does not include Canadians. Please list the full names of any individuals located outside of Canada who are competitive with you and therefore should not review your application. Please do not exclude individuals for other reasons as we are unable to honour those requests. Type "None" if you have no reviewer exclusion.
(This information will not be used to assess the application.)

WESTON BRAIN INSTITUTE

Project Information

Central hypothesis, goals and specific aims of the project: *(maximum 200 words.)*

Background and significance: Why is it important that the proposed work be carried out? Evaluate existing knowledge and identify gaps that this project is intended to fill. *(maximum 200 words.)*

Experimental approach: Outline how the proposed work will be carried out and interpreted, including clear go/no-go criteria. Please do not include background information (e.g., pathology, etiology or incidence/prevalence) of neurodegenerative diseases of aging. Include power calculations, if applicable. *(maximum 600 words.)*

How will a successful outcome accelerate the development of therapeutics for neurodegenerative diseases of aging? *(maximum 200 words.)*

List of publications cited in the application: Please include full citations with a complete author list and PMID

Preliminary Data: *(A maximum of 1 page of preliminary data that best supports the application can be uploaded as a PDF file, e.g., figures or tables.)*