Neuroscience Catalyst: Call for Letters of Intent

Instructions for completing the Letter of Intent (LOI) for the Neuroscience Catalyst program

What is the Neuroscience Catalyst?

An innovative collaborative partnership between the University of Toronto, Janssen Inc. and Johnson & Johnson Innovation, the *Neuroscience Catalyst* will fund collaborative, pre-competitive, early-stage research towards identifying and validating new therapeutic targets that can progress to the clinical treatment for mood disorders and Alzheimer's disease. *Neuroscience Catalyst* was designed with the aim of leveraging the collective skills and resources of academia and industry to accelerate the pace of developing and bringing new neuroscience drugs to market and providing treatments for major brain disorders. Participating researchers will have access to cutting-edge drug discovery tools, expert advice and scientific information from Janssen, Inc.

Who can apply?

LOI applications are open to any principal investigator holding a faculty appointment at the University of Toronto. We welcome applications from investigators from other Ontario universities provided that one of the principal investigators on the research team has a University of Toronto faculty appointment.

Please note that the Neuroscience Catalyst is a unique funding opportunity and is not meant to replace an operating grant.

LOI applicants will be required to obtain institutional endorsement of their research application from the University of Toronto through the "My Research Applications" (MRA) UT website.

Review criteria

LOIs will be scored on the following bases:

- Disruptive nature of project (novelty, impact, achievability).
- Collaborative approach to innovation and ability to inject novel thinking & science (Does the proposal consider the science beyond the applicant's laboratory?)
- Attentiveness to healthcare with a direct impact to patient outcomes

What is the application and review process?

- Submitted LOIs by Applicants will undergo review by a Joint Steering Committee (JSC) composed of representatives from the University of Toronto, Janssen Inc and Johnson & Johnson Innovation. Members of the JSC are subject matter experts and have extensive experience in drug discovery and development in industrial and academic settings, basic and translational research in mood disorders, Alzheimer's and neurodegenerative disease, as well as extensive experience in biotechnology company creation and investment.
- Selected Applicants will be invited to meet with the Joint Steering Committee for a face-to-face presentation.
- The top research teams at this stage ("Finalists") will then be selected and invited to submit a full-length proposal. These teams will receive important advice and additional expertise required in crafting the full research proposal.
- Full research proposals submitted by finalists will be sent for external peer advisory review. (Note that applicants will have an opportunity to recommend external peer reviewers at this stage).
- Top-ranked successful research proposals will be funded according to a budget developed in collaboration with the JSC.

How much funding is available?

Projects will be funded at various levels (see examples below). The duration of funding is not fixed and may be renewable upon successful completion of defined milestones. Whereas this is the typical funding level available per project, the Neuroscience Catalyst also anticipate making greater and/or lesser awards to optimize investments in a portfolio of projects that will yield significant and important results. This LOI is intended to leverage the existing resources, skills and interests within academic laboratories and is not intended to recruit new research personnel, launch major new research directions, fund general operating support for the lab or purchase equipment with applications beyond the project. Subcontracting certain specialized aspects of the work may be permissible with consent from the Neuroscience Catalyst.

Eligible Costs

Eligible Costs are direct costs of the funded research, including salary and benefit costs for staff involved in Funded Research as well as other project-related costs, including supplies and materials, service contracts, usage fees and technical support for lab equipment and computers.

Examples of Proposal Type and Funding Level/Duration of Funding

Example 1 - a project funded for $78,900 for 9 months for in vitro (cell) target validation studies. Janssen could provide scientific guidance and expertise.

Example 2 - a project funded for $234,500 for one year to develop a biomarker that could be translated into clinical use. Janssen could provide scientific guidance and expertise, and potentially patient samples to facilitate validation.

Example 3 - a project funded for $345,600k for 24 months to optimize a cell assay for HTS screening, screen a small molecule library and validate hits in cell and potentially animal models. Janssen could provide in kind resources to enable the conduct of the HTS screen.

Confidentiality

Members of the Neuroscience Joint Steering Committee will not share the information provided by applicants through the registration and application process except with directors, officers and/or representatives of the University of Toronto, Janssen Inc, Johnson & Johnson Innovation, and their respective affiliates, as deemed necessary. Nonetheless, applicants should not provide confidential information, such as chemical structures, at the LOI stage.

Intellectual Property

All pre-existing intellectual property will remain the exclusive property of the party that created it prior to or independent of the funded research. Ownership of all new Intellectual Property created during the funded research will be determined by the applicable inventions/intellectual property policy of the party who created it.

Communications and Publications

All funding recipients shall have the right to disseminate information or otherwise publish the research results arising in performance of the funded research. Janssen's support of the funded research should be acknowledged in all such publications.

NEUROSCIENCE CATALYST

UNIVERSITY OF TORONTO janssen Johnson & Johnson INNOVATION

Neuroscience Catalyst: Call for Letters of Intent (2 page maximum)

Call for Proposals Focus: **MOOD DISORDERS, ALZHEIMER'S DISEASE AND RELATED DEMENTIAS**

The Neuroscience Catalyst program is focused on the overarching aim of accelerating the progress of new treatments for mood disorders and Alzheimer's to the clinic. As such, we are interested in new drug targets, new models, biomarkers, platforms, compounds or technologies that have potential for novel interventions in these disorders.

Here are examples of some areas of particular interest:

1) Investigation of the genetic risk factors for late-onset Alzheimer's disease (AD e.g. TREM2, CD33, etc.) to identify novel treatments or drug targets.
2) Novel approaches to the treatment of AD and related dementias, other than those that directly impact on amyloid formation, deposition and disposition.
3) The role of epigenetics in the etiology and treatment of AD &/or mood disorders (e.g. protein methyltransferases)
4) Role of neuroinflammation in the etiology and treatment of mood disorders.
5) Exploration of the commercial utility of novel tools, technologies, or devices in the Neurosciences, especially those with the potential to provide disruptive healthcare solutions for patients affected by AD or Mood disorders. To include biomarkers of brain structure and function that may help delineate disease types and clinical trial decision making.

Submit LOI online at www.neurosciencecatalyst.ca

Due: August 31st, 2015

Please be sure to receive institutional endorsement through the "My Research Applications" (MRA) on the UT website prior to submission to Neuroscience Catalyst.

Title:

Applicants/Institutions/Email:

I. Principal Investigator(s): *Please include email addresses and primary institutional affiliations.*

II. Co-investigator(s): *Please include email addresses and primary institutional affiliations.*

Funds requested:

Duration of funding requested (recommend 6 months – 2 years depending on scope):

I. Disruptive nature of project
Please describe the novel insight, target, compound, biomarker, animal model, screen, assay, or technology that is relevant to this call for proposals. Include key preliminary data supporting the validity of your concept (may include clinical or preclinical work performed by your team or other researchers). *Clearly outline your project's novelty and potential for translation, game changing, impact, achievability and commercialization.* *[1000 character limit excluding spaces]*

II. Research and Collaboration Plan

Please provide a brief outline of your research plan including an analysis of its strengths as well as the gaps and requirements for progressing your concept/idea forward. Please indicate required resources and capabilities that would accelerate the testing, validation and translation of your concept/idea (E.g. Tool compounds, animal models, medicinal chemistry capabilities, etc). In addition, please indicate specific Janssen Inc resources that would advance your proposed research (see Janssen in-kind expertise document attached).

Clearly articulate a plan for collaboration and gaps to inject novel thinking and science external to your laboratory.

[2000 character limit excluding spaces]

V. Impact, Deliverables and Milestones (eg. Healthcare and patient outcomes, patent, scientific paper(s), program/tool, other grants and timelines)

Please outline concrete examples on how the results of your project will improve patient outcomes and healthcare.

Please provide detail of clear deliverables and outcomes from the proposed project. Include milestones and timelines for achieving deliverables.

[500 character limit excluding spaces]

IV. Membership Structure of the Research Team

Please describe how the structure of your research team will enable you to achieve impact, deliverables and milestones.

[500 character limit excluding spaces]

University/Institutional Approval:

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Name:
Title:
Date: