Funding Overview

The Carol and Gene Ludwig Pilot Grant Program in Neurodegeneration provides grants to support high-risk/high-reward research projects in promising areas of neurodegenerative disease, with the goal of building a cohort of researchers focusing on the mechanisms of neurodegeneration and translation of the new knowledge into clinically useful tools.

Funding Opportunity

Ludwig Pilot Grant

Funding Amount

Up to \$157,500 total costs per year for up to two years (up to \$150,000 direct costs and 5% indirect costs or up to \$7,500 indirect costs per year). The committee is expecting to fund 2 projects annually. Funding will be based on merit and the second year of funding contingent upon progress at the end of Year 1.

Key Dates and Submission Information

Request for Application Open: February 14, 2025, and annually thereafter.

<u>Letter of Intent</u>: March 14, 2025, and annually thereafter (*Invitations for full applications will be sent out in April*). For PIs with a competing NIH resubmission deadline, please <u>contact Nadia Propp</u> to discuss a possible extension.

Full Application: May 14, 2025, and annually thereafter.

Anticipated Award Decision: June 2025, and annually thereafter.

Project Duration: 24 months from July 1-June 30

Letters of intent and full application packages should be sent to Nadia Propp (np2221@cumc.columbia.edu) prior to the application deadline.

Eligibility

To promote research collaborations, applications must be submitted by research teams consisting of two or more researchers with faculty appointments at Columbia University with one of the PI's being in the field of **Neurodegeneration**. Research teams should have at least two fields of research experience and expertise. Research teams may not include non-CU Coinvestigator, unless the external investigator offers unique technology and resources. Previously awarded Ludwig Scholars may apply only if the previous award will be inactive by the start of a new funding program, and it is a new team and a new topic.

Topics of Interest

The Ludwig Family Foundation Pilot Research Program seeks applications focused on developing new knowledge about the cellular and molecular mechanisms underlying the role of cerebrovascular disease in pathogenesis of Alzheimer's disease and related neurodegeneration and dementia.

- For the 2025 RFA, we welcome applications that address the following topic:
 - Cellular and Molecular Mechanism underlying the role of cerebrovascular disease in pathogenesis of Alzheimer's disease and related neurodegenerative disorders
- Some examples include:
 - Potential role of astrocyte, border associate macrophages, pericytes, endothelial cells, fibroblasts, and adaptive immune cells
 - Glymphatics;
 - 3D models of brain vasculature interactions
 - Genetics
 - ARIA
 - Diabetes, lipid and energy dysmetabolism;
 - Mulitomics; including spatial tarnscriptomics and proteomics as part of a mechanistic study
 - Blood brain barrier dysfunction and its impact in neurodegenerative disease
- The proposed work program must focus on neurodegenerative disease, and an emphasis on **neurodegenerative dementias** is especially encouraged.
- The proposed work program should be multidisciplinary and should contain at least two independent laboratories with naturally complementary skills.

Budget

Allowable costs include:

Personnel time and effort

Fringe and associated personnel costs

Direct research expenses including supplies, services, animals, etc.

Up to \$2500 for travel to conferences to present research

Publication costs

Participant support costs

Unallowable costs include:

Administrative or overhead costs

Capital Equipment

Funding will be allocated annually up to \$150,000. Year 2 funding is contingent upon progress at the end of Year 1. Carryforward is allowable upon approval of Year 2. Separate from the funding intended to directly support the project, recipients will receive 5% indirect costs, up to \$7,500 per year.

Letter of Intent Requirements

Project team – list of personnel and research expertise.

Research description (1 page total)

Application Requirements

Proposal narrative – (5 page limit, not including references)

Detailed budget

Budget justification – (1 page)

NIH format Biosketch for all key personnel

Other support for all key personnel

Review Criteria

Impact

Collaboration

Innovation

Feasibility

Alignment with mission

Reporting Requirements

Awardees will be referred to as "Ludwig Investigators" and are required to submit annual progress reports based on the following schedule:

Year 1 Progress Report - June 30, 2026, and annually thereafter

Year 1 Financial Report

Final Progress Report

Financial Report – July 31, 2027

In addition, awardees are required to meet with the program directors and fellow Ludwig Scholars monthly for 60 minutes to provide an informal update on research progress. Meetings IN THE DEPARTMENT OF NEUROLOGY

should be followed up with a brief 1-2 paragraph summary. Carol and Gene Ludwig Family Foundation support must be acknowledged on all publications and presentations.

Administrative Requirements

Any changes to the project team require prior approval from the committee. Significant changes (up to 25%) to the project team's level of effort commitment require approval from the committee.

Significant changes in the project direction require prior approval from the committee.

Key Contacts:

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