

Center for Alzheimer's and Neurodegenerative Diseases Pilot Grant Program

Objectives

The Baylor College of Medicine (BCM) Center for Alzheimer's and Neurodegenerative Diseases (CAND) was established to promote cross-disciplinary clinical, research, and educational programs that advance precision diagnosis and personalized therapies for Alzheimer's disease (AD) and AD-related dementias (ADRDs), including Parkinson's disease, Lewy body dementia, and other neurodegenerative disorders. The major goals for the 2025 CAND Pilot Grant Program include:

- 1) Kick-start impactful research on AD/ADRDs having a high likelihood of publications and external funding.
- 2) Maximize use of generated data and biospecimen resources from BCM/CAND AD/ADRD research cohorts.
- 3) Promote research collaborations on AD/ADRD between BCM and other Texas Medical Center (TMC) institutions.
- 4) Catalyze the establishment of National Institutes of Health-funded research centers of excellence at BCM.

Two selected project proposals will each receive up to \$100,000 for a 12-month period of support. The base award amount will be \$75,000, with a \$25,000 supplement available for projects including collaborations with other TMC institutions (see below).

Eligibility

- (1) Applicant Principal Investigators (PIs) must be full-time faculty members at BCM. Faculty of all ranks are welcome to apply, including those new to the field of neurodegenerative disease research. Based on the applications received, we will try to reserve at least one award for junior faculty (Instructors or Assistant Professors). Other contributors, including those from collaborating institutions, may be listed as co-PIs or co-investigators.
- (2) Applications proposing collaborations with other TMC institutions will receive special consideration, and will be eligible for the \$25,000 supplement (total budget of \$100,000). Eligible TMC institutions include University of Houston, University of Texas Health Sciences Center Houston, University of Texas Medical Branch, Houston Methodist, Rice University, Texas A&M/IBT, and MD Anderson.
- (3) All projects must propose to leverage CAND resources, such as clinical data, DNA / genome sequencing, plasma metabolomics, cognitive / motor phenotyping, or neuroimaging from hundreds of subjects with AD, PD (or controls). Peripheral blood mononuclear cells and induced pluripotent stem cell (iPSCs) are also available. In addition, human postmortem brain tissue is available from the CAND Neuropathology Core through a strategic collaboration with UT Health San Antonio. Additional details on available CAND resources can be found at <https://candadpd.nrihub.org/>. Questions regarding CAND clinical and neuropathology resources also be directed to Joshua Shulman (joshua.shulman@bcm.edu) or Matthew Torre (Matthew.Torre@bcm.edu), respectively.
- (4) The investigative team should also include at least one BCM trainee (e.g., graduate student, post-doctoral fellow, clinical fellow).

Priority Areas

The research proposal may focus on any significant research question relevant to neurodegenerative diseases, including AD and ADRDs (e.g., Parkinson's / Lewy body dementia, frontotemporal dementia, and vascular dementia). Potential research areas may include (but are not limited to):

- (1) Precision/Personalized medicine addressing disease clinicopathologic heterogeneity
- (2) Genomics and other integrative multi-scale "omic" approaches

- (3) Basic disease mechanisms and target discovery
- (4) Population health disparities and accessibility
- (5) Ethics and health policy implementation

Application requirements

Documents should be formatted for US letter size (8.5"x11"), with 0.5-inch margins on all sides, and Arial font size 11 pt. (9 pt. for captions and tables, if applicable). Applications should include:

Cover Page (1 page)

The cover page should identify the proposal title, and identify the PI, any co-investigators (Co-Is or Co-PIs), collaborating TMC institution(s) (if applicable), and the designated trainee(s), along with affiliations and contact information.

Abstract/Specific Aims (1 page)

NIH-style specific aims presenting background, significance, main project objectives, study team, and potential impact.

Proposal Narrative (Up to 3 pages, including figures and tables)

The following sections should be included:

- (1) Background and Significance
- (2) Investigators, including Trainee and training goals
Describe any collaborations with other TMC institutions.
- (3) Research Methods and Preliminary Findings (if applicable)
Describe how CAND resources will be utilized.
- (4) Future directions, including plans for publications and external funding

References Cited are not included in the 3-page limit.

Biosketches (5 pages per investigator)

Provide an NIH-style biosketch for the PI and Co-Is. A biosketch is optional for the designated trainee.

Budget and Budget Justification

Funding requests may be up to \$100,000 if proposing a collaboration with another TMC institution, or otherwise \$75,000. Funds will be awarded directly to the project PI and can be allocated as desired for project costs (i.e., key equipment, supplies, core services, travel to meetings, or publication costs). PIs may also work with their administrators to establish contracts with collaborating institutions. In most circumstances, we do not expect to support faculty effort; however, this can be considered in selected cases if adequately justified.

Letters of Support

If applicable, letters from collaborators may also be included.

Protections for Human Subjects and Animals

If applicable, describe relevant safeguards and procedures for human subjects and animals, including any relevant IRB / IACUC approval information. CAND has established umbrella IRB protocols (H-32191, H-50254) to facilitate collaborations using clinical and neuropathologic resources from human subjects.

Review Process and Criteria

Applications will be evaluated based on the following criteria:

- a. Significance and innovation of proposed research
- b. Research approach and methods, including feasibility
- c. Strength of the investigator team, including external TMC collaborations and training potential
- d. Likelihood to result in high-impact publications and/or external grant funding
- e. Prospects to leverage CAND resources and substantive contributions to priority research areas

Deliverables, Reporting, and Acknowledgment

The awardee will be expected to present a short update on their research during a planned 2026 research symposium. The grantee should acknowledge institutional support in all publications or presentations resulting from the award in the following manner: "This study was supported by funds from the Center for Alzheimer's and Neurodegenerative Diseases at Baylor College of Medicine."

Submission Deadline

The proposal must be submitted by 5 PM, Friday, March 21, 2025.

The final composite PDF proposal application, including all sections indicated above, should be emailed to CAND-mail@bcm.edu.

Effective Date

The review committee will evaluate each proposal with the goal of announcing and disbursing funding by May 2025 for the 12-month project period.

Questions related to this program can be directed to Joshua Shulman (joshua.shulman@bcm.edu).