

Houston Methodist and Baylor College of Medicine

Collaborative Pilot Grants in Alzheimer's Disease and Related Dementias

Request for Proposals

Key Dates

Submission Deadline: Committee Review: Award Announcement: Estimated Funding Start Date: November 10, 2023 November-December 2023 December 2023 January 1, 2024

Funding Opportunity Overview

The Baylor College of Medicine (BCM) and Houston Methodist (HM) are working together to support research on Alzheimer's Disease (AD) and AD-related dementias (ADRDs). As part of this collaboration, a wealth of biospecimens and data have been collected from new research cohorts including subjects with or at risk for AD/ADRD. Through targeted investment of seed funds, this pilot grant program is designed to stimulate projects that leverage these resources and further support cross-institutional research teams. The overall goals of the AD/ADRD Collaborative Pilot Grants are to:

- 1) Promote mutually beneficial partnerships that will lead to productive and long-lasting research collaborations between BCM and HM that positively impact the AD/ADRD field.
- 2) Kick-start projects leveraging newly generated data and biospecimen resources from BCM/HM collaborative AD/ADRD research cohorts.
- 3) Support research that has a high likelihood of leading to peer-reviewed publications and external funding, including catalyzing a successful NIH-funded Houston AD Research Center Consortium based in the Texas Medical Center.
- 4) Engage HM and BCM trainees in mentored research experiences and team science, and cultivate future leaders in basic, clinical, and translational investigation for AD/ADRDs.

For this round of pilot funding, we will make up to three \$100,000 awards (total per project) for a 12-month period of support.

Eligibility

<u>New for the 2023-24 cycle, both single Principal Investigator (PI) or dual / co-PI proposals will be considered. Single PI proposals must incorporate HM/BCM data and/or biospecimens (see below).</u> Any HM-employed full-time faculty with a primary HMAI academic appointment or any full-time BCM faculty members are eligible to apply as a PI. Co-PI proposals should include one PI from each institution (BCM & HM). Other contributors may be listed as co-investigators. Investigators that are new to the AD/ADRD field are encouraged to apply, as one important goal for this program is to attract new researchers into the field. Applications involving PIs who previously received this pilot grant will only be considered if proposing new projects and collaborations.

The investigative team must also include at least one trainee from either BCM or HM. For this opportunity, trainees may include students working toward advanced degrees (medical/graduate students), post-doctoral fellows, clinical residents, and clinical fellows. Junior faculty that are not yet independent (e.g. Instructors or non-tenure track Assistant Professors), will also be acceptable as trainees, as long as the training/career development goals are clearly justified.

Available Collaborative Resources

The research proposal may focus on any significant research question relevant to AD/ADRD. ADRDs include frontotemporal dementia, vascular dementia, and Lewy body dementia (including Parkinson's disease dementia). Special consideration will also be given to projects that take advantage of collaborative HM-BCM generated AD/ADRD data and biospecimen resources, and this is a requirement for all single PI projects. In recent years, research teams at BCM and HM have collected clinical data (e.g. neurologic/neuropsychologic examinations), biospecimens (e.g., DNA, plasma, peripheral blood monocytes); biomarkers (e.g., brain MRI, amyloid/tau PET, and blood markers); and molecular profiles (e.g., genome sequencing, metabolomics) from hundreds of individuals with or at risk for AD/ADRD. A full description of these valuable research resources and how to access them can be found here: http://3.138.247.8/human_data_des.html.

Projects may also benefit from specialized, AD/ADRD core expertise, and may contact the following for further information: Clinical Core (Dr. Jon Toledo <<u>itoledo@houstonmethodist.org</u>> / Dr. Jennifer Gatchel <Jennifer.Gatchel@va.gov>); Neuropathology Core (Dr. Matthew Cykowski <mdcykowski@houstonmethodist.org> / <Hsiang-ChihSean.Lu@bcm.edu>); Data Management Dr. Sean Lu Core (Dr. Stephen Wong <STWong@houstonmethodist.org> / Dr. Zhandong Liu <zhandonl@bcm.edu>); and Biomarker Core (Dr. Sarah Elsea institutional research infrastructure, including at HM (i.e., Translational Research Neuroimaging Core, Biorepository/Tissue Bank, or Biomedical Informatics Support Cores) and/or BCM (i.e., Human Genome Sequencing Center, Intellectual and Developmental Disabilities Research Center, and Knockout Mouse Project), Lastly, projects from benefit consortia mav also AD genomic datasets (https://www.niagads.org & https://adknowledgeportal.synapse.org) and clinical data (https://www.alz.washington.edu/) or biospecimens (https://ncrad.iu.edu) from the NIH-funded AD Research Centers program (https://www.nia.nih.gov/research/adc).

Review Process and Criteria

Proposals will be reviewed by a committee composed of faculty from both BCM and HM, bound by confidentiality commitments and research ethics policies of the home institution. Competitive applications will represent high-quality research of significant benefit to the AD/ADRD field, will take advantage of HM/BCM collaborative resources and/or propose cross-institutional work plans, and therefore catalyze establishment of the Houston AD Research Center Consortium. Project goals must be attainable within the 12-month period and within the scope of funding. The review committee will rank each proposal in five domains:

- a. Significance and innovation of proposed research
- b. Research approach and methods, including use of collaborative resources
- c. Strength of the research team, including investigator expertise and training potential
- d. Likelihood to result in high-impact publications and/or external grant funding

Proposal Preparation and Application Components

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. Font size of at least 9 pt. must be used for the captions to graphics and tables. Applications must include:

- I. Cover Page (1-page maximum)
 - Proposal title
 - Principal Investigator(s) and Institutions
 - Both single PI and co-PI proposals will be considered.
 - Other Contributor(s) and Institutions
 - Designated trainee(s) and Institutions (at least one trainee from either BCM or HM is required)
 - Description of the HM/BCM resources to be utilized (1-sentence).
- II. Specific Aims (1-page maximum)

NIH-style specific aims presenting background, significance, objectives, methods, and potential impact.

- III. Proposal Narrative (3-pages maximum, including figures and tables)
 - The following sections must be included:
 - (1) Background and Significance
 - (2) Investigative Team and Relevant Expertise, including Trainee and training goals
 - (3) Research Methods, including the use of HM/BCM collaborative resources

(4) Future directions, including plans for publications and external funding

IV. References Cited

V. Biosketches (5 pages per investigator)

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

VI. Budget and Budget Justification

The maximum total project budget is \$100,000 (direct costs only). Funds will be dispersed from BCM to BCM researchers and from HM to HM researchers. For co-PI proposals, a separate budget for each institution should be provided (e.g., \$50,000 each for HM and BCM). In most circumstances, we do not expect to support faculty effort; however, this can be considered in selected cases if adequately justified.

VII. Letters of Support (If applicable, letters from collaborators may also be included.)

VIII. 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.

NOTE: If you have filed an invention disclosure with your home institution's office of technology transfer pertaining to technology included in your application, consider consultation with your office of technology transfer prior to submission and inform them that you've applied for funding under this RFA.

Submission Deadline

Proposals must be submitted by 5PM, Friday, Nov. 10, 2023.

The final proposal application, including all sections indicated above compiled as a composite PDF, must be submitted by email to <<u>CAND-mail@bcm.edu</u>>. In addition, projects with HM PIs (either single or co-PI) must be submitted to the HM Intramural Awards Portal: https://intramural-awards.houstonmethodist.org>

Effective Date

The institutions will make decisions based on the recommendations of the review committee, with a goal of announcing and disbursing funding by January 1, 2024, for the 12-month project period.

Administration and Compliance

Project grants will be administered through each institution's office of sponsored programs. Each institution will ensure that the research is conducted in compliance with all applicable federal, state, local and institutional regulations.

Deliverables, Reporting, and Acknowledgment

A BCM-HM joint symposium will be jointly organized where each investigative team will present their progress and results of the collaboration. Notice must be given of publications or presentations resulting from the award. The grantee must acknowledge institutional support in all publications or presentations resulting from the award in the following manner: "This study was jointly supported by funds from Houston Methodist Hospital and Baylor College of Medicine."

Contact Information

Joseph Masdeu, MD, PhD Houston Methodist jcmasdeu@houstonmethodist.org

Joshua Shulman, MD, PhD Baylor College of Medicine (joshua.shulman@bcm.edu)