

a2 Pilot Awards Fourth Annual Competition (2024) Request for Applications

Round 1 Application Period: March 1–April 30, 2024 (5 p.m. ET)

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The a2 Collective is pleased to announce the fourth annual a2 Pilot Awards competition to fund promising technology demonstration projects with a clear path to commercialization, translational milestones, or technology transfer at the intersection of artificial intelligence (AI), healthy aging, and Alzheimer's disease and related dementias (AD/ADRD). Launched by the National Institute on Aging (NIA), part of the National Institutes of Health, the Artificial Intelligence and Technology Collaboratories (AITC) for Aging Research program—or a2 Collective—is dedicated to helping Americans live longer, healthier lives through the application of AI and emerging technologies. The a2 Collective comprises three collaboratories centered at Johns Hopkins University (JH AITC), the University of Massachusetts Amherst (MassAITC), and the University of Pennsylvania (PennAITech), as well as the a2 Collective Coordinating Center managed by Rose Li & Associates, Inc. (RLA).

Scope

The a2 Pilot Awards fund projects that leverage cutting-edge technology and AI-based approaches to improve the care, health outcomes, and quality of life of older adults, including those with AD/ADRD, and their caregivers. Projects should focus on the development of novel technology or on novel combinations or adaptations of existing technology with clear potential for commercialization or translational impact. In addition to technology development and adaptation, a2 Pilot Awards can support feasibility and user testing to further the development of the technology, particularly of technologies that are intended to be deployed in residential settings or to enable older adults to age in place.

In the fourth annual a2 Pilot Awards competition (2024), funds will **not** be awarded to project applications that (1) focus on market research (e.g., focus groups, surveys), (2) focus on drug discovery, development, or target identification **beyond bioinformatic-based approaches**, (3) include any component that constitutes a clinical trial as <u>defined by NIH</u>, or (4) focus on the advancement of a product or technology for which the investigators have previously received Small Business Innovation Research (SBIR) or Small Business Technology Transfer (STTR) funding.

Prospective applicants should visit the three AITC websites to review their individual requests for applications, which include additional details on project scope and example project topics.

Eligibility

Fiscally responsible organizations including for-profit corporations and startups, colleges, universities, medical or nursing schools, health care systems or settings, nonprofits, and eligible government entities within the United States are eligible to apply. Eligible institutions must



have a <u>Unique Entity ID</u> (UEI). Non-domestic (non-U.S.) entities and non-domestic (non-U.S.) components of U.S. organizations are not eligible to apply. Foreign components, as defined in the <u>National Institutes of Health (NIH) Grants Policy Statement</u>, are allowed.

Program Structure and AITC Selection

a2 Pilot Awards accelerate innovation by providing funding, AITC expert oversight and potential collaboration, and enhanced opportunity for future funding and partnerships. All three AITCs are multidisciplinary research centers that can provide access to research translation support; state-of-the-art facilities; and resources including software and hardware platforms, datasets, and population study sites. Each AITC supports projects in the areas of healthy aging and AD/ADRD. Based on project focus, each awarded pilot will be funded as a subaward to one of the three AITC institutions. Applicants must specify their primary AITC choice and are encouraged to visit AITC websites prior to applying to learn more about each collaboratory's emphases, team, and resources. If the selected AITC declines to advance an application for further consideration, it can release the application for consideration by the other AITCs. Applicants may propose multiple unique pilot projects within the same competition by submitting a separate application for each project. Simultaneous submission of substantively similar or overlapping pilot projects in a single competition cycle, whether to one AITC or to multiple AITCs, is not permitted. Violation of this policy will result in disqualification of one or more of the submitted applications.

Budget

Projects will be supported for up to 1 year, beginning in spring 2025. Applicants may request up to \$200,000 in direct costs with justification (total direct costs for an appropriately scoped 1-year project are typically between \$50,000 and \$100,000), as well as facilities and administrative (F&A) costs. Individual AITCs may impose additional restrictions on costs; applicants should consult specific AITC requests for applications for additional budgetary guidance. Larger projects supported by multiple AITCs are possible; however, multi-AITC applications will only be considered if all AITCs from which support is requested have been consulted and provided preliminary approval **prior to submission**. Pilot grant funds may be used for (1) project support of personnel; (2) use of services, including, where applicable, salary support for investigators, biostatisticians, staff, or other experts; (3) project-necessary travel, including to the a2 National Symposium; (4) equipment, research supplies and reagents, and lab costs; (5) study participant compensation; (6) other study-related expenses with justification; and (7) publication costs.

Indirect Costs Policy: F&A rates that have been established in a current federally negotiated F&A rate agreement may cover applicable indirect costs during the project's approved period of performance. Applicants without federally established F&A rates are entitled to a de minimis 10 percent indirect rate. Small business applicants should note that SBIR/STTR policies and rates do not apply to this program.

Other Requirements

Funded projects' principal investigators (PIs) are expected to engage in ongoing mentoring and



oversight within individual AITCs, attend and present their project at the annual <u>a2 National Symposium</u>, and adhere to the <u>a2 Collective Data and Resource Sharing Plan</u>. Awardees are encouraged to take an active role in the AITC community, such as by attending meetings and events, participating in online discussions, and amplifying future a2 Pilot Awards competitions.

Evaluation Criteria

All AITCs will use the same application process and general evaluation criteria, which are available in full as <u>Applicant Resources</u>. Pilot projects will be evaluated based on factors including the project's significance, innovation, approach including treatment of representation and bias, commercialization potential, and proposed investigators and environment. Additional consideration may be given to projects that leverage an AITC's resources or facilities or generate datasets, software, or hardware that might benefit the AITC research community at large. Other priority areas of consideration include go-to-market strategy, regulatory and reimbursement pathways, plans for managing human subjects and data privacy risks, and mitigation of health disparities across the United States, including improving access to and delivery of care in rural areas.

Applications

The a2 Collective encourages applications from those who applied to previous a2 Pilot Awards competitions. The fourth annual a2 Pilot Awards competition includes a mandatory Round 1 application and a full Round 2 application for a subset of applicants who are invited to submit additional materials. Details on the Round 1 and Round 2 applications are included below.

Round 1 Application: To be considered for invitation to Round 2, please submit a Round 1 application here (application link open March 1–April 30, 2024). Round 1 applicants will submit a 2-page project statement that includes the following elements:

- Overview of the pilot project's scientific approach
- Overview of the project's Al/technology approach
- Description of how the project is relevant to healthy aging and/or AD/ADRD
- Project aims and expected outcomes
- Explanation of plans or potential for commercialization of project deliverables

Applicants will also be asked to report any scientific, budgetary, or commitment overlap with other funding sources; specify the project's primary clinical/behavioral health domain, specific needs to be addressed, and AI or technology approaches to be leveraged; and provide an estimated budget of direct costs, award numbers for any prior federal funding that has supported the project, a list of key personnel, an NIH biosketch for the project PI(s), information about potential conflicts of interest (COIs) relevant to any of the AITCs, human subjects and research exemptions information, and optional demographic information.

Round 2 Application: Those invited to submit a Round 2 application will provide the following:

Any emergent scientific, budgetary, or commitment overlap with other funding sources



- Completed a2 Collective Data and Resource Sharing Plan Agreement
- Project relevance to the selected AITC and description of any AITC resources the project will access
- Potential COIs relevant to any of the AITCs
- Specific aims, including objectives and benchmarks to measure success (1-page limit)
- Research strategy including project significance, innovation, approach, and known limitations (3-page limit)
- Discussion of the project's ethical considerations
- Detailed budget (template and instructions provided)
- Budget justification (example provided)
- Key personnel and other significant contributors
- Biosketches for key personnel (template and example provided)
- Project performance site(s)
- Human subjects and research exemptions information

During Round 2, applicants may also submit optional letters of support and citations.

Deadlines and Anticipated Timeline

Round 1 applications due by 5 p.m. ET on Tuesday, April 30, 2024

Round 1 application decisions expected to be made by Friday, June 14, 2024

Round 2 applications due by 5 p.m. ET on Tuesday, July 30, 2024

Finalists expected to be named by mid-September 2024

NIA approval of awards expected in fall 2024

Projects expected to begin in early 2025

Award Approval and Disbursement of Funds

Funding is contingent upon NIA approval, IRB approval (if human subjects are involved), and, if applicable, foreign clearance by the U.S. State Department. The anticipated formal award date is subject to change based on factors above. Please note that this program operates on a reimbursement basis. Project teams will invoice for expenses incurred on a schedule set by their AITC (e.g., quarterly or monthly). Funds will not be available as a lump sum disbursement and applicants selected for award should not incur costs for which they expect AITC reimbursement until a subaward agreement with the AITC's institution has been executed.

Visit <u>a2PilotAwards.ai</u> for more information, including answers to <u>frequently asked questions</u>. Additional inquiries may be directed to <u>support@a2collective.ai</u>.

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