



Duke/UNC Alzheimer's Disease Research Center Developmental Projects (DP) Request for Applications, 2021

Background: The Duke/UNC Alzheimer's Disease Research Center (ADRC, NIA P30AG028716) promotes research and discovery in Alzheimer's disease and related dementias (AD+ADRD) through its core resources. The central **theme** of our ADRC is to identify age-related changes across the lifespan that mediate the development, progression, and experience of Alzheimer's disease. Applicants are highly encouraged to leverage the services and resources of the ADRC Cores. For example, awardees have access to the expertise of a biostatistician and statistical support may be contributed or contracted, depending on the level of need. The ADRC Cores include:

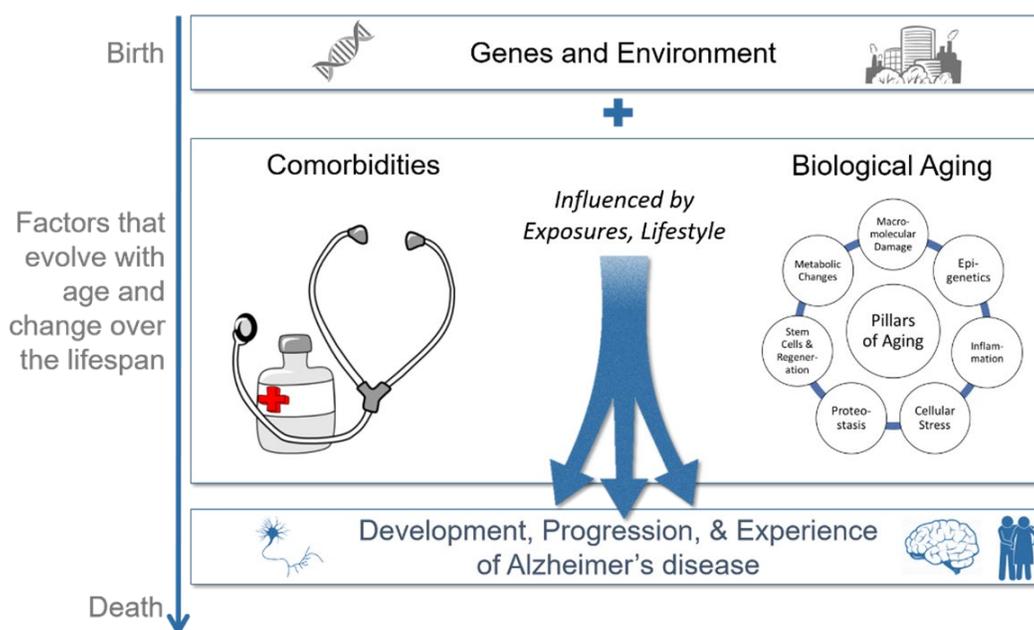
- **Administrative Core:** This Core provides leadership, oversight, and infrastructure support for each of the ADRC's five Cores and its Research Education Component (REC). The Administrative Core also oversees the Developmental project program.
- **Data Management and Statistics (DMS) Core:** This Core offers integrated data management and statistical/bioinformatics collaborative expertise. DMS consultation is available to all development project awardees.
- **Clinical Core:** This Core is responsible for recruiting, clinically characterizing, and following a diverse group of participants who will provide biomarker data and brain tissue to investigators studying AD+ADRD.
- **Biomarker Core:** This Core's objective is to acquire and analyze biofluid and imaging biomarkers; characterize their relevance to AD+ADRD, and determine the underlying age-related factors that drive the development, progression, or experience of the disease; and to advise local investigators in AD+ADRD biomarker research.
- **Neuropathology Core:** This Core supports research by performing postmortem histopathological analysis and providing well-annotated and high-quality postmortem tissue and biofluids to investigators studying AD+ADRD.
- **Outreach, Recruitment, and Engagement (ORE) Core:** The ORE Core promotes outreach and education in the community in order to facilitate research recruitment into the ADRC and its supported projects, with a particular focus on the enfranchisement of clinically underserved groups in our region.
- **Research Education Component (REC):** The REC's goal is to develop future leaders in AD+ADRD research by providing early-career exposure to AD+ADRD research, delivering broad cross-campus research education, and annually selecting REC Scholars for focused research mentorship and funding.

Purpose of the Award: The goal of the ADRC developmental project program is to stimulate and support innovative, high potential lines of research related to our theme: to identify age-related changes across the lifespan that contribute to the development, progression, or experience of AD. We expect to fund up to 3 developmental projects annually, of 1- or 2-year duration, with funding beginning July 1, 2022. DP awardees are supported by the ADRC Cores listed above. Awardees are expected to pursue external funding in their research area and applications should convey the plan to use findings from the developmental project to inform or justify future applications.

Eligibility: Candidates should be faculty, or an advanced fellow/postdoctoral student with clear plans for transition to faculty status. Candidates must hold an appropriate academic or clinical appointment at Duke University or UNC Chapel Hill by the award start date of July 1, 2022. Only U.S. citizens or non-citizen nationals, or an individual lawfully admitted for permanent residence who possesses an Alien Registration Receipt Card (I-151 or I-551), or some other verification of legal admission as a permanent resident prior to appointment, are eligible due to NIH regulations. Individuals on temporary or student visas are not eligible.

Support: DP awardees may propose up to \$75,000 per year in direct funding, depending on project needs. Funding will be provided for up to two years, with Year 2 funds contingent upon successful completion of Year 1 activities. The budget justification should detail how personnel effort or other budgeted items are necessary to support the proposed project. Applicants are encouraged to work with their departments to determine the availability of matching departmental funds or in-kind contributions (e.g., commitment of PI effort to work on the project), and such contributions should be described in the Budget Justifications.

Eligible Research: The research focus can be basic, translational, epidemiological, or clinical so long as it supports the ADRC's mission and theme (see Figure). Research that bridges basic science and clinical areas, or has the potential to lead to new interventions for prevention, treatment, or management of AD, or new diagnostic tools for early AD, is of particular interest. Research related to health equity is also encouraged, particularly when proposed as part of a collaboration with the ORE Core or other Cores. Research proposals should utilize one or more of the ADRC cores (see descriptions here: <https://sites.duke.edu/alzcollaborative/research/>). Preference will be given to applications from early stage investigators (ESIs). More senior applicants should explain how the DP funds will be used to support a novel line of research, which represents a pivot from their existing lines of research and aligns well with the Duke/UNC ADRC theme.



Examples of Successful Project Types include but are not limited to:

- Feasibility studies
- Analysis of existing data or samples to evaluate hypotheses related to our theme
- Development or validation of new methodologies or technologies
- Exploration of innovative high-risk ideas in our theme

Commitment to Diversity and Equity: The Duke/UNC ADRC is committed to promoting health equity and adding value to our community through diverse perspectives. Scientists from traditionally under-represented backgrounds are especially encouraged to apply. Additionally, whenever appropriate, applications should discuss how the proposed work may reduce health disparities or will benefit from the ADRC's diverse clinical cohort (with intentional outreach to and inclusion of minority participants, participants from rural zip codes, and participants ages 25-65). If human studies are proposed, the application should provide its strategy to promote inclusion and representation in the study population, which may be in coordination with the ORE Core.

Application Process and Timeline: Applicants are encouraged to meet with Administrative core leaders (listed below) prior to submission to optimize their project's fit with ADRC goals.

- RFA released November 8th, 2021. It is highly recommended that you schedule a meeting with the Administrative Core leaders to discuss your project idea. Please contact ADRC leaders early to allow adequate opportunity to find an available meeting time.
- Letters of Intent are requested by Dec 13th, 2022. Letters of intent should be **no more than 1 page**. Upload your LOI as a PDF with the naming convention “PIlastname.PIFirstname.LOI” (e.g., PDF document is named “Whitson.Heather.LOI.”) Please include:
 - Title
 - Principal investigators and other known members of the team. Names, titles, affiliations
 - Rationale for the proposed project and overall objective
 - Brief description of methodological approach

Letters of intent will be used to identify appropriate reviewers and communicate with investigators about how to optimize their proposal for this mechanism.

- Full application will be due 11:59pm on February 16th, 2022
- Applicants will be notified of funding decisions by April 1st, 2022
- Award start date is July 1st, 2022

Application Format: All documents should adhere to NIH formatting requirements (e.g., half-inch margins, minimum 11pt font, no more than six lines per vertical inch). Applicants should combine the following documents into a single PDF with the naming convention “PIlastname.PIfirstname.Full” (e.g., PDF is named “Whitson.Heather.Full”):

- Specific aims to include rationale, objective, and expected outcomes/deliverables (1 page)
- Research Strategy (up to 5 pages, including references) include the following sections: Background/significance, Innovation, Approach, Timeline, Use of ADRC Cores or NACC resources, Plan for future research based on findings
- [Budget with budget justification](#)
- Resource Sharing plan, describing how you will support open science (1 page)
- Applicant Biosketch + Biosketch of each key co-investigator (adhere to NIH format)

To begin the submission process and upload your LOI, go to this link:

https://duke.qualtrics.com/jfe/form/SV_0P5NvIB7LarJJtk

For administrative questions, please contact:

Sara Patillo, MSHS, CCRP, PMP (sara.patillo@duke.edu)

To schedule your 1:1 meeting, and for programmatic/scientific questions, please contact either:

Heather Whitson, MD, MHS, ADRC Co-Director (Duke) (heather.whitson@duke.edu)

Gwenn Garden, MD, PhD, ADRC Co-Director (UNC) (gwenn.garden@med.unc.edu)