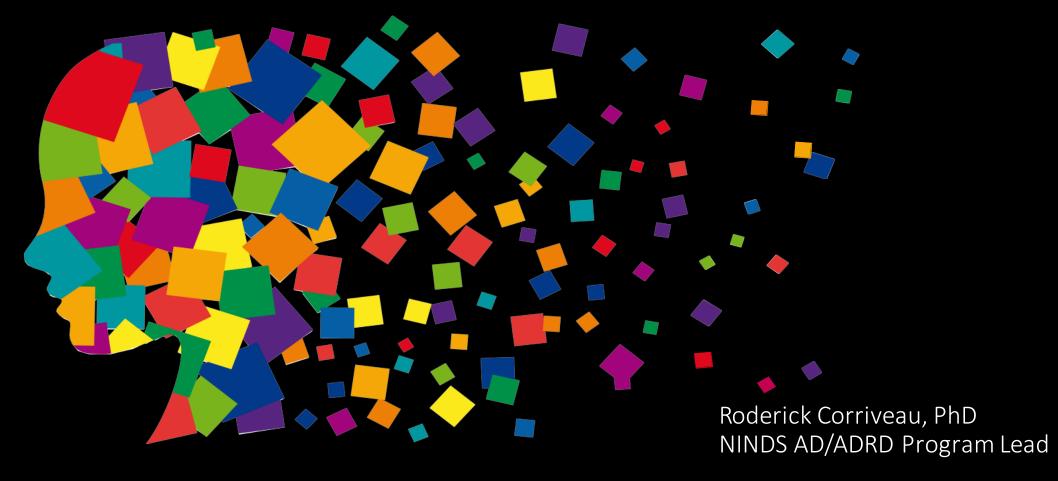
Thank You for Attending Today's Webinar on NINDS ADRD Funding Opportunities



- You will have the opportunity to ask questions using the Raise Hand feature. When it is your turn
 we will enable you to use your microphone to ask your question. We will address as many
 questions as time allows.
- A PDF of this slide set will be available after the webinar (contact <u>kiara.bates@nih.gov</u>).
- This presentation is to provide a broad overview. For additional specifics follow-up with funding opportunity contacts.
- NINDS staff will not provide opinions on specific approaches, technologies and other specifics in the applicant's purview.
- NINDS National Advisory Council open session on 5/31 will announce if additional planned funding opportunities are to be added: https://www.ninds.nih.gov/news-events/events/national-advisory-council-nandsc-meeting-may-2023
- For planned funding opportunities not yet published, NINDS cannot guarantee that they will be issued until publication in the <u>NIH Guide</u>. Similarly, awards under published funding opportunities are dependent on merit and funds available, and are thus not guaranteed.

NINDS Alzheimer's Disease-Related Dementias (ADRD) Funding Opportunities Planned for 2024





National Plan to Address AD Definition of ADRD



Vascular Contributions (VCID) Vascular contributions to cognitive impairment and dementia (VCID)

- Frequently a part of typical clinical Alzheimer's disease
- Diverse spectrum of disorders caused by cerebrovascular & cardiovascular disease
- Reducing vascular risk factors may decrease dementia risk

ADRD:

Types of dementias sharing cognitive & pathological features with Alzheimer's Disease and/or commonly co-occur with canonical Alzheimer's Disease pathology

Lewy Body Dementia (LBD)

- Lewy bodies, pathological hallmark of Parkinson's disease, are also present in brains of people with Lewy Body Dementia (LBD, PDD)
- Dementia occurs with problems with **movement**, **sleep**, **mood**, & **hallucinations**

Fronto
-temporal
Degeneration
(FTD)

- Onset often occurs in a person's 50s or 60s
- Progressive decline in social behavior and/or language (memory can be spared)
- Can be associated with amyotrophic lateral sclerosis (ALS)

Mixed
Dementias
(MED)

 Majority of all dementia cases (age 65+) are mixed or multiple etiology dementias, mainly Alzheimer's pathology (beta-amyloid plaques and tau tangles) with cerebrovascular disease and/or Lewy bodies



Paradigm Shift: Multiple Potential Pathways to Dementia

LIFESTYLE FACTORS

- Physical Activity
- Diet
- Drug/Alcohol Abuse

ENVIRONMENTAL FACTORS

- Education
- Head Trauma
- Toxins/Other

PSYCHOSOCIAL FACTORS

Depression/Anxiety

OTHER MEDICAL RISKS

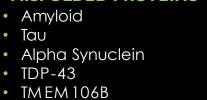
- Metabolic / Obesity / Diabetes
- Hypertension / Heart Disease / Stroke
- Inflammation
- Certain Infectious Diseases
- Certain Medications

HEALTH DISPARITIES FACTORS

AGING

GENETIC FACTORS

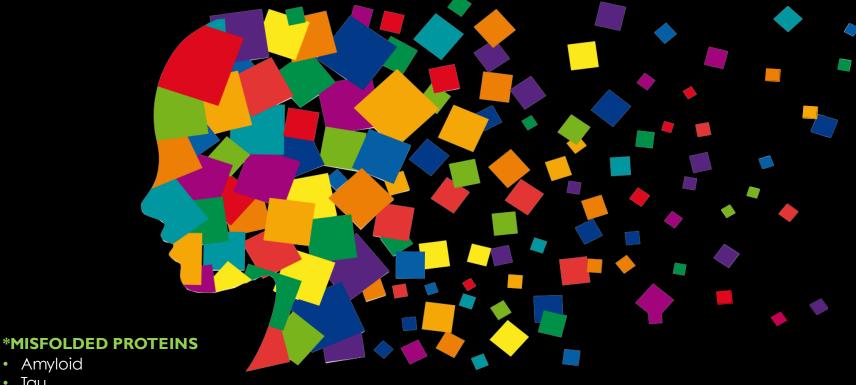
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*VASCULAR DISORDERS

- Injury, Infarct (Stroke)
- White Matter Disease
- Other Vessel Disease

*OTHER DISORDERS



COGNITIVE IMPAIRMENT and DEMENTIA DIAGNOSES

Alzheimer's Dementia **Lewy Body Dementias Vascular Dementias Frontotemporal Dementias Other Dementias**

Limbic Predominant TDP Mixed Dementias Other Cognitive Impairment



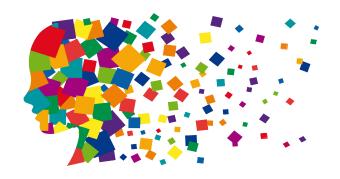
NIH ADRD Summits Shape ADRD Research Priorities

2011 NAPA Law, Goal 1: Prevent and Effectively Treat AD/ADRD by 2025

Triennial AD, ADRD & Research Recommendations **Milestones Toward Goal 1

ADRD Summits: 2013, 2016, 2019, 2022

- ☐ NIA leads NIH response to the National Plan* to Address AD/ADRD
- ☐ NINDS leads, across the NIH, LBD, FTD, VCID & ADRD Summits
- ☐ NINDS and NIA collaborate closely
 - Supplement program to expand the field
 - Paylines
 - > Triennial Summits
 - > Funding opportunities







^{**&}lt;a href="https://www.nia.nih.gov/research/milestones">https://www.nia.nih.gov/research/milestones

^{*}https://aspe.hhs.gov/reports/national-plan-2022-update

ADRD Funding Initiatives and Plans for FY2024

14 New/Planned NINDS ADRD funding initiatives for FY 2024.

For more information see NINDS Focus on Alzheimer's Disease and Related Dementias page: https://www.ninds.nih.gov/Current-Research/Focus-Disorders/Alzheimers-Related-Dementias

No RFA is needed to apply!! NINDS special AD/ADRD payline applies to investigator-Initiated research applications to the NIH Parent R01 and the NINDS R21 (PA-21-219)



Published funding announcements will also be shared via the **NINDS ADRD Listserv**

Email <u>kiara.bates@nih.gov</u> to sign up!



Training & Career

Models

Disease Mechanisms

Translation

Clinical Trials, Clinical Research







Foundational Principles of NINDS ADRD Funding



How do I know if my NINDS (NS primary) application qualifies for AD/ADRD funds?

- 1. Yes if responsive to NINDS ADRD-specific funding opportunities
- 2. Yes if (A) it is a "Parent" R01, R21, R03, or R15 funding opportunity, <u>and</u> (B) the science proposed directly addresses AD/ADRD*:
 - Framing of the science
 - Actual experiments proposed

Am I required to apply to an ADRD funding announcement to qualify for the special pay line?

No RFA is needed to apply!! The special ADRD payline applies to investigator-initiated research applications, e.g. the NIH Parent R01 & the NINDS R21 (PA-21-219)

What are the AD/ADRD Paylines?

- 1. For AD/ADRD applications responding NINDS ADRD-specific funding opportunities, NINDS sets a payline for each based on impact score, reviewer comments and funds available.
- 2. For percentiled AD/ADRD applications submitted to "Parent" R01, R21, R03, & R15 funding opportunities NINDS follows NIA AD/ADRD paylines: for FY 2023, up to 25% (NI: 28%; ESI, 30%).

^{*}AD/ADRD awards are publicly reported in NIH RePORTER under the Spending Category "Alzheimer's Disease and Alzheimer's Disease-Related Dementias (AD/ADRD)" (https://report.nih.gov/funding/categorical-spending)



Extended Payline and Investigator-Initiated Research

PA-20-184

Research Project Grant (Parent R01 Basic Experimental Studies with Humans Required)

• This Parent Funding Opportunity Announcement is for basic science experimental studies involving humans, referred to in NOT-OD-18-212 as "prospective basic science studies involving human participants.

PA-20-185

NIH Research Project Grant (Parent R01)

• The NIH Research Project Grant supports a discrete, specified, circumscribed project in scientific areas that represent the investigators' specific interests and competencies and that fall within the mission of the participating NIH Institutes and Centers (ICs)

PA-21-219

Joint NINDS/NIMH Exploratory Neuroscience Research Grant (R21)

• The Joint NINDS/NIMH Exploratory Neuroscience Research Grant program supports exploratory and innovative research projects, which fall within the missions of the NINDS and NIMH.



NINDS ADRD Current and FY2024 Planned Funding Announcements:

Training & Career

NOT-NS-21-047

Multiple due dates, through March 2024 Administrative Supplements to Promote Diversity for NINDS AD/ADRD Awardees

Contact: Marguerite Matthews (<u>marguerite.matthews@nih.gov</u>)

•To provide research supplements to promote diversity in health-related research.

PAR-23-113

Standard dues dates through May 25, 2024

NINDS Institutional AD/ADRD Research Training Program (T32)

Contact: Delany Torres-Salazar (torressalazard@mail.nih.gov)

•To provide support for institutional research training programs in ADRD.

PAR-22-022

Standard dues dates through July 13, 2024

NINDS AD/ADRD Advanced Postdoctoral Career Transition Award to Promote Diversity (K99/R00)

Contact: Amelie Gubitz and Lauren Ullrich (ADRDK99@ninds.nih.gov)

• To enhance workforce diversity by supporting a mentored research experience (K99) followed by independent research (R00) for postdoctoral fellows working in research areas supported by the AD/ADRD Initiative.



NINDS ADRD Current and FY2024 Planned Funding Announcements: Models

PAR-23-154

Due dates, June 20, 2023 and October 20, 2023 **Development and Validation of Models for ADRDs** (R61/R33)

Contact: Becky Roof (<u>rebecca.roof@nih.gov</u>) and Linda McGavern (<u>mcgavernlm@ninds.nih.gov</u>)

• To supports the development and validation of clinically- and pathophysiologically-relevant models of ADRD.

Concept approved

Development & Characterization of Experimental models of post-TBI ADRD

Contact: Hibah O. Awwad (hibah.awwad@nih.gov)

• To support development and characterization of experimental models that accurately reproduce the neuropathological signatures and clinically relevant TBI-related dementia sequelae and phenotypes.



NINDS ADRD Current and FY2024 Planned Funding Announcements:

Disease Mechanisms

PAR-23-140
Dues date June 02,
2023

Blood Brain Barrier Response to Antibodies Targeting Beta-Amyloid (R01)

Contact: Roderick A. Corriveau (roderick.corriveau@nih.gov)

• To increase understanding of mechanisms that can be targeted to protect the blood-brain barrier, and thus brain blood vessels, during therapeutic interventions targeting beta-amyloid.

Concept approved

Mechanistic Investigations into ADRD Multiple Etiology Dementias

Contact: Linda McGavern (mcgavernlm@ninds.nih.gov)

• To support mechanistic studies to understand of the etiology of multiple etiology dementias.

Concept approved

Distinct & Overlapping Mechanisms in TDP-43 Proteinopathies, including in LATE, FTD, & other ADRDs Contact: Linda McGavern (mcgavernlm@ninds.nih.gov)

• To support studies establishing deeper mechanistic insight and causal cellular and molecular relationships between TDP-43 pathology and clinical phenotypic outcomes.

Concept approved

Neuropathological Interactions Between COVID-19 and ADRD

Contact PO: William P. Daley (william.daley@nih.gov)

• To support applications that propose studies in different models to elucidate the mechanisms by which COVID-19 interacts with and/or modulates ADRD-relevant phenotypes.



Translation

PAS-22-196 PAS-22-197

Standard due dates through 9/5/25

Concept approved

Concept approved

Concept approved

Concept approved

Multi-target validation for ADRD

Contact: Rebecca Roof (<u>rebecca.roof@nih.gov</u>)

• Validate multiple targets for future therapy development for ADRDs that better reflect the complexity of disease.

Advancing Research on Alzheimer's Disease (AD) and AD-Related Dementias (ADRD)(R43/R44)

Contact: Annette Gilchrist (annette.gilchrist@nih.gov)

• Support innovation (R43/R44) and technology transfer (R41/42) small business research to advance progress in preventing and treating, and care, for AD/ADRD.

Center Without Walls for PET Ligand Development for ADRD

Contact: Debra Babcock (dbabcock@ninds.nih.gov)

• Support a multi-center program that applies innovative and interdisciplinary approaches to identify and validate PET radioligands for ADRD-related targets and pathways.

Early-Stage Therapy Development for ADRD (Re-issue of RFA-NS-22-059)

Contact: Rebecca Roof (<u>rebecca.roof@nih.gov</u>)

• To encourage early-stage development of novel small molecule or biologic therapeutics for ADRD.

Optimization of Genome Editing Therapeutics for ADRD (Re-issue of <u>RFA-NS-23-017</u>)

Contact: Timothy LaVaute (<u>lavautetm@mail.nih.gov</u>)

• To support early translational research focused on somatic cell genome editing for ADRD.



NINDS ADRD Current and FY2024 Planned Funding Announcements:

Clinical Trials, Clinical Research

RFA-NS-24-001

Standard due dates through September 05, 2025 Using Multimodal Biomarkers to Differentially Diagnose ADRDs for Clinical Trials (U19)

Contact PO: Carol Taylor-Burds (carol.taylor-burds@nih.gov)

• Multi-site clinical validation of a multimodal set of neuroimaging and biospecimen biomarkers to differentially diagnosis three or more similarly presenting neurodegenerative diseases, including at least one of the ADRDs.

Concept approved

Neuropathological Assessment of TBI-Related Neurodegeneration & Neurocognitive Decline (Re-issue RFA-NS-19-030)

Contact PO: Nsini Umoh (nsini.umoh@nih.gov)

• Multisite study to comprehensively characterize the neuropathological features associated with neurodegeneration and neurocognitive decline in persons with a history of TBI.

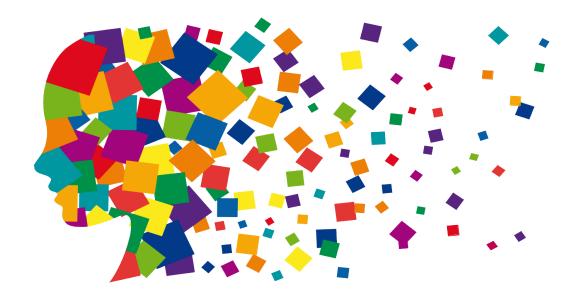
Concept approved

Anti-Beta-Amyloid Passive Immunotherapy Efficacy in Populations with VCID

Contact PO: Rebecca Hommer (<u>rebecca.hommer@nih.gov</u>)

• Development and implementation of a phase 3 clinical trial to determine the efficacy and safety of FDA-approved monoclonal antibody therapy in mixed-etiology dementia populations with evidence of VCID.

Thank You For Attending



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