Alzheimer's Disease and Related Dementias Research Update

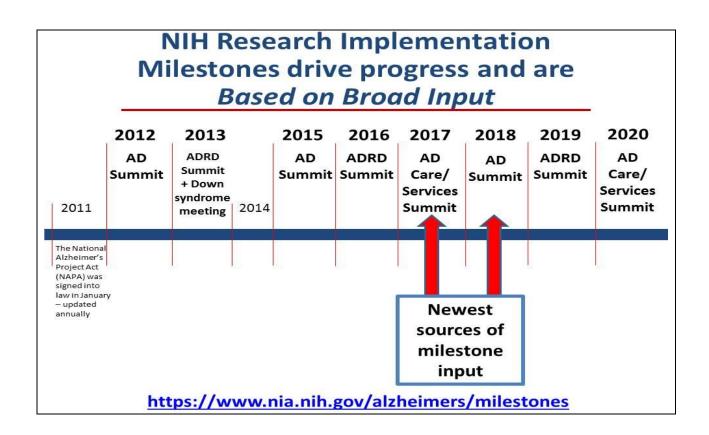
Advisory Council on Alzheimer's Research, Care, and Services Meeting

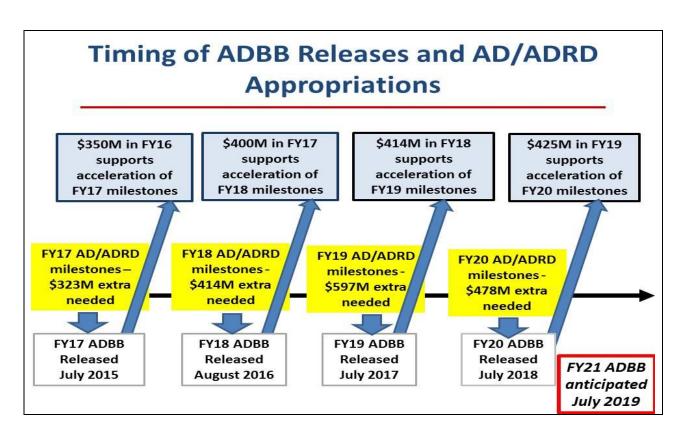
Richard Hodes, M.D.

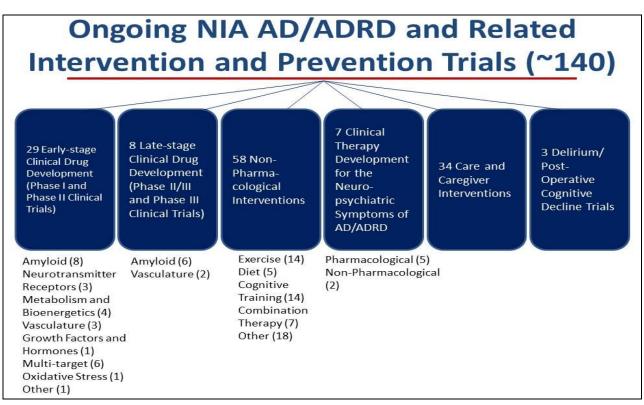
Director, NIA

January 28, 2019









Ongoing NIA AD/ADRD and Related Intervention and Prevention Trials (~140) 7 Clinical Therapy 58 Non-Development 34 Care and Pharmafor the Caregiver cological Neuro-Interventions Interventions psychiatric Symptoms of AD/ADRD Exercise (14) Amyloid (8) Diet (5) Non-Pharmacological Neurotransmitter Cognitive

Bioenergetics (4) Hormones (1) Multi-target (6)

Training (14) Combination Therapy (7) Other (18)

69% of ongoing trials are nonpharmacological

Physical Activity Clinical Trial for AD

Exercise in Adults With Mild Memory Problems (EXERT)

 Goal: Test effects of physical exercise on cognition, functional status, brain atrophy and blood flow, and cerebrospinal fluid biomarkers of Alzheimer's disease, in adults ages 65 to 89 year with MCI (Completion: 2022)



Diet-Based Clinical Trial for AD

MIND Diet Intervention to Prevent Alzheimer Disease

Goal: Test the effects of a 3-year intervention of the MIND diet (Mediterranean-DASH Intervention for Neurodegenerative Delay) on cognitive decline and brain neurodegeneration among individuals 65+ years without cognitive impairment, who are overweight and have suboptimal diets (Completion: 2022)



Cognitive Training Clinical Trial for AD

Processing Speed Training to Preserve Driving and Functional Competencies in MCI



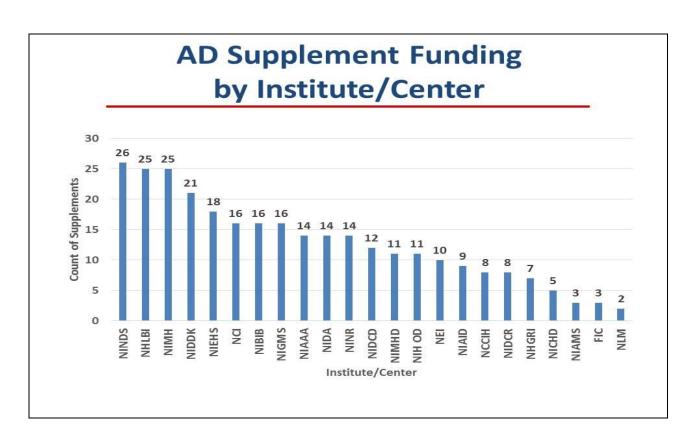
 Goal: Test the capacity of an enriched version of processing speed training (PST) to preserve functional abilities in a clinical MCI population with quantified genetic and neuroimaging AD and comorbid cardiovascular disease biomarkers (Completion: 2020)

Caregiving Clinical Trial for AD

Indiana University Dementia Screening Trial (IU-CHOICE)

 Goal: To examine the question of whether the benefits outweigh the harms of routine screening for dementia among older adults in primary care when the screening program is coupled with primary care practices prepared to provide care for those who screen positive (Completion:2019)





Supplement to NINR Parent Grant

Improving Sleep Using Mentored Behavioral and Environmental Restructuring (SLUMBER)

 Goal: Test a sleep improvement program (SLUMBER) designed to teach nursing facility staff to improve common sleep-related symptoms among individuals with AD and related dementias (e.g., improve nighttime sleep environment, increase daytime activity levels and light exposure).



Supplement to NCCIH Parent Grant

Integrating Mind Body Skills with Physical Activity to Improve Pain Outcomes in Patients with Heterogeneous Chronic Pain Conditions



 Goal: Adapt a mind body program (the Relaxation Response Resilience Program) for the specific needs of individuals with chronic pain who have documented MCI. The researchers are specifically targeting increased physical activity, with tracking devices like Fitbits.

Supplement to NIDCD Parent Grant

Community-Delivered Affordable, Accessible Hearing Care to Reduce Symptom Burden in Alzheimer's Disease: Adaptation of HEARS Intervention



 Goal: Adapt the HEARS (Hearing Equality through Accessible Research & Solutions) intervention to older adults with ADRD and their caregivers to potentially address hearing loss and improve communication among persons with dementia.

Supplement to NIDCD Parent Grant

Brain-Computer Interface to Enhance Attention in Alzheimer's Disease

 Goal: Enhance attention and reading skills in people with mild AD through a visual-attentionto-letters training paradigm. The training uses a letter-based brain-computer interface, the Rapid Serial Visual Presentation Keyboard system, which was already established in the parent award.



NIA AD/ADRD Health Care Systems Research Collaboratory

- <u>Goal:</u> To improve care for persons with dementia (PWD) and their caregivers through health and longterm care <u>systems</u>, to include:
 - primary and specialty outpatient care
 - acute inpatient care
 - skilled nursing and other rehabilitation facilities
 - residential long-term care
 - home and community-based services
- https://grants.nih.gov/grants/guide/rfa-files/rfa-ag-19-009.html

NIA AD/ADRD Health Care Systems Research Collaboratory, cont'd

- Promote development of pragmatic trials and demonstration projects
- Develop and disseminate technical and policy guidelines/best practices for effective research collaborations
- · Provide technical support for scaling up pilot studies
- Disseminate best practices for engaging stakeholders, conducting ethical research in the special circumstances of dementia care, and involving longterm and acute-care providers

REMINDER: iCare-AD/ADRD Challenge

Improving Care for People with AD/ADRD Using Technology Challenge

 Seeks to spur the development of technology applications to improve dementia care coordination and/or care navigation



- Up to \$400,000 in cash prizes may be awarded to teams or individuals that participate in the competition
- Submissions accepted from October 1, 2018 through June 30, 2019
- See https://nia.nih.gov/challenge-prize for full prize details

Save the Date

AD/ADRD Care/Services Summit (II)

March 24-25, 2020 Natcher Conference Center Bethesda, MD









ALZHEIMER'S **DISEASE-RELATED DEMENTIAS SUMMIT 2019:**

- Please register online at: https://meetings.ninds.nih.gov/?ID=21149
- Attendance in person is encouraged
- Videocast will be available, and the links will be posted on the meeting website closer to the date

MIARCH 14-15, 2019 NATCHER AUDITORIUM, NIH CAMPUS, BETHESDA MD

Julie Schneider, MD Rush University Medical Center NINDS, Program Director Scientific Chair

RoderickA. Corriveau, PhD NIH Lead

Sessions on:

- Multiple Etiology Dementias
- **Health Disparities**
- Emerging Topics
- Nomenclature
- Frontotemporal Degeneration
- **Lewy Body Dementias**
- Vascular Contributions to Cognitive Impairment and Dementia





FY 2019 ADRD Research Funding Opportunities

- <u>Diversity Notice</u> to encourage NINDS AD/ADRD awardees to apply for administrative supplements in response to PA-18-906 Research Supplements to Promote Diversity in Health-Related Research
- Upcoming FOA Post-Stroke VCID in the U.S. including in Health Disparities Populations NOT-NS-18-092
 - Goal: To invite applications for a large prospective clinical research study to determine the specific subsets of stroke events that predict cognitive impairment and dementia in post-stroke populations and identify any additional clinical factors/comorbidities that influence cognitive impairment and dementia outcomes (Estimated Application Due Date: March 2019)
- Upcoming FOA Development and Validation of Advanced Mammalian Models for ADRD
 - Goal: To invite applications that would develop improved mammalian models of Lewy body, frontotemporal, vascular, and mixed dementias that recapitulate comprehensive disease phenotypes

6 more new ADRD funding opportunities are planned for FY 2019