Alzheimer’s Disease and Related Dementias Research Update

FY 2024 Bypass Budget

Richard J. Hodes, M.D.
Director, National Institute on Aging

July 25, 2022

Bypass Budget Language

SEC. 230. Hereafter, for each fiscal year through fiscal year 2025, the Director of the National Institutes of Health shall prepare and submit directly to the President for review and transmittal to Congress, after reasonable opportunity for comment, but without change, by the Secretary of Health and Human Services and the Advisory Council on Alzheimer’s Research, Care, and Services, an annual budget estimate (including an estimate of the number and type of personnel needs for the Institutes) for the initiatives of the National Institutes of Health pursuant to the National Alzheimer’s Plan, as required under section 2(d)(2) of Public Law 111–375.
Using CADRO as a Framework

- Six research areas – derived from the CADRO (Common Alzheimer's and Related Dementias Research Ontology) categories – provide the overarching framework for the FY24 AD Bypass Budget and narrative.

- CADRO provides the framework for IADRP (the International Alzheimer’s Disease Research Portfolio) and allows tracking of implementation of funding across research areas.
Professional Judgment Budget FY 2024, Projected Costs and Additional Resources Needed

<table>
<thead>
<tr>
<th>Additional Resources Needed</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epidemiology/Population Studies</td>
<td>$75,000,000</td>
</tr>
<tr>
<td>Disease Mechanisms</td>
<td>$65,500,000</td>
</tr>
<tr>
<td>Diagnosis, Assessment, and Disease Monitoring</td>
<td>$44,000,000</td>
</tr>
<tr>
<td>Translational Research and Clinical Interventions</td>
<td>$142,500,000</td>
</tr>
<tr>
<td>Dementia Care and Impact of Disease</td>
<td>$41,000,000</td>
</tr>
<tr>
<td>Research Resources</td>
<td>$80,800,000</td>
</tr>
<tr>
<td>Alzheimer’s Disease-Related Dementias</td>
<td>$40,000,000</td>
</tr>
<tr>
<td>Staffing Needs and Administrative Support</td>
<td>$9,437,000</td>
</tr>
<tr>
<td><strong>Total Costs for New AD/ADR Research</strong></td>
<td><strong>$498,237,000</strong></td>
</tr>
<tr>
<td>Less: Funding from completed projects that is now available for new AD/ADR research</td>
<td>($177,000,000)</td>
</tr>
<tr>
<td><strong>Additional FY 2024 Resources Needed for New AD/ADR Research</strong></td>
<td><strong>$321,237,000</strong></td>
</tr>
</tbody>
</table>

Distribution of FY 2024 Projected Costs Across Research Areas

- **Research Resources** $80,800,000 (16%)
- **Dementia Care and Impact of Disease** $41,000,000 (8%)
- **Epidemiology/Population Studies** $75,000,000 (15%)
- **Alzheimer’s Related Dementias** $40,000,000 (8%)
- **Staffing Needs and Administrative Support** $9,437,000 (2%)
- **Disease Mechanisms** $65,500,000 (13%)
- **Diagnosis, Assessment, and Disease Monitoring** $44,000,000 (9%)
- **Translational Research and Clinical Interventions** $142,500,000 (29%)

**Total Projected Costs:** $498,237,000

**Less: Funding from completed projects**

$177,000,000

**Additional Resources Needed for New Research:**

$321,237,000
Total Resource Needs, FY 2024

<table>
<thead>
<tr>
<th>Total Resources Needed</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2022 NIH Estimate (based on FY 2022 enacted dollars) for AD/ADRD Research (baseline estimate)</td>
<td>$3,553,000,000</td>
</tr>
<tr>
<td>ADDITIONAL FY 2024 Resources Needed for New AD/ADRD Research</td>
<td>$321,237,000</td>
</tr>
<tr>
<td>Total FY 2024 Resources Needed for AD/ADRD Research</td>
<td>$3,874,237,000</td>
</tr>
</tbody>
</table>

FY 2024 ADBB Narrative: Future Research Opportunities

- Features a new, prospective narrative outlining examples of research opportunities that could be pursued with additional investment.
- Organized by six research areas, with an additional cross-cutting area.

https://www.nia.nih.gov/bypass-budget
FY 2024 ADBB Narrative: Examples of Future Research Opportunities

- Organized by six research areas, with an additional cross-cutting area.
  - Epidemiology/Population Studies
  - Disease Mechanisms
  - Diagnosis, Assessment, and Disease Monitoring
  - Translational Research and Clinical Interventions
  - Dementia Care and Impact of Disease
  - Research Resources
  - Cross-cutting: Health Equity and Inclusion

FY 2024 ADBB Narrative: Examples of Future Research Opportunities

- Epidemiology/Population Studies
  - Use longitudinal studies to examine the role of social determinants of health in the risk and development of AD/ADRD
  - Fund a precision environmental health approach to risk reduction and prevention for AD/ADRD

- Disease Mechanisms
  - Fund efforts to systematically identify and elucidate the functional roles of different genetic elements on risk and development of AD/ADRD
  - Fund proof-of-principle studies of novel immunotherapies to fight neurodegenerative diseases
FY 2024 ADBB Narrative: Examples of Future Research Opportunities

• Diagnosis, Assessment, and Disease Monitoring
  > Expand the AT(N) framework to consider related dementias and develop clinical tools to differentiate between Alzheimer’s disease and related dementias
  > Leverage technologies that enable characterization of individual cells to create research tools, identify novel therapeutic targets, and facilitate therapeutic development

• Translational Research and Clinical Interventions
  > Enhance digitized health records with demographic and environmental data to identify risk or resilience factors and aid in therapeutic development
  > Fund large-scale pragmatic trials of AD/ADRD prevention approaches
  > Initiate a new Artificial Intelligence for Drug Discovery Program to accelerate drug design for AD/ADRD

FY 2024 ADBB Narrative: Examples of Future Research Opportunities

• Dementia Care and Impact of Disease
  > Establish a research consortium that brings together multiple sources of dementia care data to address barriers to integrated care
  > Fund economic research to explore how incentives can be optimized for dementia care, thereby improving quality of care while reducing costs

• Research Resources
  > Develop, validate, and share new translational research tools, including microphysiological models of dementia, for use in preclinical screening and testing
  > Enhance research & data sharing infrastructure by standing up a centralized online hub of all available NIH-funded resources, including protocols, samples, and data.
FY 2024 ADBB Narrative: Examples of Future Research Opportunities

- Cross-cutting theme: Health Equity and Inclusion
  - Expand efforts to understand causes and consequences of health disparities, as well as the potential modifiable risk factors to address health disparities
  - Address infrastructure challenges, such as enhancing community engagement efforts and recruitment of diverse populations for clinical trials
  - Establish new cross-disciplinary career development programs in dementia research for underrepresented early-stage scientists

AD/ADRD Progress Report

- Previous versions of the ADBB featured a retrospective progress report
- This report will now be released separately, in Fall 2022
- It will feature examples of recent science advances across multiple research topics, from basic to clinical research, care/caregiving interventions, and more.
Implementation Tracking

- Web-based tool for tracking funding initiatives and activities: https://www.nia.nih.gov/research/milestones
  - Newly revised
  - Aimed at addressing the research milestones associated with NAPA

- IADRP: http://iadrp.nia.nih.gov/
  - Will continue to offer detailed tracking of awards under the CADRO categories

Upcoming Events
The Butler-Williams Scholars Program

For junior faculty and researchers new to the field of aging

Dates: August 23-25, 2022
Location: To be held virtually
Eligibility: Doctoral degree – Ph.D., DrPH, M.D., etc.

For more details and to apply for a future session:
https://www.nia.nih.gov/research/osp/butler-williams-scholars-program

Save the Date: 2023 Geroscience Summit

The Fourth Geroscience Summit:
Geroscience for the Next Generation

April 24-26, 2023
Bethesda, MD
Ways to Stay Informed and Connected

Search all active NIA funding opportunities: https://www.nia.nih.gov/research/funding

Review the latest approved concepts: https://www.nia.nih.gov/approved-concepts

Subscribe to our blog and stay up to date on the latest NIA news: https://www.nia.nih.gov/research/blog

National Institute on Aging, The Leader in Aging Research