THE ALZHEIMER'S ASSOCIATION IS THE LARGEST NONPROFIT FUNDER OF ALZHEIMER'S AND ALL OTHER DEMENTIA RESEARCH IN THE WORLD

At any given moment, research is happening. The Association once again made its largest-ever total annual research investment in FY22: More than \$90 million, including over \$71 million in grants for new scientific investigations. As the world's leading nonprofit funder of Alzheimer's and other dementia research, the Association is currently investing over \$310 million in more than 950 active best-of-field projects in 48 countries.

International Research Grant Program (IRGP)

The Alzheimer's Association received 949 proposals in response to specific programs issued via its International Research Grant Program. Grants were awarded to researchers whose proposals were ranked highest in a rigorous three-tier peer-review process. The Association engages a panel of international volunteer scientists to evaluate the merits of each proposal; nearly 800 individuals from 29 countries provided 4,734 reviews in 2022.

In FY2022 the Association reissued several funding programs. With input from the IRGP Council and the Medical and Scientific Advisory Group (MSAG) to ensure an overall portfolio balance across the entire spectrum of dementia science, the Association funded 34% of submitted applications across all programs. Newly funded projects are advancing dementia research across four essential areas:

Molecular Pathogenesis and Physiology of Alzheimer's and other Dementia – 45% (144 projects) of funded projects are exploring processes including brain inflammation and immunity, cellular transport, genetics and the production of proteins (e.g., beta-amyloid, tau, alpha synuclein, etc.), and cellular functions that may normally protect and maintain nerve cells in the brain.

Diagnosis, Assessment and Disease Monitoring of Alzheimer's and other Dementia – 19% (61 projects) of the projects are investigating tools and methods aimed at earlier diagnosis, timelier interventions and more effective monitoring of disease progression. This includes studies that develop and expand the use of brain scans, fluid biomarkers such as blood tests, and clinical tools, as well as studies that combine these measures to further develop, standardize and validate them.

Translational Research and Clinical Interventions – 18% (57 **projects**) of the projects are exploring novel treatment strategies for potential drugs (drug discovery, drug development and human trials) and non-drug interventions for Alzheimer's and other dementia.

Dementia Care and Impact of Disease, including Population Studies – 18% (57 projects) of the projects are studying potential factors that may impact an individual's risk for dementia and ways to improve care (such as with new technology) for people at all stages of Alzheimer's and other dementia.

IRGP grant types, including the number of grants per type in parentheses:

- (67) Alzheimer's Association Research Grants (AARG) and (22) Alzheimer's Association Research Grants to Promote Diversity (AARG-D) to fund investigations by scientists in dementia research who are less than 18 years past their advanced or terminal degree.
- (24) Alzheimer's Association Research Grants New to the Field (AARG-NTF) and (12) Alzheimer's Association Research Grants to Promote Diversity New to the Field (AARG-D-NTF) to fund investigations by scientists who are new to dementia research.
- (69) Alzheimer's Association Research Fellowships (AARF) and (22) Alzheimer's Association Research Fellowships to Promote Diversity (AARF-D) to support investigations by exceptional researchers in dementia research who are engaged in post-graduate work (i.e., postdoctoral fellows or early career faculty).
- (16) Alzheimer's Association Clinical Fellowships (AACSF) and (6) Alzheimer's Association Clinical Fellowships to Promote Diversity (AACSF-D) to support training in dementia research for clinicians who have completed their residency (M.D.), postdoctoral fellowship (Ph.D.) or both and actively see patients.
- **(6) Part the Cloud (PTC) Awards 2022** in partnership with Part the Cloud, an initiative benefiting the Alzheimer's Association that provides funding for Phase I and Phase II clinical trials worldwide.
- (3) Zenith Fellows Awards (ZNTH) to support senior scientists who have made significant contributions to the field of dementia research or another area and who will pursue promising lines of investigation in Alzheimer's disease mechanisms, diagnosis and novel treatment approaches.
- (5) Alzheimer's Association Investigator Initiated Award (AAIIA) to support established researchers with meritorious projects that were submitted to the Association in other programs.

(26) Pilot Awards for Global Brain Health Leaders (GBHL), a joint effort by the Association, the Global Brain Health Institute (GBHI) and the UK-based Alzheimer's Society to support leaders focused on advancing innovative projects that create social change for improving health equity in dementia care.

(8) Neuropsychological Effects of COVID-19 in Older Adults from Health Disparity Populations (NeuroCOVID), a joint partnership with the National Academy of Neuropsychology (NAN) to support research focused on the neuropsychological impacts of COVID-19 in older adults from health disparity populations.

The Alzheimer's Disease Strategic Fund (ADSF) is a collaboration between the Alzheimer's Association and an anonymous foundation to fund innovative research through consortia-based team-science projects and open funding calls to the global research community. Through the ASDF in FY22, (1) ADSF consortium award was given to provide funding to increase knowledge of the underpinnings of inflammation in Alzheimer's disease and (12) ADSF APOE Biology in Alzheimer's (ABA) Program awards were given to provide funding to increase the understanding of APOE biology and contributions to disease.

Strategic Research Initiatives

Leveraging insights and a global network of dementia scientists, philanthropic partners and other stakeholders, the Alzheimer's Association proactively identifies, accelerates and enhances Strategic Research Initiatives with elevated potential for advancing the entire field of dementia research. The Association issued support for twenty (20) Strategic Research Initiatives in FY2022. Examples of these high-impact projects include:

The AHEAD Study comprises two phase III clinical trials testing the anti-amyloid drug lecanamab in individuals who have buildup of beta-amyloid. Equity AHEAD (Increasing Diverse Representation in Clinical Trials for Dementia) supports community-based recruitment to the AHEAD study in order to ensure study outcomes are relevant to all communities. The Alzheimer's Clinical Trials Consortium (ACTC) will leverage this funding to establish a nationwide infrastructure for the ongoing engagement of diverse groups in clinical Through ACTC, the AHEAD studies. Biomarker Biorepository supports long-term storage of biological samples from study participants to share with the research community.

ALZ-NET (Alzheimer's Network for Treatment and Diagnostics) is a new global network developed to help both clinicians and scientists better understand FDA-approved Alzheimer's treatments using real-world evidence. Data collected in ALZ-NET will be available to health care providers to improve disease diagnosis and patient care and to researchers to improve future treatments for Alzheimer's.

DIAN-TU (Dominantly Inherited Alzheimer Network Trials Unit) is one of the world's leading Alzheimer's prevention studies. In FY2022 the Association, in partnership with GHR Foundation, made a commitment to support the DIAN-TU Primary Prevention Study, the first trial targeting beta-amyloid in individuals who will develop the disease due to a genetic mutation before the onset of clinical symptoms. Previously funded and ongoing work in DIAN-TU includes: DIAN-TU Tau Next Generation (NexGen), which is testing the next generation of experimental therapies targeting tau protein in clinical trials; DIAN-TU Open Label Extension (DIAN-TU OLE), an initiative to collect more biomarker, clinical and cognitive data on an experimental drug therapy administered at a high dose; and DIAN LATAM (Latin America), an initiative to add DIAN observational study sites in Latin American countries to grow the network and increase dementia awareness. For more information please visit dian.wustl.edu/our-research/clinical-trial/.

The use of blood tests to diagnose Alzheimer's is rapidly advancing, though more research is needed before this could be used in global clinical practice. The Standardization of Alzheimer's Blood Biomarkers (SABB) Pre-analytics FIRST and Pre-analytics NEXT studies aim to develop a protocol for processing blood samples for analysis with Alzheimer's disease biomarkers. The first results from this work were published in *Alzheimer's & Dementia*.

Note: For more details visit <u>alz.org/research</u>.