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. In FY2021 the Alzheimer's Association made its largest ever annual investment in new research, committing more than \$70 million to fuel 253 research projects, including 236 investigations funded via requests for applications (RFAs) and 17 commitments to support Strategic Research Initiatives. By the end of FY2021, the Association's active funding commitments totaled more than \$250 million to more than 750 best of field projects in 39 countries.

International Research Grant Program (IRGP)

The Alzheimer's Association received 621 proposals in response to RFAs 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; 566 individuals from 29 countries provided 7,801 reviews in 2021.

In March 2020 the Alzheimer's Association paused the application process in response to challenges presented by the COVID-19 pandemic, which impacted biomedical research around the world. The Association worked closely with the research community during this time and provided special support, including grants to help early-career researchers continue to achieve progress in their Association-funded dementia investigations.

In FY2021 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 32% 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 – 33% 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 -15% of the projects are investigating tools and methods aimed at earlier diagnosis, timelier interventions and effective monitoring of disease

progression. This includes studies that develop and expand 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 -15% 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 –37 % 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

- (37) Alzheimer's Association Research Grants (AARG) and (11) Alzheimer's Association Research Grants to Promote Diversity (AARG-D) fund investigations by scientists in dementia research who are less than 15 years past their advanced or terminal degree.
- (16) Alzheimer's Association Research Grants New to the Field (AARG-NTF) and (4) Alzheimer's Association Research Grants to Promote Diversity New to the Field (AARG-D-NTF) fund investigations by scientists who are new to dementia research.
- (41) Alzheimer's Association Research Fellowships (AARF) and (11) Alzheimer's Association Research Fellowships to Promote Diversity (AARF-D) support investigations by exceptional researchers in dementia research who are engaged in post-graduate work (i.e., postdoctoral fellows).
- (10) Alzheimer's Association Clinical Fellowships (AACSF) and (2) Alzheimer's Association Clinical Fellowships to Promote Diversity (AACSF-D) support training in dementia research for clinicians who have completed their residency (M.D.), postdoctoral fellowship (Ph.D.) or both and actively see patients.
- (5) Part the Cloud (PTC) Gates Awards 2021 in partnership with Part the Cloud, an initiative benefiting the Alzheimer's Association, provides funding for Phase I and Phase II clinical trials worldwide. Part the Cloud partnered with Bill Gates for the PTC-Gates Awards, which focus on advancing potential therapies for dementia that target biogenetics, cell clearance mechanisms and vascular contributions into human trials.

(4) Zenith Fellows Awards (ZNTH) 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.

(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, support leaders focused on advancing innovative projects that create social change for improving health equity in dementia care.

(34) Alzheimer's Association Rapid Program in Dementia (RAPID) grants provide funding to early-career researchers who are currently funded by the Association to continue achieving progress in their investigations despite challenges presented by the COVID-19 pandemic.

(33) Alzheimer's Disease Strategic Fund (ADSF) awards provide funding for collaborative team science focused on the increasing knowledge of the underpinnings of Alzheimer's disease, with a focus on immune and clearance biologies. The awards were issued via ADSF Consortia Funding Programs (25) and the Neuroimmune Funding Program (8). The 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.

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 seventeen (17) Strategic Research Initiatives in FY2021. Examples of these high-impact projects include:

DIAN-TU (Dominantly Inherited Alzheimer Network Trials Unit) is one of the world's leading Alzheimer's prevention studies. In FY2021 the Association made several new commitments to the groundbreaking trial, including support for: 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/.

World-Wide FINGERS (WW-FINGERS) is a global initiative to understand and evaluate whether lifestyle interventions that simultaneously target many risk factors can protect cognitive function in older adults at an increased risk for cognitive decline. New and ongoing studies in the WW-FINGERS network include: U.S. POINTER (U.S. Study to Protect Brain Health Through Lifestyle Intervention to Reduce Risk), the first study of its kind to be conducted in a large group of Americans across the U.S.; LatAm FINGERS (Latin America FINGERS), a first-of-its-kind study bringing together researchers from 12 Latin American countries to better understand whether lifestyle interventions can reduce cognitive decline in this population; and AU-ARROW (AUstralian Multidomain Approach to Reduce Dementia Risk by Protecting Brain Health with Lifestyle Intervention), which will help provide insights on the same focus area among the Australian population. WW-FINGERS initiatives are active across the world. A full list of studies can be found at www.alz.org/wwfingers/overview.asp.

New IDEAS (Imaging Dementia - Evidence for Amyloid Scanning) builds on the momentum of the original IDEAS Study to determine the clinical value of a beta-amyloid PET brain scan in individuals from diverse backgrounds, ages 65 and older with mild cognitive impairment (MCI) or dementia. The Association is enhancing the study by enabling the New IDEAS Biorepository. Housed at the University of Southern California, the New IDEAS Biorepository will store saliva and blood samples from the participants who have completed brain scans. This will allow researchers to test and validate new genetic and blood biomarkers for dementia that are applicable and accurate for a diverse, "real-world" population. For more information please visit www.ideas-study.org/.

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