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

The Alzheimer's Association made the *largest-ever research investment* of more than \$42 million in FY2019 to advance **162** <u>new</u> research projects. These projects include 139 investigations funded through the International Research Grant Program (IRGP) and 23 strategic research initiatives. Today, the Alzheimer's Association is funding \$167 million to more than 500 best-of-field projects in 27 countries.

IRGP RESEARCH CATEGORY

This includes proposals ranked highest by a peerreviewed process in an extremely competitive field of 519 applications submitted from 1084 letters of intent. Grant information by research categories and specific grant competition includes:

Molecular Pathogenesis and Physiology of Alzheimer's Disease and All Dementia – 30% of the funded projects are exploring processes including brain inflammation and immunity, cellular transport, genetics and the production of betaamyloid, tau, alpha synuclein and others, as well as cellular properties and functions that may normally protect and maintain nerve cells in the brain.

Diagnosis, Assessment and Disease Monitoring – 25% of the projects are investigating brain imaging, fluid biomarkers including blood tests, and clinical tools aimed at earlier diagnosis, timelier interventions, and effective disease monitoring.

Translational Research and Clinical Interventions

– 18% of the projects are exploring novel treatment strategies for potential drug and non-drug interventions.

Dementia Care and Impact of Disease, including population studies – 27% of the projects are studying potential factors that may increase or decrease an individual's risk for dementia and ways to improve care for people at all stages of Alzheimer's and all dementia and interventions to support new technology as well as those providing care. In addition, projects may focus on better understanding and addressing health disparities.

IRGP specific grants competitions, including # of grants per program in parantheses:

(24) Alzheimer's Association Research Grants (AARG) and (7) Alzheimer's Association Research Grants to Promote Diversity (AARG-D) to fund investigators in Alzheimer's and all dementia research who are less than 10 years past their medical or doctoral degree and those who are currently underrepresented (at academic institutions) respectively.

(10) 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) funds investigators who are new to Alzheimer's and related dementia research and those who are currently underrepresented (at academic institutions), respectively.

(27) Alzheimer's Association Research Fellowships (AARF) and (7) Alzheimer's Association Research Fellowships to Promote Diversity (AARF-D) to support exceptional researchers in Alzheimer's and all dementia research, who are engaged in their post-graduate work (i.e. postdoctoral fellows) and are currently underrepresented (at academic institutions) respectively.

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(9) Alzheimer's Association Clinical Fellowships (AACSF) and (1) Alzheimer's Association Clinical Fellowship to Promote Diversity (AACSF-D) to support clinical research training in Alzheimer's and all dementia for clinical fellows and for those who are currently underrepresented (at academic institutions) respectively. These fellows have completed their residency (MD), postdoctoral fellowship (PhD), or both (MD/PhD).

(6) Part the Cloud Translational Research Funding for Alzheimer's Disease (PTC) awards, including the PTC Challenge award, in partnership with the Part the Cloud initiative to increase research efforts in Phase I and Phase II clinical trials directed towards Alzheimer's disease and all dementia internationally and also to accelerate the discovery and testing of innovative compounds to be used for interventions in the earliest stages of Alzheimer's. These awards have been made possible by funding from Part the Cloud, benefiting the Alzheimer's Association.

(1) Alzheimer's Innovation Award (AIA) award in collaboration with Johnson and Johnson innovation to promote novelty in new drug discovery and development.

(3) Zenith Fellows Awards (ZNTH) to support senior scientists who have made significant contributions to the field of Alzheimer's and related dementia research, and who continue to pursue promising lines of investigation in disease mechanisms, diagnosis, novel treatments, and quality care.

(10) Biomarkers Across Neurodegenerative Diseases Awards (BAND) awards in collaboration with Alzheimer's Research UK, The Michael J. Fox Foundation for Parkinson's Research, and the Weston Brain Institute, to enable researchers to analyze data of existing cohorts to discover biomarkers, identify genetic profiles, and optimize brain scan modalities across Alzheimer's disease and all dementia to increase understanding of the similarities or differences between these diseases and to help identify populations and potential treatments. (22) Pilot Awards for Global Brain Health Leaders (GBHI) is a joint effort of the Alzheimer's Association, Global Brain Health Initiative (GBHI) and Alzheimer's Society to advance brain health leaders' innovative and unique projects that create social change.

(8) GAAIN Exploration to Evaluate Novel Alzheimer's Queries (GEENA-Q) awards to stimulate researchers to interrogate the federated GAAIN (Global Alzheimer's Association Interactive Network) platform—a cloud based network— for new discoveries in Alzheimer's and all dementia research.

INTERNATIONAL RESEARCH GRANT PROGRAM- PEER-REVIEW EVALUATION

The Alzheimer's Association Medical and Scientific Relations Division engages a panel of volunteer scientists to evaluate the merits of each proposal anonymously. A total of 648 reviewers from 26 countries provided 1,513 reviews in 2019. The Alzheimer's Association, with the IRGP Council and the Medical and Scientific Advisory Group (MSAG) evaluates the peer review process and makes recommendations on each grant program's awards to ensure overall portfolio balance across the entire spectrum of science. The Association estimates that approximately 42% of proposals in 2019 deserved funding, however, with available resources, 27% of the projects were advanced. Research grants awarded by the Alzheimer's Association International Research Grant Program have indirect costs capped at 10%. The Association strictly enforces that at least 90% of the grant funding goes directly to the research project.

STRATEGIC RESEARCH INITIATIVES

Strategic Research Initiatives are opportunities to advance high-impact research projects. The Association leverages insights, global network and philanthropic investments to proactively identify, accelerate and enhance investigations with elevated potential for advancing the entire field of dementia research farther and faster. Some examples of strategic grants include: **INSIGHT (INveStiGation of AlzHeimer's PredicTors in Subjective Memory Complainers) is an observational study** to determine the biomarker/ biomarker combination or the algorithm that most accurately predicts Alzheimer's disease in a group of older adults with self-reported memory complaint.

SPRINT MIND 2.0 (Systolic Blood Pressure Intervention Trial Memory and Cognition in Decreased Hypertension) is a newly funded study that will continue and extend follow up of the SPRINT MIND trial. The SPRINT MIND 2.0 study will investigate the impact of intensive blood pressure treatment on reducing risk of cognitive impairment and dementia.

Accelerating Medicines Partnership-Alzheimer's Disease (AMP-AD) is a partnership among government, industry and nonprofit organizations (including the Alzheimer's Association) that focuses on discovering, validating and accelerating new drug targets.

Health and Retirement Study (HRS)

Neuroimaging Pilot Study will pilot the addition of brain scans to the original seminal HRS, collecting and distributing data to inform multidisciplinary research studies on key issues regarding the health and economic well-being of middle-aged and older adults in the United States within their community. The Neuroimaging pilot will engage individuals over two years, from the HRS study and add cognitive evaluation to determine the feasibility and provide the first hint of how many individuals in the community are living with Alzheimer's disease.

Imaging Dementia Evidence for Amyloid Scanning (IDEAS) Study to determine the clinical value of using brain amyloid PET imaging in diagnosing and managing treatment of individuals age 65 and older with mild cognitive impairment (MCI) or dementia of uncertain cause. The IDEAS Study is led by the Alzheimer's Association and managed by the American College of Radiology (ACR) and the American College of Radiology Imaging Network (ACRIN). The IDEAS study and **The Brain Health Registry (BHR)** – an online registry– are working together to engage interested IDEAS participants with BHR to monitor progression of overall health and cognition. The Alzheimer's Neuroimaging and Genetics Initiative (ANGI) will collect genetic information from IDEAS participants. For more information visit alz.org/ideas.

Longitudinal Early Onset Alzheimer's Disease Study (LEADS GENETICS) will expand the scope of the parent grant (LEADS) led by Indiana University, the Alzheimer's Association, Harvard and University of California, San Francisco. The LEADS GENETICS study will perform genetic analyses to better inform our understanding of Early Onset Alzheimer's Disease (EOAD) that could enable future planning and implementation of clinical trials in EOAD.

<u>U.S.</u> Study to <u>Protect</u> Brain Health Through Lifestyle <u>Intervention to Reduce Risk</u> (U.S. POINTER) to evaluate whether lifestyle interventions that simultaneously target many risk factors protect cognitive function in older adults (60-79 years old) who are at increased risk for cognitive decline. U.S. POINTER is the **first such study** to be conducted in a large group of Americans across the U.S.

Note: For more details visit alz.org/research

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