

2004 Alzheimer's Association Research Grants

—Portfolio Profile

The Alzheimer's Association received a record 694 applications for our fiscal 2004 research grants. With available funds, we were able to award 71 proposals ranked highest by their peer reviewers a total of \$15,883,000. Since 1982, the Alzheimer's Association has awarded a total of more than \$165 million to 1,336 research projects.

Awards by grant category

- Our Pioneer Award (\$1 million over 5 years) to Philip D. Sloane, M.D., M.P.H., University of North Carolina at Chapel Hill, will explore strategies for improving care of individuals with dementia who reside in assisted living facilities.
- Our Senator Mark Hatfield Award in Clinical Research to Daniel L. Murman, M.D., M.S., Michigan State University, will study ways to improve outpatient dementia care.
- 5 Zenith Fellows Awards to senior scientists investigate cutting-edge approaches to early detection, causes, treatment or prevention of Alzheimer's.
- 5 Everyday Technology for Alzheimer Care grants, awarded in partnership with Intel Corp., explore how televisions, computers, monitoring devices and other household electronics can be used to meet the day-to-day needs of individuals with Alzheimer's and those who care for them.
- 38 Investigator-Initiated Research Grants to established investigators support work addressing virtually every critical question in dementia research.
- 21 New Investigator Research Grants fund the next generation of promising dementia researchers who have earned their doctoral degrees within the last 10 years.

Senior science staff selected 10 investigator-initiated projects and 5 new investigators for inclusion in the Ronald and Nancy Reagan Research Institute, an initiative supporting innovative basic science in honor of the Reagan family's longstanding commitment to the Alzheimer cause.

Research themes

- 25 percent of 2004 projects explore best practices in care and strategies to support diagnosed individuals, their caregivers and family members.
- 20 percent focus on aspects of the "amyloid hypothesis," the theory that some stage of production or accumulation of the protein fragment called beta-amyloid is the key toxic event that damages and kills nerve cells in Alzheimer's disease. Confirming or disproving the amyloid hypothesis is among the most pressing questions in Alzheimer research.
- 20 percent investigate other cellular processes, proteins, and signaling pathways that may be implicated in Alzheimer's.
- 20 percent study brain imaging and other new tools for assessment, diagnosis and monitoring disease progression. These techniques will play a key role in supporting new treatment development.
- 10 percent focus on treatments directed at beta-amyloid and other promising new targets.
- 5 percent explore diet, cardiovascular issues, and other potential approaches to prevention.

Alzheimer's Association peer review

For each research proposal, our Medical and Scientific Affairs Division engages a custom panel of three to six volunteer "peer" scientists with expertise in the proposed area of investigation to evaluate the merits of the project. Following custom panel peer review, our Medical and Scientific Advisory Council (MSAC) meets to assure the fairness of individual evaluations and to fine-tune each year's awards so our overall portfolio covers significant established research areas and moves the field forward in important new directions. Based on scores awarded by peer reviewers and MSAC review, senior science staff estimates that 40 percent of 2004 proposals deserved funding. Only 10 percent could be funded with available resources.