DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

Fiscal Year 2014 Budget Request

Statement for the Record

Senate Subcommittee on Labor-HHS-Education Appropriations

Mr. Chairman and Members of the Committee:

IMPROVING THE HEALTH AND WELL-BEING OF OLDER AMERICANS

Life expectancy in the developed world has improved dramatically over the last century, and advances in public health and medicine are allowing people to stay healthier longer. But, since 1980, U.S. life expectancy, especially for women, has lagged behind other wealthy nations, and cross-national studies suggest that older Americans get sicker sooner than older Europeans. Similar disparities in health and longevity exist across geographical areas within the United States. NIA has established an initiative to identify and address the behaviors and social circumstances behind these differences.

NIA-supported investigators are continuing to work to identify the optimal means to address the unique health needs of older individuals. For example, studies have show[or examplcentur4E1e h management system for older patients with heart failure and development of a unique biomaterial that can act as a temporary replacement for both bone and cartilage. Other ongoing studies include the ASPirin in Reducing Events in the Elderly (ASPREE) trial to determine whether the benefits of aspirin outweigh the risks in people over 70; testosterone supplementation to delay or prevent frailty in older men; exercise for mood, health, and cognition; and several interventions for menopausal symptoms.

THE FIGHT AGAINST ALZHEIMER'S DISEASE

It is estimated that as many as 5 million people in the United States aged 65 and older

, and annual costs of care for dementia, of which

using data from the Health and Retirement Study at between $157 billion and $215 billion among people 70 and older. Unless effective treatment or preventive interventions are identified, these numbers will rise significantly as the number of older Americans continues to increase. NIA has been a leader

Project Act and the development of the National Plan t

. Recent initiatives have boosted support for AD research, including

an additional $50 million in FY 2012 and $40 million in FY 2013 for the disease.

Budget request for NIA, $80 million of the increase planned for competing research project grants will be

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Disease Research Summit held in May 2012. The recent launch of the International

Disease Research Portfolio (IADRP), a publicly available database to capture the full spectrum of current AD research investments and resources throughout the world, will facilitate coordination of these efforts.

One active and highly promising area of research is the identification and elucidation of risk and protective genes for AD. For example, a variation in TREM2, a gene involved in inflammation and immune response, was recently identified as a moderate risk factor for late-onset AD, and a variant of the BCHE gene has been associated with deposition of beta-amyloid in the brain a pathologic hallmark of the disease. Other investigators found that in mice, ApoE-4, the best-known genetic risk factor for late-onset AD, is associated inflammation of the blood vessels that feed the brain involving a molecule called cyclophilin A, suggesting that cyclophilin A may be a viable drug target. Finally, investigators with the NIH-supported AD Genetics Consortium have identified a gene, ABCA7, which appears to be more strongly associated with AD in African Americans than in individuals of European ancestry. Further study is needed to confirm and extend this finding.

NIH currently supports more than 35 clinical trials, including both pilot and large-scale trials, of a wide range of interventions to prevent, slow, or treat AD and/or cognitive decline; more than 40 compounds are in preclinical development through the AD Translational Initiative. Cooperative Study was renewed earlier this year, and several interventional studies are planned: a secondary prevention trial to test an amyloid-clearing drug in 1,000 symptom-free older volunteers with abnormal levels of brain amyloid accumulation; a randomized, controlled trial to find out if supervised aerobic exercise can influence cognitive decline, slow brain atrophy, a condition that often leads to AD; and a study to test the drug prazosin to help control agitation, a common symptom in AD patients.

UNDERSTANDING AGING AT THE MOST BASIC LEVEL

NIA initiatives on the molecular mechanisms of aging, from in-depth study of single cells to the broad study of organisms at the systems level, continue to advance our

Richard J. Hodes, M.D.

Director, National Institute on Aging

Richard J. Hodes, M.D., directs the research program of the National Institute on Aging (NIA) at the National Institutes of Health. A leading immunologist, Dr. Hodes was named Director of the NIA in 1993, to oversee studies of the basic, clinical, epidemiological and social aspects of aging.

reduce the length and cost of clinical trials, thereby speeding up the testing of new therapies for AD.

Dr. Hodes is a graduate of Yale University and received his M.D., from Harvard Medical School. He completed training in Internal Medicine at Massachusetts General Hospital and in Oncology at the National Cancer Institute. Dr. Hodes is a Diplomate of the American Board of Internal Medicine. In 1995, he was elected as a member of The Dana Alliance for Brain Initiatives; in 1997, he was elected as a Fellow of the American Association for the Advancement of Science; and in 1999, he was elected to membership in the Institute of Medicine of the National Academy of Sciences.

cellular and molecular mechanisms that regulate the immune response, with major fields of current emphasis in: 1) the function of costimulation in T and B cell lineage development and function, and 2) regulation of telomere length, and its functional consequences, in both h