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SUMMARY

At Johns Hopkins, with federal funding from the National Institutes of Health, we are proud to be on the forefront of Alzheimer's research and we are as optimistic about the breakthrough drugs on the horizon. We are also just as concerned about reductions in NIH funding.

There is a rapidly growing body of knowledge about the links between cardiovascular risk and Alzheimer's and about the possibilities that exercise, diet and even social engagement might help reduce the risks of Alzheimer's and cognitive decline. However, we still don't know how much exercise, or which kinds of social engagement, or which specific dietary changes will have the greatest impact on the disease. But, the findings are strong enough that the Alzheimer's Association has launched its Maintain Your Brain Campaign® and in partnership with the Centers for Disease Control has initiated a new effort to address cognitive health. Maintain Your Brain® workshops educated 26,000 people in communities across the nation last year. The average age of participants was 61 and many were baby boomers – program's target audience.

Another exciting development is the collaboration between the Alzheimer's Association and the Centers for Disease Control and Prevention. A National Public Health Roadmap to Cognitive Health is being developed which will provide guidance to government and the private sector on key steps to communicate the latest scientifically sound information, conduct and translate research on risk factors and strategies to maintain and improve brain health, on policy changes needed to support brain healthy behavior, and on better surveillance techniques to assess the burden of Alzheimer's disease and cognitive decline in communities nationwide. In addition, with support from the CDC, the Alzheimer's Association is now testing a program on brain health in two communities – Southern California and the Greater Atlanta area – targeted to African-American baby boomers. Given the higher rates among African Americans of cardiovascular disease, diabetes, obesity and high blood pressure, all of which are risks for Alzheimer's, a program targeted to this population could have enormous benefit for public health.

While we continue our work on strategies to prevent Alzheimer's disease, we are also learning a great deal about how to reduce its impact on patients and families. NIH-funded studies have shown that relatively simple interventions, such as caregiver education, can reduce the behavioral and psychological symptoms in people with the disease that create the greatest challenges for family caregivers and our health and long term care systems. They can reduce depression, stress, burden and unmet needs in caregivers. They can improve quality of life for both the person with the disease and the caregiver. And they can delay nursing home placement, in one study by more than a year and a half.

The most exciting research findings are meaningful only if they are translated into practice, and if the benefits offered by state and federal programs like Medicaid and Medicare are updated to incorporate these new and successful care strategies. That is why your proposed *Alzheimer's Breakthrough Act* is so important, Senator Mikulski. We have a strong foundation

and the scientific community is well on its way to the answers needed to change a diagnosis of Alzheimer's disease from a death sentence to one of hope for generations to come.

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to

AGING SUBCOMMITTEE, SENATE HEALTH, EDUCATION, LABOR & PENSIONS
COMMITTEE
MARCH 20, 2007

Good morning Madame Chair and Senator Burr. My name is Marilyn Albert, and I am Director of the Division of Cognitive Neuroscience in the Department of Neurology at Johns Hopkins University School of Medicine and Co-Director of the Johns Hopkins Alzheimer's Disease Research Center. I am also a member of the national board of the Alzheimer's Association and former chair of the Association's Medical and Scientific Advisory Council. I speak to you today as a scientist and as someone who has worked with hundreds of people with Alzheimer's disease and their families for over 20 years.

At Johns Hopkins, with federal funding from the National Institutes of Health, we are proud to be on the forefront of the research just discussed by Dr. Gandy. We are as optimistic as he is about the breakthrough drugs on the horizon. We are also just as concerned about reductions in NIH funding. Senator Mikulski, thank you for your support of Alzheimer's disease research and our efforts at Hopkins.

My reason for being here is to report ground-breaking results in two exciting areas of Alzheimer research: 1) scientific breakthroughs on lifestyle factors that could reduce the risk of developing Alzheimer's disease; and 2) evidence-based strategies to reduce the impact of Alzheimer's disease on individuals, families and our health care system. This progress is a direct result of prior investments Congress has made at the National Institutes of Health (NIH) and research supported by the Alzheimer's Association.

Reducing the Risk of Alzheimer's Disease

At this Subcommittee's last hearing on Alzheimer's, you learned about a rapidly growing body of knowledge about the links between cardiovascular risk and Alzheimer's. About the possibilities that exercise, diet and even social engagement might help reduce the risks of Alzheimer's and cognitive decline. We have only scratched the surface of these issues and we still don't know, for example, how much exercise, or which kinds of social engagement, or which specific dietary changes will have the greatest impact on the disease. But, the findings are strong enough that the Alzheimer's Association has launched its Maintain Your Brain Campaign® and in partnership with the Centers for Disease Control has initiated a new effort to address cognitive health. All of these public health initiatives are based on solid science. And,

all provide hope that we may be able to someday prevent this terrible disease through lifestyle changes and pharmaceutical interventions.

Our challenge now is to continue the research and to educate the public and health care practitioners to act on this information. We have a lot of work to do. A recent national survey by the Alzheimer's Association found that most Americans are not aware of the progress being made against Alzheimer's and that only 14% are taking any action to reduce their risk for Alzheimer's disease.

We've begun to make some progress in this area. Just last year, the Alzheimer's Association's Maintain Your Brain® workshops educated 26,000 people in communities across the nation. The average age of participants was 61 and many were baby boomers, the target audience for the program. Nearly half came to the workshops with no prior family or other experience with Alzheimer's disease, which means there is interest in brain health in the general population. We don't know whether participation in the Maintain Your Brain workshops have lead to changes in lifestyle or improvements in brain healthy behavior, but the first step in behavior change is knowledge and 90 percent said they learned something new and could apply this new knowledge.

But, the most exciting development began a year and a half ago with the collaboration between the Alzheimer's Association and the Centers for Disease Control and Prevention. With a small federal appropriation, some big things have begun to happen. Most notable is the development of a National Public Health Roadmap to Cognitive Health, which will provide guidance to government and the private sector on key steps to communicate the latest scientifically sound information, conduct and translate research on risk factors and strategies to maintain and improve brain health, on policy changes needed to support brain healthy behavior, and on better surveillance techniques to assess the burden of Alzheimer's disease and cognitive decline in communities nationwide. This report will be released in June at the Alzheimer's Association's International Prevention of Alzheimer's Disease Conference here in Washington, DC.

In addition, with support from the CDC, the Alzheimer's Association is now testing a program on brain health in two communities – Southern California and the Greater Atlanta area – targeted to African-American baby boomers. Given the higher rates among African Americans of cardiovascular disease, diabetes, obesity and high blood pressure, all of which are risks for Alzheimer's, a program targeted to this population could have enormous benefit for public health. At this time next year, this exciting demonstration project will be reporting initial results.

The CDC is also working with organizations, such as the AARP, the American Society on Aging and National Council on the Aging to educate professionals and the public about cognitive health. Some programs are targeted to school age populations in the hopes of starting at the youngest age to address brain healthy behavior.

Reducing the Impact of Alzheimer's Disease

While we continue our work on strategies to prevent Alzheimer's disease, we are also learning a great deal about how to reduce its impact on patients and families. We now have strong evidence from randomized clinical trials that coordinated medical and community care for

people with dementia and counseling and support for family caregivers can stretch out the time that people with Alzheimer's can live successfully in the community.

These NIH-funded studies have shown that relatively simple interventions, such as caregiver education, can reduce the behavioral and psychological symptoms in people with the disease that create the greatest challenges for family caregivers and our health and long term care systems. They can reduce depression, stress, burden and unmet needs in caregivers. They can improve quality of life for both the person with the disease and the caregiver. And they can delay nursing home placement, in one study by more than a year and a half.

Through the Alzheimer Demonstration Grant Program at the Administration on Aging, states are matching modest federal grants and are developing practical ways to incorporate evidence-based programs to help patients and caregivers into their health and long term care systems. For example, North Carolina developed a guide for families and a companion manual for nurses to improve hospital care for people with dementia. Georgia developed a mobile day care program to bring these important services to rural areas that did not have the resources to support a full program on their own. Maryland extended caregiver outreach services into rural and underserved minority communities. California developed a model to mobilize community resources to support Alzheimer families in underserved areas, starting first in a Latino community in Los Angeles and then adapting the program for African-American and Asian communities.

Translating Research to Practice

In the end, the most exciting research findings are meaningful only if they are translated into practice, and if the benefits offered by state and federal programs like Medicaid and Medicare are updated to incorporate these new and successful care strategies.

That is why your proposed *Alzheimer's Breakthrough Act* is so important, Senator Mikulski. It would provide the authority and resources to deliver on the exciting promise of the Alzheimer's Association/CDC Brain Health Initiative, the Maintain Your Brain®, and the community demonstrations with African American baby boomers. And it would extend the opportunity to develop innovative Alzheimer programs under AoA's Demonstration Grant Program to all 50 states. And, perhaps most important, it will lay the groundwork to increase funding at NIH to pursue the many promising avenues in Alzheimer research.

We have a strong foundation and the scientific community is well on its way to the answers needed to change a diagnosis of Alzheimer's disease from a death sentence to one of hope for generations to come. With your continued support and leadership, we can create a world without Alzheimer's.