

CURE ALZHEIMER'S FUND  
INNOVATION HEARING OUTSIDE WITNESS TESTIMONY

Chairwoman Mikulski, Vice Chairman Shelby, and members of the Senate Appropriations Committee, Cure Alzheimer's Fund is pleased to submit this outside witness testimony. We thank the Committee for having this important hearing on Driving Innovations through Federal Investments.

Cure Alzheimer's Fund is a national nonprofit, based in Massachusetts that funds research into the genetic aspects of Alzheimer's disease. It is the belief of Cure Alzheimer's Fund that we will not be able to cure the disease if we do not know what causes the disease. And the answer to that question lies in the genes that impact Alzheimer's disease.

Since its founding in 2004, Cure Alzheimer's Fund has provided more than \$22.5 million in funding for research to unlock the mystery of what causes Alzheimer's disease. It was a Cure Alzheimer's Fund supported project, The Alzheimer's Genome Project that mapped the Alzheimer's genome in 2008. This project was recognized by Time and CNN as one of the Top Ten Medical Breakthroughs of 2008.

Other funded initiatives have been responsible for several key breakthroughs—including a potential treatment recently selected by the National Institutes of Health for its elite “Blueprint” drug discovery program.

Our Research Consortium is an all-star team of scientists working at premier research institutions across the country, regularly conferring with one another on the progress and impediments in their research and constantly sharing their data with all interested researchers, not just those supported by Cure Alzheimer's Fund.

These efforts are leading to current efforts, funded in a public-private partnership by Cure Alzheimer's Fund and the National Institute of Mental Health, to undertake whole genome sequencing which will provide the targets for intervention to first delay, and ultimately prevent, onset of Alzheimer's disease. It is these types of public-private partnerships that will ultimately end the scourge of Alzheimer's disease on our country and federal budget. Further, this project is augmenting the exome sequencing being conducted by National Institute of Aging grants, showing how these partnerships are important to leveraging limited federal dollars.

A partnership between Cure Alzheimer's Fund and the federal government allowed for the purchase of a Fluidigm EP1 Genotyping System, which cut at least two years off the time for the Genome Wide Association Study. This partnership resulted in a real savings of time and money while moving us closer to a cure for Alzheimer's disease.

Because we believe that both the public and private sectors have an important role in the funding of Alzheimer's disease research, Cure Alzheimer's Fund is encouraged by this hearing because the federal government spent on Alzheimer's disease, in Fiscal Year 2013, more than \$142 billion on care, but less than \$500 million on research. Every additional dollar for research is

vital and necessary to not only preventing Alzheimer's disease, but also helping us control the rise in spending of the Centers for Medicare & Medicaid Services.

Cure Alzheimer's Fund finances high potential research, some of it in the "proof of concept" stage, which might not be funded initially by the National Institutes of Health or other funders. This "pump priming" is proving increasingly successful, as more of our early-stage grants are leveraged into more substantial and longer-term funding.

Another indicator of success is the number of peer-reviewed papers that Cure Alzheimer's Fund researchers have published, and the number of times those papers have been cited by other investigators. Researchers supported by Cure Alzheimer's Fund have published 138 papers which have been cited almost 7,652 times.

Since 2004, Cure Alzheimer's Fund has invested more than \$22.5 million in Alzheimer's disease research. This investment has resulted in more than \$35.2 million in grants from the National Institutes of Health for a total of more than \$57.7 million in Alzheimer's disease research.

Cure Alzheimer's Fund believes that the path to the cure consists of both innovation and public-private partnerships. Neither government nor private philanthropy will be able to cure Alzheimer's disease. It will take an ongoing and increasing commitment from both to be able to cure not only Alzheimer's disease, but many other diseases as well.

With continuing federal budget constraints, it is necessary to review federal expenditures. However, it is not necessary to stifle innovation or to reduce investment in research and science that will lead to disease cures that will ultimately save money because of reductions in costs to Medicaid and Medicare.

Cure Alzheimer's Fund is committed to continuing its role in supporting innovative and cutting-edge research that will lead to additional incredible scientific discoveries. But our commitment must be in concert with a federal commitment. As we described, Cure Alzheimer's Fund's investment in research has been more than doubled by National Institutes of Health investment resulting in a greater scope of innovative and necessary research. The partnership that resulted in the purchase of innovative equipment saved time and money and will lead to savings lives.

But a retreat by the federal government on funding for innovation and scientific research will halt progress and put even more lives at risk. As our population ages, Alzheimer's disease prevalence is expected to increase from 5 million today to more than 16 million in 2050. And for each person with Alzheimer's disease there is a family that is suffering as well with Alzheimer's disease making the true number of people impacted by Alzheimer's disease much, much higher.

The United States has a national plan to address Alzheimer's disease and the top goal of the plan is to cure Alzheimer's disease by 2020. This cannot be accomplished without a strong commitment to research by the federal government. Private philanthropy cannot do it alone.

Public-private partnerships, as we have described, are working and are a cost-effective way to leverage government and philanthropic investment. As our nation's healthcare needs are increasing and the cost of disease is increasing, the investment in innovation and research should also be increasing.

Cure Alzheimer's Fund has worked effectively and efficiently with government. And we will continue to do so. Cure Alzheimer's Fund knows the importance of federal investment in innovation and research and stands ready to assist this Committee in any way it can to continue this important partnership.

Thank you for the opportunity to submit this outside witness testimony. Cure Alzheimer's Fund appreciates the Committee's hard work on this matter and looks forward to continuing to working together with the federal government to cure Alzheimer's disease.

Submitted April 24, 2014 by:

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