The Alzheimer’s Disease Tsunami

Chairman and Founder Jeff Morby recently presented to the Pacific Health Summit in Seattle. Invited participants included leading scientists, public policy experts and philanthropists who offered ideas for “connecting science, innovation and policy for a healthier world”. Jeff’s presentation featured these highlights from Cure Alzheimer’s Fund’s reading of the problem and what we are doing about it.

What’s the Problem?

The point, of course, is that as this tsunami, this tidal wave of Alzheimer’s disease is sweeping over us, federal funding for research into the cause and prevention of the disease is actually going down. Along with continued pressure on our public officials to rectify this, private sources need to be found to continue the fight.

What are we doing about it?

President Tim Armour reports our progress as follows. Dollars are in cash received; no pledges or commitments are included. Please note that the Cure Alzheimer’s Fund 2005 tax return, Form 990, is now online at www.curealzfund.org.

How much have we raised?
Total funds raised from inception to July 1, 2006: $2,539,000 100%

How are we putting that money to work?
Total distributed for Research (from inception to July 1, 2006) $1,750,000 69%
Total spent for overhead/administration: (Provided by the Founders; not paid for by other donors) $320,000 13%
Reserve before additional fundraising for research in 2006 $469,000 18%
Expected additional research commitments for 2006 $700,000
Need to raise by end of year for 2006 $231,000
What research have we funded?

Cure Alzheimer’s Fund has distributed $1,750,000 to research as of June 30, 2006. The Alzheimer’s Genome Project, the identification of all remaining genes that influence risk for Alzheimer’s disease, is the heart of the effort which we believe is essential to accelerating the search for a cure. Cure Alzheimer’s Fund has so far invested $812,000 in this estimated $3 million, three-year project to be completed by the summer of 2008.

While that key foundational research is underway, we are funding complementary research derived from current genetic findings. One terrific example is the Research Consortium Collaborative. This is led by the Research Consortium Chair, Dr. Rudy Tanzi, but results from brainstorming by all the members of the Consortium and one member of the Scientific Advisory Board about how their various skills and perspectives can be brought to bear on a very hot topic in Alzheimer’s research right now—the role of Abeta oligomers in the cause of the disease. Here is a summary. A full listing of our funded research, including more detail about the individual Collaborative projects, can be found on our website at www.curealzfund.org.

Cure Alzheimer’s Fund Research Consortium Collaborative
A collaboration of five of the members of the Research Consortium and a member of the Cure Alzheimer’s Fund Science Advisory Board hypothesize that an abnormal increase in levels of synaptic Abeta and particularly, Abeta oligomers may lead to synaptic dysfunction, cognitive decline, and eventually dementia. This highly innovative collaborative project will, therefore, readdress the amyloid hypothesis by asking which types of Abeta oligomers detrimentally impact synaptic dysfunction and neuronal survival in the brain. Moreover, this collaboration will address the molecular mechanism of action by which specific Abeta oligomers impact normal synaptic function and neuronal cell viability. In summary, the six collaborative projects will address not only which Abeta oligomers are most relevant to AD pathogenesis, but also exactly how they lead to cognitive dysfunction and dementia in AD.

Dr. Charles Glabe, University of California at Irvine
The Role of Oligomeric Abeta in Alzheimer’s Disease

Dr. Virginia M.-Y. Lee, University of Pennsylvania
Abeta Oligomers in Mouse Models of Alzheimer’s Disease

Drs. Rudolph Tanzi and Robert Moir, Massachusetts General Hospital
Identification of agents that inhibit the generation and neurotoxicity of cross-linked Beta amyloid protein species (CAPS)

Dr. Sangram Sisodia, University of Chicago
Molecular Analysis of Abeta*56 Structure and Function

Dr. Paul Greengard, The Rockefeller University
The Role of Oligomeric Abeta in Synaptic Transmission and Plasticity

Dr. David Holtzman, Washington University
Role of Synaptic Activity and Neurotransmitter Modulation in the Dynamic Regulation of Interstitial Fluid Abeta and Oligomer Formation

“All projects stem from leading edge genetic research into the causes of Alzheimer’s disease with the objective of finding the most rapid path to effective therapeutic intervention.”
Perspective: A letter from Henry

Many people have asked me to share some personal thoughts about my Cure Alzheimer’s Fund experience.

First, let me say that what really counts in life beyond family and friends is giving back to one’s community.

As I became involved in Cure Alzheimer’s I became keenly aware that so many key problems in our society are not being solved by government policies or by long standing, somewhat bureaucratic, non-profits. This led my co-founders and me to articulate the venture capital/entrepreneurial approach to philanthropy that we are employing at Cure Alzheimer’s but which, hopefully, is a template/model for other non-profits as well.

Let me frame the problem. To a pragmatic, “bottom-line” oriented venture capitalist like myself, there is something wrong with the world’s greatest researchers on Alzheimer’s disease, or on any other major topic in academia, spending 25% to 35% of their time filling out forms and applications for grant money on an annual basis. Equally troubling is the fact that each member of our Research Consortium tells me their research, funded by the government or charities through this process, is approved through such a risk adverse mechanism that the funded studies are equivalent to a one yard fullback plunge in a football game. There must be a better way.

In my experience, the really great venture capitalists are not reacting to a series of funding requests that come over the transom. Instead they proactively identify and network with the very best technologists in their fields of interest and initiate the formation and funding of new companies, such as Google, Apple, Genentech and Red Hat. The venture capitalist couples the technology visionaries with experienced, go to market, executive talent. They also instill a capital efficient low overhead culture to insure that every dollar of risk capital is stretched. And finally, they are willing to take an appropriate, but not foolish, risk to create change or to be disruptive. They “dare to be great”.

Cure Alzheimer’s is attempting to harness these ideas. We have identified and recruited the absolute best Alzheimer’s disease researchers to our team. This Research Consortium has, in turn, collaborated on drafting a Research Roadmap, which is a cohesive, systematic research program to find a cure for this disease. We have hired two experienced non-profit executives to develop and implement our strategy and to raise the necessary funding to support the Research Roadmap. Our research projects have the scientists in the laboratory, not filling out forms, and are ambitious enough to move the ball – like in a 20 yard pass. The initial structure allows contributors to experience no overhead tax in the first two years and, hopefully, a very low overhead in the long term.

Over 400 of you have joined us, and we are deeply grateful for your generosity and support. We are also gratified that other people are beginning to take notice of us. This month our Chairman, Jeff Morby, was asked to present at the prestigious Pacific Health Summit, and in September, I have been asked to organize a panel on Venture Philanthropy at the Harvard Business School reunion. We look forward to keeping you posted on the progress of this most important venture.

In summary, attempting to give back through a project that is personally meaningful to me is one of life’s greatest experiences.
**Mission Statement**
Fund research with the highest probability of slowing, stopping or reversing Alzheimer’s disease by 2016.

**Research Consortium**
Rudolph E. Tanzi, Ph.D., Chairman, Research Consortium, Harvard Medical School/Massachusetts General Hospital
Charles Glabe, Ph.D., University of California at Irvine
David Michael Holtzman, M.D., Washington University, St. Louis
M. Ilyas Kamboh, Ph.D., University of Pittsburgh
Virginia M.-Y. Lee, Ph.D., MBA, University of Pennsylvania
John C. Mazziotta, M.D. Ph.D., UCLA
Sangram S. Sisodia, Ph.D., University of Chicago

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*Founder

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**Charity Designation**
Cure Alzheimer’s Fund™ is a ‘doing business as’ name for the Alzheimer’s Disease Research Foundation, a 501c3 public charity with federal tax ID # 52-2396428, and, as defined by the IRS, a 509a3 supporting organization to The Pittsburgh Foundation.

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Please help us fund research with the highest probability of slowing, stopping or reversing Alzheimer’s Disease. Donations can be made through our website www.curealzfund.org or sent directly to our office.

880 Winter Street, Suite 300, Waltham, Massachusetts 02451
Telephone: 781-622-2201 • Fax: 781-622-2300 • www.curealzfund.org