

# Steve Wagner Receives NIH 'Blueprint' Grant

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#### The CAF approach is working.

UC San Diego neuroscientist Steve Wagner, a previous recipient of two substantial grants from Cure Alzheimer's Fund (CAF), has been awarded a \$1 million NIH "Blueprint" grant for the fast-track development of a promising Alzheimer's drug therapy.

"This is further validation of our venture model," says CAF President and CEO Tim Armour. "We've always been willing to take considerable risk for the prospect of faster progress. Steve's project is a sterling example of why our founders adopted this strategy. Thanks in part to CAF's support for Wagner's research, the world is now much closer to a promising new class of Alzheimer's drugs."

Harvard professor Dr. Rudy Tanzi, Wagner's collaborator on this project, will serve on the lead development team for the five-year NIH project, which brings together 15 agencies in an unprecedented bid to quickly shepherd drug candidates into clinical trials. The new Blueprint for Neuroscience Research program is the controversial brainchild of NIH Director Francis Collins.

"Blueprint is innovative and critical," says Tanzi, "and Wagner's is the perfect inaugural project. I am extremely optimistic about the prospects for this series of drugs, given the very promising preliminary data generated in Steve's lab and my own at Massachusetts General Hospital."

Wagner is just as hopeful. "I think this is the final frontier for the beta-amyloid hypothesis," he says. "We have finally found what we've been looking for."

Preventing toxic beta-amyloid protein fragments from accumulating in the brain long has been a goal of Alzheimer's researchers because so many studies have shown their direct causal relationship to the disease. Previous compounds aimed at clearing away and preventing the formation of the fragments seemed promising in mice, but caused such major side effects as skin cancer and nausea in humans because they also cleared away vital, non-toxic beta-amyloid. Since those recent failures, Wagner and Tanzi have aimed to develop a compound that would remove only the toxic beta-amyloid. CAF grants in 2009 and 2010 made their research possible.



Steve Wagner,
University of
California, San Diego

continued on page 3 »

# Two Journeys Converge on the Road to a Cure

While many of us enjoyed the barbecues and beach festivities typical of summer, Glenn Caffery and Alan Arnette were doing something atypical. Instead of lounging by the pool, Caffery ran 3,312 miles across the northern United States—from Oregon to Rhode Island—with just a jogging stroller for his supplies, and Alan Arnette climbed two of the highest peaks in the world—Denali (Mount McKinley) in Alaska and Mount Elbrus in Russia.

While their physical journeys may have been different—one horizontal and one vertical—their emotional journeys were surprisingly similar. Both Caffery and Arnette lost a beloved parent to early-onset Alzheimer's disease and both have made an enormous commitment to help fight this debilitating disease by challenging themselves physically to generate awareness for the issues and raise money to help find a cure.

#### All about the cause.

Denali and Mount Elbrus were the fourth and fifth summits on Arnette's Seven Summits Climb for Alzheimer's: Memories Are Everything expedition—his yearlong mission to scale the highest peak on each continent to raise money for the fight against Alzheimer's and to honor the memory of his mother, whom he lost to Alzheimer's in 2009. The Alzheimer's Immunotherapy Program of Janssen Alzheimer Immunotherapy and Pfizer Inc. are funding Arnette's journey, which means 100 percent of the money he raises goes directly to Cure Alzheimer's Fund and the National Family Caregivers Association

Native American for "the Great One," Denali is the highest summit in North America at more than 20,000 feet high. While Arnette has summited each of the peaks on his expedition so far, unrelenting 70 mph winds made attempting Denali's summit too dangerous. When Arnette told his donors, who had sponsored him a penny a foot, that they were off the hook for the full amount because he hadn't summited, they donated the full amount anyway.

"It was a wonderful reminder that my journey is not about the summit—it's about the cause," says Arnette.

At greater than 18,000 feet high, Elbrus is a dormant volcano with two distinct summits. To get to the top, Arnette had to navigate through crevasses using crampons and ice axes. "It was great to look out over the Russian Alps and see the Black Sea in the distance," says Arnette, "but the biggest takeaway for me was the cultural experience. Here I was on the other side of the world, and I was struck by how many people have been affected by Alzheimer's."

For every continent Arnette has been to, there have been teammates who have had very real stories about the impact of the disease on their lives and how they've all shared that feeling of helplessness. "Alzheimer's is truly a global issue," says Arnette.

#### From coast to coast.

While Arnette was battling strong winds, snow and ice, Caffery was dealing with blistering heat, physical injuries and the constant fear of being hit by a car. From late May to August, Caffery ran 50 miles a day or more to honor the memory of his father, whom he lost to Alzheimer's in 2002.

"Part of the motivation for my trip was to continue with my mourning process for my dad," says Caffery. As he ran, memories of his father came surging back, and he finally had the opportunity to engage with them, which he says "was of great emotional value." By day three Caffery was already thinking, "I've had enough of this," from purely a recreational perspective. But people were investing in him and he couldn't let them down. Says Caffery, "If my goal had been to finish, I might not have been able to do it—but my goal was to honor my dad," which helped him put his best feet forward every day.

From the very beginning of his journey, Caffery had no choice but to be open and trusting of other people, because he literally was sleeping on the side of the road in a tent.

"I came to think of all the people whom I met along the way as friends and helpers," says Caffery. "Many of them had loved ones with Alzheimer's, and talking with them was cathartic, because we all related to the emotional pain we shared. It's





amazing now many people have been affected by Alzheimer's," he says. "What was so paradoxical was how many people have these really powerful stories, but how little they are part of their regular discourse because they are so difficult to talk about."

On his trip, Caffery was threatened with baseball-sized hail, coyotes, snakes, flat tires, injuries, speeding cars and lightning while he consumed 7,000 calories a day. Sadly, Caffery also had to endure the passing of his father-in-law from cancer.

"The generosity of people along the way was overwhelming," he says. "Friends, friends of friends and strangers would drive me places, let me stay with them and clear their lives out for me. It was hard to accept all the generosity," Caffery says, "until I realized that it wasn't about me—it was about the cause I was running for. I was thrilled with my partnership with CAF and how they were right there with me throughout my trip."

#### What's next?

Arnette was to depart for his sixth summit, Kilimanjaro in Africa, on Sept. 11. "World Alzheimer's Day is September 21 and, wherever I am, I'll be sending a message of hope, urgency and the need for support to find a cure," he said. Arnette already has raised more than \$30,000 for CAF and more than \$20,000 for the National Family Caregivers Association, and he's not done yet.

Although Caffery's run is over for now, his push to do his part to find a cure is not. "This trip made it clear to me that I have an obligation to continue to share my experience with Alzheimer's, and I'll continue to look for ways to do that so I can do my part to try to stop it," Caffery says. "It's so frustrating to watch someone you love suffer so much when you're utterly powerless. That's why I'll continue to do what I can do." So far, he has raised more than \$23,000 for the Cure Alzheimer's Fund, which will be used to fund critical research.

"We are grateful to Alan and Glenn for their selfless commitment and their unrelenting drive to help us get closer to a cure every day," says Tim Armour, president and CEO of CAF. To support them, please visit our website at www.curealz.org.

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continued from page 1 »

"I think we may now have that molecule," Wagner explains. "With the CAF funding, we got through that hurdle. I don't know how many hurdles are left, but there may not be many. That's why drug companies are getting real serious about this approach."

With the large NIH grant now in place, CAF has stepped into a new supporting role, augmenting Wagner's research with an additional \$150,000 to determine his compound's precise "mechanism of action"—how it actually works. This particular investigation is not covered by the NIH grant but will be crucial, explains Tanzi, for a future clinical trial application to the FDA.

"CAF is so proud to be a part of this project," says Armour. "As Wagner and Tanzi carry out their vital work, our superb Research Consortium will continue to keep its eyes out for the most promising and aggressive solution-oriented Alzheimer's research we can find."

## **Ways to Give**

By donating to Cure Alzheimer's Fund, every dollar immediately is used for research with the best chance of leading to new therapies to prevent, slow or even reverse Alzheimer's disease. Giving to Cure Alzheimer's Fund can be done in a number of different ways, and we invite your participation to help us fund important research:

- Donate online at www.curealz.org or by mail to Cure Alzheimer's Fund, 34 Washington St., Suite 200, Wellesley Hills, Mass. 02481.
- Designate a gift to us in memory of a loved one—
  it's a wonderful way to honor someone in a hopeful way and
  support our research.
- Organize races, events and tournaments.

- Use your company's corporate matching gift program to match your donation to CAF.
- Donate your old car or vehicle to National Charity Services (NCS) and a percentage of the proceeds will go directly to Cure Alzheimer's Fund (see enclosed postcard). Simply call 800-506-0172 and an NCS representative will handle all of the details.

## **Financial Update**

	This Quarter	YTD*	Inception to date
Fundraising	\$162,043	\$1,232,838	\$20,282,906
Expenses paid for by the founders	\$169,498	\$507,530	\$4,067,469
Funded research	\$1,300,000	\$1,802,500	\$14,471,141

<sup>\*</sup>These numbers as of Sept. 12, 2011

## Research Update

Research funded during the third quarter of 2011

Project	Researcher	Distribution Amount
Alzheimer's Genome Project™ Phase 2	Rudolph Tanzi, Massachusetts General Hospital, Harvard Medical School	\$600,000
Optimization of Novel ACAT Inhibitors	Dora Kovacs, Massachusetts General Hosptial, Harvard Medical School	\$150,000
Effect of Bexaratene on Abeta in AD	David Holtzman, Washington University at St. Louis	\$100,000
Mechanisms of Retinoid X Receptor-mediated Abeta Clearance	Case Western Reserve University	\$100,000
Molecular Tweezers: Novel Inhibitors of amyloido- genic proteins and promising drug candidates for Alzheimer's disease	Gal Bitan, UCLA	\$100,000
Novel Soluble Gamma- secretase Modulators for the Treatment of AD	Steven Wagner, University of California, San Diego	\$150,000
Modulation of Abeta Deposition by Cell-Specific Mechanisms	Sangram Sisodia, The University of Chicago	\$100,000
Total Distributed to Research for	3Q 2011	\$1,300,000

## **Cure Alzheimer's FUND**

34 Washington Street, Suite 200 Wellesley Hills, Massachusetts 02481 Telephone: 877-CURE-ALZ (287-3259) Fax: 781-658-2399 www.curealz.org

Henry W. Oliver Building 535 Smithfield Street, Suite 625 Pittsburgh, Pennsylvania 15222 Telephone: 412-261-2785

#### **Mission**

Fund research with the highest probability of slowing, stopping or reversing Alzheimer's disease.

#### **Research Consortium**

Rudolph E. Tanzi, Ph.D., Chairman, Research Consortium, Harvard Medical School/ Massachusetts General Hospital
Sam Gandy, M.D., Ph.D., Mount Sinai School of Medicine
Charles Glabe, Ph.D., University of California, Irvine
David Michael Holtzman, M.D., Washington University, St. Louis
Virginia M.-Y. Lee, Ph.D., MBA, University of Pennsylvania
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Cure Alzheimer's Fund® is a "doing business as" name for the Alzheimer's Disease Research Foundation, a 501(c)(3) public charity with federal tax ID # 52-2396428.

Contributing Writer: Patty Bovie Copy Editor: Colleen O'Neill Design: Winking Fish

### **David Shenk Joins CAF Team**

Award-winning author and popular speaker David Shenk, whose book *The Forgetting* is widely considered one of the best ever written about Alzheimer's, has joined Cure Alzheimer's Fund as a senior adviser. Shenk will be deeply involved with writing, events and fundraising on a project basis at CAF.

"We are thrilled to be working closely with David to help people better understand the urgency of this disease and how everyone can join in to help stop it," says Tim Armour, president and CEO of Cure Alzheimer's Fund.

Shenk, author of five other acclaimed nonfiction books (see davidshenk.com),

also has advised the President's Council on Bioethics and is a nationally recognized Alzheimer's filmmaker. In recent years, he has written and directed five short "pocket films" aimed at educating the public about the disease. This year, MetLife Foundation commissioned him to produce four new documentary films about the family caregiving experience.

He first came to the Alzheimer's world a dozen years ago, he says, after overhearing the story of a husband and wife facing the disease together. "The woman was still living at home," he recalls, "but she had gotten to the stage where she no longer recognized her husband. It was so devastatingly sad. I had to know more

about this disease. From there, the more I learned about Alzheimer's, the more I felt like I had to be a part of helping people understand it better."



David Shenk

Shenk first met Rudy Tanzi at a scientific conference in 1999 while researching *The Forgetting* (and while Tanzi was writing his own soon-to-be-acclaimed book *Decoding Darkness*), and they've crossed paths several times over the years. Recently, Tanzi introduced Shenk to CAF, and the fit was obvious.

"I was immediately struck by how much amazing research had been spawned by this relatively small organization," Shenk says, "and I was drawn to its bold approach. CAF is doing extraordinary work in getting much-needed dollars into the right scientific hands, and I'm very proud to join that effort. The clock is ticking. We can't afford not to do better."

Shenk will join Tanzi, Harvard's Robert Moir and moderator Robert Bazell on the "Taking Control of Alzheimer's Through Research" panel at CAF's science symposium on Oct. 18 (see below).



The Los Angeles Times Book Review called David Shenk's The Forgetting "a remarkable addition to the literature of the science of the mind."

#### Cure Alzheimer's Fund presents:

# Taking Control of Alzheimer's Through Research

Tuesday, Oct. 18, 2011 • Mandarin Oriental, Boston, Mass.

3:30 – 4 p.m. Registration 4 – 5:30 p.m. Information Session Light Refreshments Served

#### **PRESENTERS**

#### MODERATOR:

Robert Bazell, Chief Science and Health Correspondent, NBC News

#### PANEL:

Rudolph Tanzi, Ph.D. Harvard Medical School/ Massachusetts General Hospital; Chair, CAF Research Consortium

#### Robert Moir, Ph.D. Harvard Medical School/ Massachusetts General Hospital

Author of the national bestseller The Forgetting, Alzheimer's: Portrait of an Epidemic

**David Shenk** 

#### ON DISPLAY:

An exhibition from ARTZ: Artists for Alzheimer's®, an initiative of the I'M STILL HERE Foundation

**REGISTRATION AND INFORMATION:** 

curealz.org/symposium or 781.237.3800

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# **Local Heroes**

For the last five years, Diana Fiske has organized a round-robin tennis tournament for 44 women ranging in age from their 30s to their 70s-at Fishers Island's Hay Harbor Club to raise money for Cure Alzheimer's Fund.

"I felt like we should have some sort of a charity tournament where we give to others," says Fiske. "And pretty much everyone I know knows a parent or friend who has been afflicted with Alzheimer's." Hay Harbor Club member Alison McCance had been diagnosed with early-onset Alzheimer's, and Fiske learned about CAF through Alison's husband, Henry McCance, co-founder of CAF, where "every single penny goes directly to research."

So five years ago Fiske rallied a group of women to support the cause, and every July they take to the courts to play. Every uttered "sorry" means \$1 toward research, and expletives garner \$10 each, in addition to the \$25-per-person entry fee.



"Everyone is welcome to play," says Fiske.

"You don't have to be a member of the club to participate."

At the start of the tournament Fiske reminds everyone why they are there—to raise money for Alzheimer's research. "I'm really proud of the fact that we've been going strong for five years and it's been a real team effort, from our pro Ramsey Hoehn donating his time to the club providing refreshments. It's a lot of fun, too," says Fiske.

"Over the years, the tournament has raised nearly \$20,000 for CAF," says Tim Armour, president and CEO of CAF, "and we thank Diana for her tireless efforts on our behalf."