The ALS Therapy Development Institute (ALS TDI) was founded because of one family's belief that there had to be a better, more efficient, and faster way to develop treatments for disease—specifically ALS, a disease where time is of the essence. The traditional model of ‘wait and see’ maintained by academia had not produced results back in 1999 when the Institute was founded, and still has not worked to-date. A new system was needed; the moment was right for innovation. The result was the creation of the world's first ‘nonprofit biotech’; housing under one roof target validation, lead optimization, preclinical screening and validation in both human induced pluripotent stem cells and genetic animal models of the disease, biomarker discovery, and clinical trials on experimental medicines for ALS—and all of it beholden to the support of people living with ALS today.

Many organizations say they work ‘for patients’ and towards ‘a cure’, but I would argue that at ALS TDI, we mean it literally. We were founded by a patient and his family, and that sense of urgency drives every decision we make. It's evident in our strong Board leadership—chaired by a man living with ALS—and in our executive team and staff, which it is my privilege to lead. We saw and heard it from Jean Saling, Joan Melanson, Nancy Frates, Julie Swan, Peggy Heywood, and Wendy Reich, who each have a son diagnosed with ALS. Each of their families and hundreds of others have stepped up and owned this effort. It is for their families and the families of people living with ALS the world over that we work.

Our values as an Institute have always included the need to be transparent. This means total financial as well as research transparency. In fact, we are the only ALS organization to have more than a decade’s worth of audited financials and 990s available on our website. We are also the only one to have our entire drug development pipeline easily accessible in a single place on our website, and it’s updated monthly so that you can see exactly where your donation goes. I encourage you to plan a visit to the lab in Cambridge so I can show how your support has enabled progress toward our goal to end ALS and impacted the lives of PALS today.

2013 was one of the most successful fundraising years in ALS TDI’s history, and it was equally significant for scientific advancement. More money means more potential medicines get closer to clinical trial, and consequently, closer to people living with ALS. This was due directly to the support from nearly 200 family funds and more than 150 events in communities around the world. With your help, we stay 100% committed and focused to achieving our mission—our promise—to end ALS.

Thank you for your support.

Sincerely,

Steve Perrin, Ph.D.
CEO & Chief Scientific Officer

Cover Image: A colony of ALS-patient derived induced pluripotent stem cells at ALS TDI.
To-BBB, Anida Pharma, Neurimmune Partnerships

Our research partnerships this year showcase our belief that ALS is a complex disease, requiring a comprehensive approach to drug discovery; to explore new technology to get potential treatments across the blood brain barrier, to test compounds that affect neuroinflammation and cell death, and a deeper understanding of the role of misfolded SOD1 in disease. It is through these types of collaborations that ALS TDI works towards achieving our mission: to end ALS.

FDA Approval and Enrollment in Phase IIa Clinical Trial

In early 2013, ALS TDI received FDA approval to conduct a clinical trial of TDI-132 (aka fingolimod, Gilenya®) in record time. The purpose of the study is to determine the safety and tolerability of the drug in people with ALS. Four enrollment centers were set up: Georgia Regents University in August, GA; Massachusetts General Hospital in Boston, MA; Methodist Neurological Institute in Houston, TX; and University of California, Irvine in Orange, CA. Results will be announced in 2014.

Launch of National Ales for ALS Campaign

This unique craft brewery-based fundraising initiative brought together nearly 50 craft breweries across the country in support of ALS TDI’s mission to end ALS. As part of the program, participant breweries created unique brews with experimental hops grown by B.T. Loftus Ranches and Hopunion, with a portion of sales donated to ALS TDI. This year’s campaign raised nearly $150,000 for ALS research.

ALS TDI Adds Three New Board Members

In the largest addition in a decade, three new members were elected to the Board of Directors in 2013. Robert Sepucha Jr. is a policy and business development executive from Massachusetts whose father passed away from ALS this year. Michael M. Smith and his family own and operate an international hops organization in Washington. His wife’s family has an inherited form of the disease. Jennifer Gore Dwyer is a longtime ALS advocate and supporter of ALS TDI whose husband passed away from ALS in 2013. The Board of Directors at ALS TDI includes members with deep ties to the ALS community and vast experience in leadership positions across multiple industries.

9th Annual Leadership Summit

Featured speakers included: Robert Beall, PhD, president & CEO of the Cystic Fibrosis Foundation; Julie Donnelly, healthcare and life sciences reporter for the Boston Business Journal; Aaron Gitler, PhD, associate professor of genetics, Stanford University School of Medicine; Michael Gold, MD, VP clinical therapeutic area CNS, UCB Pharma; Steve Finkbeiner, MD, PhD, associate director and senior investigator, Gladstone Institutes, and professor at University of California, San Francisco; Steve Perrin, PhD, CEO & CSO of ALS TDI; Philip Reilly, MD, JD, venture partner at Third Rock Ventures; and Willem van Weperen, CEO of to-BBB. Leadership Awards went to Rick Cochran, Jenny Dwyer, Roger Petrone Jr, Andy Rubenstein, and Kevin Swan.
Neurimmune and ALS TDI Partner to Advance Treatments for ALS

ALSTDI, together with its wholly-owned subsidiary, Anelixis Therapeutics, announced recently it has formed a research partnership with Neurimmune to explore a human monoclonal antibody that targets misfolded SOD1. Recent studies show that misfolded SOD1 accumulates in familial and sporadic ALS, suggesting a generalized role as a drug target for ALS treatments.

“Recent evidence would suggest that therapies targeting misfolded SOD1 could be important in both sporadic and familial forms of ALS,” says Dr. Steve Perrin of ALS TDI. “It is crucial that we use every tool available to us to advance potential treatments toward the clinic, and we are proud to work together with Neurimmune to attempt to do just that.”

Neurimmune, a Swiss biotech, has developed high-affinity human antibodies that selectively target misfolded SOD1. In preclinical studies with transgenic mice, chronic antibody treatment significantly reduced SOD1 pathology and rescued spinal cord motor neurons, resulting in significantly reduced muscle atrophy, better motor functions, and increased survival.

“Our human antibodies are directed against pathologically misfolded SOD1 and the selected lead candidate shows marked efficacy in independent ALS animal models,” says Dr. Jan Grimm of Neurimmune. “We believe that there is significant potential for this therapeutic approach for ALS and are enthusiastic to jointly advance this program towards clinical development together with ALS TDI.”

“The brown is SOD1 positive staining in the spinal cord of G93A-SOD1. This demonstrates abnormal SOD1 staining before the mice present with any visible symptoms. We know that some proportion of the SOD1 represented here is misfolded and aggregated. This misfolded SOD1 which is known to be disruptive to numerous cellular processes is being targeted by the therapeutics being tested in collaboration between ALSTDI and Neurimmune.”

– Fernando G. Vieira, MD, ALS TDI
Invest in iPSc @ ALS TDI

ALS is a highly complex disease driven by a variety of molecular and cellular mechanisms that differ among subpopulations of ALS patients. This complexity makes the discovery of potential therapies optimally suited for individual types of ALS difficult. Despite efforts over the last 15 years, 20+ drugs have gone into Phase III clinical trial in ALS and failed, due in part to this lack of understanding of what makes each person’s ALS unique.

At ALS TDI, we believe to accelerate ALS therapy discovery and development efforts, we must invest and adopt new technologies to dissect and target ALS disease mechanisms that operate in the cells of ALS patients. Induced pluripotent stem cell (iPSc) technology is now ready to be a powerful screening tool to identify potential medicines best suited for the treatment of distinct types of ALS.

To learn more about iPSc cell technology at ALS TDI or to donate, visit www.als.net/ips.

Translational Research Team:

Matvey Lukashev, Ph.D.
Director of Translational Research
Dr. Lukashev came to ALS TDI in 2013 with over 20 years of postgraduate research experience and 14 years of biotechnology industry experience, most recently from Biogen Idec. He has supported and led therapeutic discovery and development programs across all stages of drug development in neurology, oncology, immunology, and fibrosis.

Jerry De Zutter, Ph.D.
Senior Scientist
Dr. De Zutter came to ALS TDI in 2005 from Wyeth, now Pfizer, and has nearly 10 years of experience in drug discovery for ALS. He earned his doctorate in molecular medicine, specializing in neurodegeneration research, at the University of Massachusetts Medical School.

Jessie St. Martin
Associate Scientist
Jessie is a neuroscientist with 10 years of research experience. She received her Master’s of Science from Brandeis University, where she studied the development of neural circuits. Prior to coming to ALS TDI, she’s worked in drug discovery and animal model development for Parkinson’s disease.

Alexandra Tsolias
Research Associate
Alexandra is a recent graduate from Northeastern University where she received her bachelor’s degree in Biology. She has previously worked as a member of various multidisciplinary teams at several biotechnology companies, and most recently, at an academic lab at Beth Israel Deaconess Medical Center.

From left to right: Jessie, Dr. De Zutter, Dr. Lukashev, and Alexandra.
Hops Growers Unite 50 Craft Brewers Nationwide in Ales for ALS™

Professionally, Cheryl and Mike Smith, owners of B.T. Loftus Ranches in Yakima, WA, grow hops for the craft brewing industry. Loftus Ranches is one of the largest growers for the craft beer industry and is a major participant in the Hop Union. In their personal life, Cheryl’s family is tragically affected by a genetic form of ALS. Currently, two of Cheryl’s family members are living with ALS, and a long line of family members dating back to her great-great grandmother have succumbed to the disease.

Determined to do all they can to end ALS and actively participate in the cause, Cheryl and Mike Smith approached ALS TDI with the idea for a fundraising campaign called, “Ales for ALS.”

The idea was simple: The Smiths would provide a special blend of experimental hops produced with the help of two highly respected brewers – Vinnie Cilurzo from Russian River and John Mallett from Bell’s Brewery – free of charge to craft brewers. In exchange, brewers were asked to donate a minimum of $1 per pint from their brew to fund ALS drug development taking place at ALS TDI.

The first year of the program was a success, with participation from 50 craft brewers in 17 states and more than $150,000 raised for ALS TDI.

To learn more about “Ales for ALS” and the participating breweries in the 2014 program, please visit www.alesforals.com.
Two Families Create A Legacy

Imagine a world where those stricken with ALS continue to walk, talk, hug, and kiss their children. That’s the goal of ALS TDI, and many are joining the Legacy Giving Society to help make that world possible.

“I chose to include ALS TDI in my Living Trust so that I can do more with my money after I’m gone. We can only do so much while living, with all the unknowns of health costs, old age, and stock market fluctuations. But, whatever is left can go to a good cause and I chose ALS TDI.”

“Soon after my husband was diagnosed with ALS, I searched the internet hoping to find answers and help. I found ALS TDI’s website and, as we watched a webinar, the passion you have for finding a cure gave us both the only hope we ever found during the months Bill struggled with the disease. Over the following months I called TDI occasionally with questions about ALS or how we could help you find the cure and each person I spoke with stopped me mid-question to ask about Bill. Such a small gesture but it meant so much to have someone patiently listen through my tears. When his estate was settled, I held the check in my hand and thought of Bill struggling through this horrid disease. And I remembered where we found hope. You at ALS TDI lead the fight and I believe you will find the cure.”

CarolAnn Garratt uses her passion for flying to raise money and awareness in her mother’s memory.

Marilou Town continues to make a difference in memory of her husband Bill (pictured).

“Many organizations say they work ‘for patients’ and towards ‘a cure’, but ALS TDI really means it. We were founded by a patient and his family, and that sense of urgency drives every decision we make.”

Steve Perrin, Ph.D. CEO & CHEF SCIENTIFIC OFFICER

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Jenny Gore Dwyer
James Allen Heywood
John B. Heywood, Ph.D.
Spiros Jamas, Ed.D.
Leslie Michelson
Keith Melanson
Rob Rodin
Ted Reich, J.D. & CPA
Robert Sepucha, Jr., J.D.
Michael M. Smith

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Director of Operations & Assistant Clerk, Ken Thompson
2013 Financial Review

For the fiscal year ending December 31, 2013 ALS TDI recognized more than $9.3 million in contributions to advance its singular and profound mission: discover and develop effective treatments for ALS patients today as soon as possible. Compared to the previous year, this represented a slight decrease overall in net public support, which was due in large part to the after effects of a difficult economic situation in the United States and abroad. As outlined earlier in this annual report, new programs such as Ales for ALS™ and the YFALS National Corn toss Challenge provided key support to the Institute, as well as the ongoing support from more than 200 individual Family Funds, many of which have been with us in our battle for ten years or more. Public support allowed us to advance a phase 2 clinical trial, enter into important new venture philanthropy partnerships, and screen more potential medicines for ALS patients today than any other organization in the world.

A full breakdown of our assets, liabilities, revenue, and expenses is below. For a complete copy of our IRS Form 990 or Independent Auditors Report, please visit our website at www.als.net or call us at 617.441.7200.

**ASSETS**

<table>
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<tr>
<th>Current Assets</th>
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<tbody>
<tr>
<td>Cash</td>
<td>3,711,068</td>
</tr>
<tr>
<td>Pledges &amp; Accounts Receivable</td>
<td>1,169,248</td>
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<tr>
<td>Other</td>
<td>92,182</td>
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<table>
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<tr>
<th>Other Assets</th>
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<tbody>
<tr>
<td>Pledges Receivable</td>
<td>1,052,585</td>
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<tr>
<td>Property &amp; Equipment, net</td>
<td>591,307</td>
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<tr>
<td>Patents</td>
<td>129,979</td>
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**Net Assets EOY 2013**

6,746,369

**Utilities & Net Assets**

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<th>Current Liabilities</th>
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<tr>
<td>Long Term Liabilities</td>
<td>151,760</td>
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<tr>
<td>Net Assets</td>
<td>5,876,853</td>
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**Total Liabilities & Net Assets**

6,746,369

**OPERATING INCOME**

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<th>Grants</th>
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<td>Special Events, net</td>
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<tr>
<td>Contributions</td>
<td>1,443,647</td>
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<td>Released from Restricted</td>
<td>530,000</td>
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<td>Fee for Service</td>
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<tr>
<td>Donated Goods &amp; Services</td>
<td>31,410</td>
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<td>Interest</td>
<td>5,924</td>
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**Net Public**

9,331,231

**OPERATING EXPENSES**

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<th>Program</th>
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<td>R&amp;D</td>
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<tr>
<td>Science</td>
<td>6,420,943</td>
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<tr>
<td>Informatics</td>
<td>355,989</td>
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<tr>
<td>Patient Services</td>
<td>145,847</td>
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<td>Communications</td>
<td>1,231,287</td>
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<tr>
<td>BD</td>
<td>147,608</td>
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<tr>
<td><strong>Total Program</strong></td>
<td>8,301,674</td>
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<table>
<thead>
<tr>
<th>Support</th>
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<tbody>
<tr>
<td>General</td>
<td>500,797</td>
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<tr>
<td>Fundraising</td>
<td>761,813</td>
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<tr>
<td><strong>Total Support</strong></td>
<td>1,262,610</td>
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</table>

**TOTAL EXPENSES**

9,564,284
Below is a graphical representation of revenue and expenses for the last three years, 2011-2013. As always, ALS TDI is committed to transparency in our research, in our fundraising, and in our financial information. We are proud of our continued achievement, year after year, to spend as much funding as possible every day on research toward our single mission: to end ALS. More information is available on our website at www.als.net.

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Total Spent</th>
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<tbody>
<tr>
<td>Program Services</td>
<td>6,707,315</td>
<td>8,454,877</td>
<td>8,301,674</td>
<td>23,463,866</td>
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<tr>
<td>Support Services</td>
<td>1,035,726</td>
<td>1,276,210</td>
<td>1,262,610</td>
<td>3,574,546</td>
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</tbody>
</table>

86 cents per dollar is spent on research and programs.