
What is ALS?

Amyotrophic lateral sclerosis (ALS)

Amyotrophic, from the Greek language. A—negative. myo—muscle. trophic—nourishment.
= no muscle nourishment.

Lateral—the areas in the spinal cord where portions of the nerve cells that signal and control the muscles are located.

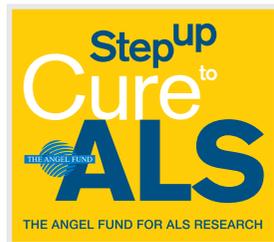
Sclerosis—scarring or hardening of the degenerated area.

Often referred to as Lou Gehrig's Disease, ALS is a progressive neurodegenerative disease that affects nerve cells in the brain and the spinal cord. Motor neurons reach from the brain to the spinal cord and from the spinal cord to the muscles throughout the body.

As motor neurons degenerate, they can no longer send impulses to the muscle fibers that normally result in muscle movement. Early symptoms of ALS often include increasing muscle weakness, especially involving the arms and legs, speech, swallowing or breathing. When muscles no longer receive the messages from the motor neurons that they need to function, the muscles begin to atrophy.

The condition slowly gets worse. The progressive degeneration of the motor neurons in ALS eventually leads to the death of the motor neurons. When the muscles in the chest area stop working, it becomes hard or impossible to breathe independently. With voluntary muscle action progressively affected, patients in the later stages of the disease may become totally paralyzed.

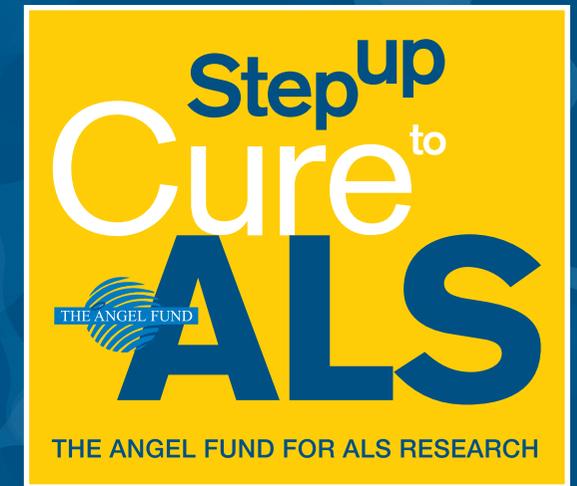
Death often occurs within three to five years of diagnosis.



Currently, there are approximately 30,000 people in the US living with ALS and there is no effective treatment or therapies.

649 Main Street, Wakefield, MA 01880 tel: 781-245-7070

Donate online at www.theangelfund.org



The Angel Fund

has embarked on a major fundraising campaign to raise \$4 million for ALS (Lou Gehrig's Disease) research.

Our Mission: To bring ALS research from the lab to human trials.

WE NEED YOUR HELP.

There is no known cure for ALS. **Yet.**

Step Up to Cure ALS

The Angel Fund Step Up to Cure ALS campaign will fund an innovative approach to turning off mutant genes that cause ALS.



World renowned ALS researcher **Dr. Robert H. Brown, Jr.** and the UMass Gene Therapy Center team are already working on this exciting cutting-edge research using gene therapy to silence ALS genes. The initial gene to be targeted will be the SOD1 gene, responsible for 50% of genetic ALS.

This clinical program is a

cooperative effort conducted jointly at UMass Medical School under the leadership of Dr. Brown and the Massachusetts General Hospital team led by Dr. Merit Cudkowicz and Dr. James Berry.

The Angel Fund's goal is to bring this cutting-edge research to human trials as quickly as possible.

Together, with your help, **we can turn hope into reality.**

SILENCING GENES THAT CAUSE NERVE DEGENERATION IN THE BRAIN AND SPINAL CORD MAY NOT ONLY HELP IN THE FIGHT AGAINST ALS, IT CAN POTENTIALLY BENEFIT OTHER DISORDERS, SUCH AS SOME FORMS OF ALZHEIMER'S, PARKINSON'S OR HUNTINGTON'S DISEASE.

What can you do?

We need you now, more than we ever have. Your donation does make a difference.

Significant strides have been made in ALS research. But more needs to be done.



THE ANGEL FUND—is dedicated solely to funding ALS research.

We are proud to say that total research expenditures incurred in 2011 and 2012 averaged 91%.

Making a donation to make a difference is easy...

Individuals can write a check, go online www.theangelfund.org to make a donation, get pledges from friends and relatives, get matching donations from companies, host a fundraiser, or ask your company to create a program.

Businesses can make donations online or by check, create employee programs, begin a donation program for customers and much more.

YOUR DONATION—large or small—will go directly to fund this innovative approach to turning off mutant genes that cause ALS and bringing it to HUMAN TRIALS.

Send your donations to: The Angel Fund for ALS Research, 649 Main Street, Wakefield, MA 01880 or make an online donation at www.theangelfund.org