

Retrograde Viral Delivery of IGF-1 Prolongs Survival in a Mouse ALS Model

B. J. Kaspar, J. Lladó, N. Sherkat, J. D. Rothstein, F. H. Gage

Science **301**, 839-843 (8 August 2003)

[\[Abstract\]](#) [\[Full text\]](#) [\[PDF\]](#)

Free to All Visitors

A growth factor slows the progression of a disease similar to amyotrophic lateral sclerosis in mutant mice, even when administered after symptoms appear.

[\[top of page\]](#)

Selected Web Resources on ALS

Following is a brief selection of Web sites that are useful for understanding ALS, and that help put recent research on the disease into a larger context.

[About ALS](#)

Rich set of pages providing basic information on ALS, its symptoms, and its possible causes. Site is a project of the [Robert Packard Center for ALS Research](#) at Johns Hopkins University.

[Project A.L.S.](#)

Organization involved in providing funding and support of ALS research (including the [Kaspar et al. study](#)), as well as information resources.

[MedlinePlus ALS Information Page](#)

Useful site includes ALS news, an interactive tutorial, information on research and clinical trials, and much more.

[ALS Association](#)

ALS advocacy group site offers news about research, a collection of [links](#), and other resources.

[International Alliance of ALS/MND Associations](#)

Worldwide meta-association of groups that support people living with amyotrophic lateral sclerosis and motor neuron diseases.

[\[top of page\]](#)

[Muscular Dystrophy Association ALS Newsletter](#)

Free monthly newsletter on ALS published by the [Muscular Dystrophy Association](#), which also maintains an [information-rich Web site](#) specifically on ALS.

[Motor Neurone Disease Association](#)

Web site of British organization includes interesting tutorial material, online publications, and more.

[ALSLinks.com](#)

Link-rich portal targeted mainly at ALS patients, families, and caregivers.

[ALS Survival Guide](#)

Wide-ranging site includes information on causes of ALS, statistics on the disease, drug therapies, links, and a substantial array of other features.

Other Science Papers on ALS

Collected below are links to a number of earlier *Science* papers dealing with amyotrophic lateral sclerosis, its causes, and its possible treatments. As with all original research published on [www.sciencemag.org](#), access to the research papers below is free to registered users for papers published more than 12 months ago; more recent research papers, as well as Review articles and Perspectives, are available free to [AAAS members](#) or via [individual article purchase](#).

Mutations in Dynein Link Motor Neuron Degeneration to Defects in Retrograde Transport

Majid Hafezparast *et al.*

Science **300**, 808-812 (2 May 2003)

[\[Abstract\]](#) [\[Full text\]](#) [\[PDF\]](#)

Functional Role of Caspase-1 and Caspase-3 in an ALS Transgenic Mouse Model

Mingwei Li *et al.*

Science **288**, 335-339 (14 April 2000)

[\[Abstract\]](#) [\[Full text\]](#) [\[PDF\]](#)

Free with Registration

Perspective: Stay the Executioner's Hand

Mark E. Gurney, Alfredo G. Tomasselli, Robert L. Heinrikson

Science **288**, 283-284 (14 April 2000)

[\[Summary\]](#) [\[Full text\]](#)

Induction of Nitric Oxide -- Dependent Apoptosis in Motor Neurons by Zinc-Deficient Superoxide Dismutase

Alvaro G. Estévez *et al.*

Science **286**, 2498-2500 (24 December 1999)

[\[Abstract\]](#) [\[Full text\]](#) [\[PDF\]](#)

Free with Registration

Review: Genetic Classification of Primary Neurodegenerative Disease

John Hardy, Katrina Gwinn-Hardy

Science **282**, 1075-1079 (6 November 1998)

[\[Abstract\]](#) [\[Full text\]](#) [\[PDF\]](#)

Review: Genetic Neurodegenerative Diseases: The Human Illness and Transgenic Models

Donald L. Price, Sangram S. Sisodia, David R. Borchelt

Science **282**, 1079-1083 (6 November 1998)

[\[Abstract\]](#) [\[Full text\]](#) [\[PDF\]](#)

[\[top of page\]](#)

Aggregation and Motor Neuron Toxicity of an ALS-Linked SOD1 Mutant Independent from Wild-Type SOD1

Lucie I. Bruijn *et al.*

Science **281**, 1851-1854 (18 September 1998)

[\[Abstract\]](#) [\[Full text\]](#) [\[PDF\]](#)

Free with Registration

Review: A Structural Scaffolding of Intermediate Filaments in Health and Disease

Elaine Fuchs, Don W. Cleveland

Science **279**, 514-519 (23 January 1998)

[\[Abstract\]](#) [\[Full text\]](#) [\[PDF\]](#)

Review: Life and Death of Neurons in the Aging Brain

John H. Morrison, Patrick R. Hof

Science **278**, 412-419 (17 October 1997)

[\[Abstract\]](#) [\[Full text\]](#) [\[PDF\]](#)

Bcl-2: Prolonging Life in a Transgenic Mouse Model of Familial Amyotrophic Lateral Sclerosis

Vladimir Kostic, Vernice Jackson-Lewis, Fabienne de Bilbao, Michel Dubois-Dauphin, Serge Przedborski

Science **277**, 559-563 (25 July 1997)

[\[Abstract\]](#) [\[Full text\]](#) [\[PDF\]](#)

Free with Registration

Altered Reactivity of Superoxide Dismutase in Familial Amyotrophic Lateral Sclerosis

Martina Wiedau-Pazos *et al.*

Science **271**, 515-518 (26 January 1996)

[\[Abstract\]](#)

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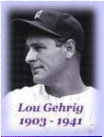
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<http://www.ambion.com/catalog/supp/brainRNA.html>

ALS Survival Guide

Offering hope to people with Amyotrophic Lateral Sclerosis

[Home] [What is ALS?] [ALS News] [Causes of ALS] [Vital Stats] [Treatments] [Adaptive Equipment] [Legal/Financial] [Advocacy] [Ask the Expert] [Useful Links] [Caregiver] [Support Group] [Research Abstracts] [Advanced ALS] [Guest Speaker] [Doug Sez] [Dictionary] [Resources] [About Doug] [About Lou] [Guestbook] [You Can Help] [Inspiration] [Doug's Journal]



Lou Gehrig
1903 - 1941

- ▶ Home
- ▶ What is ALS?
- ▶ ALS News
- ▶ Causes of ALS
- ▶ Vital Stats
- ▶ Treatments
- ▶ Equipment
- ▶ Legal/Financial
- ▶ Advocacy
- ▶ Ask the Expert
- ▶ Useful Links
- ▶ Caregiver
- ▶ Support Group
- ▶ Research
- ▶ Advanced ALS
- ▶ Guest Speaker
- ▶ Doug Sez
- ▶ Dictionary
- ▶ Resources
- ▶ About Doug
- ▶ About Lou
- ▶ Guestbook
- ▶ You Can Help
- ▶ Inspiration
- ▶ Doug's Journal
- ▶ Irene & Dan's Journal



www.alsurvivalguide.com and www.lougehrigsdisease.net

ALS can conquer the body but not the mind and the spirit! Stay strong in your hearts dear PALS.
This website is dedicated to the loving memory of Douglas Edwin Eshleman, who lost his battle with ALS on Wednesday, November 28, 2001. Thank you for all your thoughts and prayers during this difficult time.

The Discuss ALS Forum has been graciously continued by PALS Patrick Madigan. Click here to go to DiscussALS.com



What is New?
Second Annual Walk to d'feet ALS raises over \$216,000.

11-25-01 Doug's last [Journal](#) entry.

What is ALS?

>> **STARTING POINT:** Do you want quick answers about ALS? Have you or someone you know been recently diagnosed with ALS?
What is ALS?: This page gives answers to 45 frequently asked questions about ALS.
ALS Fact Sheet: This page gives snapshot information about ALS on one printed page.
Coping with ALS: This is my 12 step program to make dealing with ALS more manageable.
Ten Commandments for the Management Of ALS by Forbes Norris, MD.
Respiratory Management: The Only Long Term Option for Surviving ALS by Ed White, PALS

ALS News

- [12-01-01 The Columbus Dispatch pays tribute to Doug Eshleman.](#)
- [12-02-01 The Akron Beacon Journal chronicles Doug's work.](#)
- [12-02-01 The Cleveland Plain Dealer writes about Doug's efforts.](#)

Causes of ALS

While the exact cause or causes of ALS remains a mystery, there are several promising theories outlined on this page: Excitotoxicity, Oxidative stress, Apoptosis, Neurotrophic factors and Autoimmunity.

Vital Stats

Did you know that men are much more likely to get ALS than women? Did you know that 20% of ALS patients live more than 5 years and 10% more than 10 years? Learn more ALS statistics on this Vital Stats page.

Legal/Financial

Employment concerns, legal issues and financial worries all come with the diagnosis of ALS. This page examines these difficult issues and stresses the need to get legal and financial affairs in order as soon as possible. Information is also provided on medical insurance and on dealing with government agencies including Social Security, Medicare and Medicaid.

Adaptive Equipment



This page has useful information on tools to make living with ALS easier: information on mobility, eating/drinking, hygiene, sleeping communication, and breathing. A BiPap machine is useful when breathing becomes difficult or you show signs of CO₂ buildup including: morning headaches, feelings of disorientation and drowsiness.

Treatments



Check this page for information on existing drugs, experimental drugs, therapies, supplements and alternative medicine used in the fight against ALS.
Ginseng, an over-the-counter supplement, has recently been shown to be effective in delaying ALS onset among mice. [Read about it here.](#)
[Creatine Offers Hope For ALS Patients](#): Creatine, another over-the-counter supplement works twice as well in diseased mice as the only approved prescription drug available for treating ALS. [Creatine information and caution.](#)

Advocacy

We won! [ALS Specific Legislation Approved By Both Houses of Congress](#)
Hard work pays off. Thousand of PALS, their families, their friends plus organizations such as the ALS Association were instrumental in getting the Medicare law changed. Beginning July 1st 2001, ALS patients will no longer have to wait 24 months for Medicare coverage. The new waiting period? Zero months!
Check the [Congressional Hall of Fame](#). Sign the two online petitions. See [pictures](#) from our Washington DC trip.

[Ask the Expert](#)

[Ask the Pharmacist](#)

Dominic Marchese, RPh with Athena Rx Home Pharmacy, provides information about ALS drugs and supplements.

[Ask the Respiratory Therapist](#)

Jerold Reynolds, RCP, RRT at The Ohio State University, provides information about breathing, respiratory equipment, etc.

[Ask the Mental Health Therapist](#)

Viann Powers, LMFT, LPC a marriage and family therapist and a licensed counselor who has worked successfully with ALS patients and their families.

[Ask the Occupational Therapist](#)

Julie Scurich, OTR, provides information on how to function with ALS as independently as possible while minimizing effort.

[Ask the Physical Therapist](#)

Wendy King, Physical Therapist at The Ohio State University, provides information about exercise, joint mobility, range of motion, etc.

[Ask the Speech/Swallowing Therapist](#)

 thickening agents to help with swallowing thin liquids

[Useful Links](#)

This page has a number of good ALS related links: ALS Organization Pages, PALS' Web Pages, Other ALS Pages, Medical & Health Pages, Newsgroup & Newslst Pages, and Chat and Web Forum.

[Caregiver](#)

As difficult as dealing with ALS is for the patient, it is often more difficult for the caregiver. This page is designed for the ALS caregiver and includes Caregiver Tips, Personal Stories, Caregiver Issues and Resources

[Guestbook](#)

 I enjoy reading your comments about the website as well as learning about you and your experiences with ALS. Sign the Guestbook and view what others have written.



[Support Group](#)

The value of a good ALSA or MDA support group cannot be underestimated. This page describes the monthly activities of the Western Ohio ALSA chapter support group. Doug participated in this chapter as a PALS and a board member.

[Research Abstracts](#)

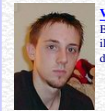
Medline abstracts of ALS research published in professional scientific journals. There are dozens of new ALS abstracts every month. Some are quite useful to PALS, such as there one which discusses the neuroprotective quality of ginseng.

[Advanced ALS](#)

Advanced ALS explores end-of-life issues including the wonderful service of Hospice. For those 5-8% of PALS who elect to continue their lives through mechanical life-support, there is a review of the current technology of ventilators, tracheostomy, feeding tubes, etc.

[Guest Speaker](#)

On this page you will find educational, inspirational, and emotional articles written by ALS patients, caregivers and others.



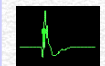
[Views and opinions on ALS and those who it affects](#) 

By Dan Eshleman, Doug's son and CALS. "Those who know me say I have turned my life around in the last 3 years, is this totally attributable to the fact that my Father has a fatal illness which cannot be cured? It seems like an odd trade to me. Also, if he had never been diagnosed with ALS then he wouldn't have this website. He helps so many people every day, some call him an inspiration, to me he is a hero."

[Doug Sez](#)

This is Doug's editorial page. **Advocacy efforts make a difference!** ALSA's National Advocacy Day 2000 was remarkably productive. All told, nearly 400 ALS patients, families, friends and volunteers participated ...Our Ohio delegation fared very well! As a result of our meetings with Representatives and/or their legislative aides, along with the many letters, phone calls, and faxes by chapter PALS and their families, we have made significant progress.

[Dictionary](#)



The Dictionary page gives definitions of hundreds of ALS related words. This picture shows an EMG pulse. What is an EMG? Electromyography. An insertion of needle electrodes into muscles to study the electrical activity of muscle and nerve fibers. The EMG is one of the essential tools used to help diagnose Amyotrophic Lateral Sclerosis.

[Resources](#)



ALS books and manuals are listed on this page. "Caregiver's Handbook" offers indispensable advice on providing quality care. The "ALSA Manuals" are free for those who have been diagnosed with ALS. "The Brain Wellness Plan" offers scientific nutritional supplement advice.

[About Doug](#)



Read [Doug's Journal](#), an online account of the daily struggle of living with Amyotrophic Lateral Sclerosis. It's all here, the good, the bad, and the ugly. Follow Doug's ALS progression by looking at the monthly updates on the [ALS Functional Rating Scale \(ALSFRS\)](#) Look at the [graph](#) showing the monthly changes in Doug's breathing function over the past three years. Meet the fine ladies who helped Doug to make this website possible: [Doug's Team aka Doug's Angels](#).

[About Lou](#)



The headline says it all: "Gehrig top vote getter in [All-Century Team](#) balloting." The fans have spoken, naming Lou Gehrig the best baseball player of the past 100 years. Read Doug's tribute page about this remarkable ballplayer, a soft-spoken, unassuming man who was cut down in the prime of his life by the disease which was to be named after him.



[How You Can Help](#)

This page shows how you can help PALS by donating time and/or money to support our cause and raise public awareness about ALS.

[Inspiration](#)

Keeping hope alive through inspiration. Here you will find uplifting poetry, stories, sayings and quotes for PALS: "So of cheerfulness, or a good temper, the more it is spent, the more it remains." -- Ralph Waldo Emerson

[Search the ALS Survival Guide for a word or name.](#)

	
ALS Survival Guide www.lougehrigsdisease.net	
Douglas E. Eshleman PALS (Person with ALS)	"Knowledge is Power" dagma101@netset.com
<small>Doug's business card.</small>	

[Click here to read Disclaimer](#)

PALS Webring People with ALS This site by Doug Eshleman		Previous	Next
		Previous 5 Sites	Next 5 Sites
		Random Site	List Sites

The **ALS Survival Guide** has received several website awards: [Awards Received](#) page.

The **ALS Survival Guide** was one of several websites featured by the *Cleveland Plain Dealer*. Read the article, "[Sites that stand out](#)," and [Local Web masters offer solid information on sites](#)

Last updated on 01/30/03:  visits to this page from all 50 USA states and over [100 countries](#).