



SCI Research

Paralysis is the result of some sort of disconnection between the central nervous system (the brain and spinal cord) and the body. Sometimes scientists know why this happens, as in the case of trauma, for example, wherein nerve cells are knocked out by directly by some outside force. In many other cases, including diseases such as multiple sclerosis or transverse myelitis, the breakdown of the nervous system comes from within, and this makes for a very complex mystery.

Biomedical research hopes to unravel the mysteries of nervous system disease and trauma and to return as much function as possible to people who have lost it. This is, of course, easier said than done.

A generation ago, the notion of "cure" for spinal cord injury or other paralyzing conditions wasn't part of the vocabulary. The central nervous system was simply not viewed as fixable. Few scientists invested their careers in what was considered a dead end area of research. But over the years, things have changed.

The field of restorative neuroscience is bubbling with energy and expectation. There are more scientists working on brain and spinal cord dysfunction now than at any time in history. Even the most conservative researchers no longer believe that the damaged or diseased nervous system cannot be treated.

The clues are mounting. Clinical trials for innovative treatments and therapies will steadily increase in coming years.

Our knowledge of the brain and spinal cord is far beyond what it was just a few years ago, but it's still limited. Many discoveries are still needed to assure that treatments are effective and safe.

While there is much work to do, it is important to know that there is reason for hope.

Websites

http://www.christopherreeve.org/site/c.ddJFKRNoFiG/b.4435067/k.A03D/International_Consortium_on_Spinal_Cord_Injury.htm

Christopher & Dana Reeve Foundation International Research Consortium on Spinal Cord Injury

The mission of the Reeve Foundation International Research Consortium on Spinal Cord Injury is to promote structural repair and functional recovery in the acutely and chronically injured spinal cord.

<http://www.christopherreeve.org/site/c.ddJFKRNoFiG/b.4343879/k.D323/Research.htm>

Christopher & Dana Reeve Foundation: Research

This page has information on research into treatments and cures for spinal cord injury. The site offers free research newsletters and access to the Foundations Progress in Research reports.

<http://csro.com/>

Canadian Spinal Research Organization

120 Newkirk Road, Unit 2

Richmond Hill, ON L4C 9S7

Canada

Phone: 905-508-4000, 800-361-4004 (Toll-free)

E-mail: info@csro.org

The CSRO is dedicated to the improvement of the physical quality of life for persons with a spinal cord injury and those with related neurological deficits, through targeted medical and scientific research.

<http://www.miamiproject.miami.edu>

Miami Project to Cure Paralysis

PO Box 016960 (R-48)

Miami, FL 33101-6960

Phone: 305-243-6001, 800-STAND UP (Toll-free, 800-782-6387)

E-mail: miamiproject@med.miami.edu

The Miami Project is the world's largest comprehensive spinal cord injury research center, dedicated to finding more effective treatments and, ultimately, a cure for paralysis.

http://www.ninds.nih.gov/disorders/sci/detail_sci.htm

National Institute of Neurological Disorders and Stroke: Spinal Cord Injury – Hope Through Research

This page has information on spinal cord injury, including treatment, rehabilitation and research.

<http://www.ncddr.org/>

National Center for the Dissemination of Disability Research (NCDDR)

SEDL

4700 Mueller Boulevard

Austin, TX 78723

Phone: 512-476-6861, 800-266-1832 (Toll-free)

E-mail: NCDDR@sedl.org

The long-term goal of the NCDDR is to expand production, access, dissemination, and use of disability and rehabilitation research evidence among National Institute on Disability and Rehabilitation Research (NIDRR) management and grantees, people with disabilities and their families, and disability-oriented professionals, practitioners and service providers.

http://www.pva.org/site/c.ajIRK9NJLcJ2E/b.6305827/k.7268/PVA_Research_Foundation.htm

Paralyzed Veterans of America Research Foundation

Phone: 202-416-7652

E-mail: foundations@pva.org

The PVA Research Foundation supports innovative research and fellowships that improve the lives of those with spinal cord injury and disease.

<http://www.reeve.uci.edu>

Reeve-Irvine Research Center

The mission of the Reeve-Irvine Research Center is to find new treatments for spinal cord injury through the collaborative research and educational efforts of prominent scientists and clinicians both at the University of California, Irvine and around the world.

<http://keck.rutgers.edu/>

Rutgers University: W.M. Keck Center for Collaborative Neuroscience

The Spinal Cord Injury Project

604 Allison Road, D-251

Piscataway, NJ 08854

Phone: 732-445-2061

E-mail: SCIProject@biology.rutgers.edu

The mission of the W. M. Keck Center for Collaborative Neuroscience is the development of effective treatment for acute and chronic spinal cord injuries and to move these discoveries from laboratory to human lives as rapidly as possible.

<http://www.spinalcord.uab.edu/show.asp?durki=22508>

Spinal Cord Injury Information Network: Research for a Cure in Spinal Cord Injury (2005)

This page has general information on research (what it is, how it's done, how to interpret results) as well as information on SCI-related research and strategies are pursuing to find a cure.

<http://www.icord.org/scire>

Spinal Cord Injury Rehabilitation Evidence (SCIRE) SCIRE is a Canadian project that synthesizes research on SCI rehabilitation for health care professionals, scientists, policy-makers and consumers.

<http://www.herl.pitt.edu/>

University of Pittsburgh: Human Engineering Research Laboratories (HERL)

VA Pittsburgh Healthcare System
6425 Penn Avenue, Suite 400
Pittsburgh, PA 15206
Phone: 412-822-3700

HERL's mission is to continuously improve the mobility and function of people with disabilities through advanced engineering in clinical research and medical rehabilitation. HERL operates an assistive technology registry which informs people of research studies. The registry is open to all people at least 18 years of age who use any form of assistive technology. People do not need to be located in or travel to Pittsburgh in order to participate.

<http://www2.ed.gov/rschstat/research/pubs/res-program.html>

U.S. Department of Education: National Institute on Disability and Rehabilitation Research (NIDRR)'s Research Program

This page describes the NIDRR's research program, which is conducted via a network of individual research projects and centers of excellence throughout the country. Most NIDRR grantees are universities or providers of rehabilitation or related services.

<http://www.wingsforlife.com/en-us/>

Wings for Life: Making Spinal Paralysis Curable

A non-profit organization in Austria that funds research projects focusing on curing paraplegia.

Journals

<http://www.nature.com/sc>

Spinal Cord: The Official Journal of the International Spinal Cord Society

Spinal Cord is published monthly and deals with all aspects of spinal anatomy, physiology and lesions (injury and disease).

<http://sci.washington.edu/info/newsletters/update.asp>

Spinal Cord Injury Update

This newsletter, published three times a year, covers topics related to spinal cord injury for consumers and health care providers.

<http://www.thomasland.com/about-spinalrehab.html>

Topics in Spinal Cord Injury Rehabilitation

Quarterly peer-reviewed journal that discusses functional approaches and innovative techniques for spinal cord injury rehabilitation. Each issue focuses on research papers with the latest clinical developments as well as an in-depth review of a single key topic.

The following books and videos are available for free loan from the PRC library. For more information, please see www.paralysis.org and click *Borrow from Our Lending Library* under PRC Quick Links.

Books

- **Spinal Cord Injury: Progress, Promise, and Priorities.** Washington, DC: National Academies Press/Institute of Medicine, 2005.
- Vikhanski, Luba. **In Search of the Lost Cord: Solving the Mystery of Spinal Cord Regeneration.** Washington, DC: Joseph Henry Press, 2001.

Videos

- **Clinical Kinesiology Applied to Persons With Quadriplegia Part I: Maximizing Movement Potential.** Washington DC: Paralyzed Veterans of America, 2001. (90 minutes)
- **Clinical Kinesiology Applied to Persons With Quadriplegia Part II: Enhancing Function.** Washington DC: Paralyzed Veterans of America, 2001. (53 minutes)
- **From the Bench to the Body: Translational Research & Spinal Cord Injury Avoiding Potential Pitfalls.** Miami, FL: University of Miami School of Medicine, 2003. 4 volume set. (90 minutes each)
Covers the issues involved in moving SCI research from the lab to human trials.
- **Spinal Impact.** Princeton, NJ: Films for the Humanities & Sciences, 2000. (51 minutes)
Explores the promising scientific breakthroughs in treatment including nerve regeneration and electrical stimulation devices.
- **Spinal Injuries: Recovery of Function.** Princeton, NJ: Films for the Humanities and Sciences, 1995. (24 minutes)
- **The Toughest Break.** Princeton, NJ: Films for the Humanities & Sciences, 2000.
Narrated by Christopher Reeve. Reenacts a spinal cord injury from accident to rehab. Interviews some scientists on progress in the field.

The information contained in this message is presented for the purpose of educating and informing you about paralysis and its effects. Nothing contained in this message should be construed nor is intended to be used for medical diagnosis or treatment. It should not be used in place of the advice of your physician or other qualified health care provider. Should you have any health care related questions, please call or see your physician or

other qualified health care provider promptly. Always consult with your physician or other qualified health care provider before embarking on a new treatment, diet or fitness program. You should never disregard medical advice or delay in seeking it because of something you have read in this message.