A Word from the Director

Greetings from the International Center for Spinal Cord Injury at Kennedy Krieger Institute! It has been a wonderful past few months for ICSCI—the clinic is flourishing, our research program is growing, and our outreach and educational efforts have expanded. This newsletter will highlight several ongoing projects that we are excited to share with you.

Our clinical research program has grown tremendously over the past few years. As of today, we have six active clinical trials, which we highlight in this newsletter, and we have two others in the late planning stages that should start very soon. Recently, we have begun fundraising efforts for a half-dozen other clinical research projects that we are very excited about and hope to begin soon.

An article written by ICSCI team members and recently accepted for publication in the Archives of Physical Medicine and Rehabilitation highlights another exciting ongoing clinical research project. The article “Bone mass in individuals with chronic spinal cord injury: associations with activity-based therapy, functional and neurologic status, a retrospective study” was developed using results from our ICSCI clinical research database. This database is used to track clinical outcomes, validate our treatment and therapy methods, and further develop optimal clinical care interventions for patients.

Virtual Sailing Program Update

By Shannon Inches

In 2011, under the direction of Dr. Albert Recio, the International Center for Spinal Cord Injury began a pilot therapeutic virtual sailing program using a virtual sailing simulator we call the VSail. The VSail is a ride-on computer-assisted sailing simulator. It offers a safe and realistic sailing experience, while allowing the prospective sailor to learn necessary sailing skills on dry land before heading onto the water.

Our Mission

Transitioning today's science to near-term therapeutic applications, we focus on developing and applying advanced restoration strategies for optimizing spontaneous recovery in those living with paralysis.
A Word from the Director

Since our last newsletter, we have hosted, organized, and participated in a number of events that we hope will benefit our patients and raise awareness about spinal cord injury and related disorders, including the Transverse Myelitis Association Walk-Run-N-Roll, Roll on Capitol Hill, the National Complex Rehab Technology (CRT) Leadership & Advocacy Conference, our Contemporary Trends in Spinal Cord Injury Management Symposium, our activity-based restorative therapy workshops, and many others. We believe it is essential that we continue to advocate for our patients and educate the community about spinal cord injury and its impact on society.

Thank you for your support!

Cristina Sadowsky, MD
Clinical Director, International Center for Spinal Cord Injury at Kennedy Krieger Institute

Virtual Sailing Program Update

We are also researching the recreational and therapeutic benefits for people with spinal cord injury using the VSail-Access sailing simulator. The VSail-Access is the first sailing simulator available for people with disabilities. The sailor “sails” the simulator around virtual courses displayed on a computer screen or an overhead display in the same way as a real sailboat on water (a tiller to control the rudder angle and a mainsheet [a rope] to control the set of the sail). Electronic sensors provide real-time feedback to match the movements of the virtual sailboat displayed on the screen with those of the simulator. The sensors are absolute encoders, one each attached to the hull, the tiller, and the mainsheet. These are set at a standard position each time the simulator is to be used. These record the position of the hull (degree of heeling), the position of the tiller (which determines the direction of sailing), and the position of the sail with respect to the wind direction. Sailors can select wind strength and conditions to suit their ability. For people with severe disabilities, a seat on a frame with a manual or an electronic joystick or with head controls is lowered into the VSail-Access cockpit.

Since 2011, 11 participants (three females and eight males) have enrolled in the VSail program, and eight participants have completed the program to date. Participants range in age from 23 to 63 years, with the number of years since their injury ranging from two to 38 years. Five of the participants had tetraplegia, and six had paraplegia.

All participants showed dramatic improvement in their sailing scores, successfully completing the triangular race course in less than 3 minutes with 14 knots of wind on the VSail. Quality of Life (QOL) measurements improved in all four SCI QL-23 domains, with overall rating of life situation and problems relating to injury each sustaining a statistically significant increase. In the VR-36, statistically significant improvements (p < .05) were seen in the health change and role limitation due to emotional health categories.

Participants were able to successfully sail on the water at the Downtown Sailing Center in Baltimore. They were able to perform specific sailing maneuvers (i.e., steering predetermined courses, sail trimming, tacking, jibbing, and mark rounding) after completing the 12-week virtual reality sailing study.

Participants described their on-water experience as “exhilarating and great fun.” Participating in a sports activity with their respective family members and leaving their wheelchair unoccupied gave a sense of optimism about their future.

Please help spread the word about this study. If you or someone you know is interested in joining this study, please call the clinical research coordinator at 443-923-9235 or clinicaltrials@spinalcordrecovery.org.

Virtual Sailing Simulator in Individuals with Spinal Cord Injury
Principal Investigator: Dr. Albert Recio, MD
Research Coordinator: Shannon Inches
IRB protocol: NA_00044093
Clinical Trials Currently Recruiting

Pediatric Multi-Center Evaluation of Notable SCI Outcome Instruments, Evaluation of Outcome Instruments when Applied to Children

The overall objective of this research project is to establish pediatric psychometric support (usability, reliability, validity) of outcomes instruments that have been recommended for use in spinal cord injury (SCI) rehabilitation, clinical trials, and outcomes research.

Principal Investigator: Cristina Sadowsky, MD
IRB protocol: NA_00091797

Patterned FES Ergometry of Arm and Shoulder in Individuals with Spinal Cord Injury

This research is being done to find out if functional electrical stimulation (FES) arm cycling can improve the function of people with cervical spinal cord injury that paralyzes both the arms and legs. FES arm cycling is a method of applying low-level electrical currents to the arm and shoulder muscles to cause the weakened or paralyzed muscles to contract and produce a cycling motion of the arms.

Principal Investigator: Cristina Sadowsky, MD
IRB protocol: NA_00014481

Relationship of MRI to ASIA Impairment Scale in Chronic Spinal Cord Injury

The objective is to study the structural and functional magnetic resonance imaging of the brain and spinal cord. Participants will be asked to lie still in the MRI scanner, while we take pictures of their brain and spinal cord. During the scan, participants will also be asked to do a variety of activities, such as look at pictures and movies, listen to sounds and words, press buttons when they feel a vibration, or move their hands or feet during these scans.

Principal Investigator: John McDonald, MD, PhD
IRB protocol: NA_00001271

CAPTURE: Collaborative Assessment of Pediatric Transverse Myelitis: Understand, Reveal, Educate

The study combines assessments from healthcare providers and patients relative to pediatric TM outcomes. The study is designed to assess the current state of pediatric TM in terms of diagnosis, treatment, and outcomes, and reveal current best practices.

Principal Investigator: Albert Recio, MD, PT
IRB protocol: IRB_00037076

Linking Adult and Pediatric Outcomes Instruments

This is a non-intervention study. The pediatric and adult computer adaptive tests (CATs) and their respective short forms will be administered as a way to validate the linking estimates established in the pilot work. The pediatric and adult CATs will be administered to children (child-report) and parents (parent-report) using study-designated tablets that contain the CAT software programs, and short forms will be pen and paper.

Principal Investigator: Cristina Sadowsky, MD
IRB protocol: IRB_00037075

For more information about our research, visit spinalcordrecovery.org.
Welcome back to the Advocacy Spot! Here, we aim to keep you abreast of today’s hot topics in legislation that will impact access to services, equipment, and other aspects of healthcare. By keeping you informed, we hope to motivate you to advocate, which will promote change and protect your right to quality care! On a daily basis, healthcare providers and equipment suppliers are advocating for you; however, your voices and your stories will make the greatest impact.

By Erin Michael, PT, DPT, ATP/SMS

In this issue, we focus on two new hot topics: transportation and the ABLE Act, followed by an update on the status of the Complex Rehabilitation Technology Bill. Also included is a great resource to help you in your fight for the equipment you need.

**Transportation**

The Rehabilitation Act (1973), the Air Carrier Access Act (1986), and the Americans with Disabilities Act (1990) all included provisions for improved access to transportation, including public buses and subways, airlines, curb ramps, and accessible sidewalks. However, access continues to be an issue for people with disabilities. Recent studies show that people with disabilities are twice as likely to have inadequate transportation as those without disabilities, especially in rural areas.

Part of the problem is that it’s difficult to enforce compliance with the Rehabilitation and Americans with Disabilities Acts. Additionally, federal funding for safety programs and public transit is at risk, with a major law set to expire in June 2015, and the Highway Trust Fund, used to pay for road and transit projects, potentially going bankrupt soon.

To fight for your right to improved ease and safety of transportation, reach out to your House Representatives and ask for support of the following bills:

1) **HR 3978, New Opportunities for Bicycle and Pedestrian Infrastructure Financing Act**, sponsored by Rep. Albio Sires (D-NJ 8th). This bill includes funding for achieving compliance with the ADA, and improving public transit and biking and pedestrian infrastructure.

2) **HR 3494, the Bicycle and Pedestrian Safety Act**, sponsored by Rep. Earl Blumenauer (D-OR 3rd) and Rep. Howard Coble (R-NC 6th). This bill would require the Department of Transportation to set non-motorized safety performance measures, also known as legislation to protect people who walk, roll, or bike. This type of legislation does not currently exist.

*This bill has a companion bill in the Senate, sponsored by Sen. Jeff Merkley (D-OR) and Sen. Kelly Ayotte (R-NH). Reach out to your state senators for their support of this bill.

**ABLE Act of 2013**

The Achieving a Better Life Experience Act of 2013, or ABLE Act, establishes tax-exempt accounts to assist people with disabilities to save private funds to pay for qualified expenses. These accounts would also be excluded from gross income, which means these funds would be disregarded when determining Medicaid eligibility and other means-tested federal programs, except for supplemental security income (SSI) monthly benefit payments. These SSI benefits would be suspended, not terminated, if available funds exceeded $100,000, but would resume when assets dropped below $100,000.

ABLE accounts can be used for a variety of expenses, including education, housing, and transportation. They can also be used for “employment support,” such as job-related training, assistive technology, or personal assistance support to assist in ability to perform the job. Funds can be set aside for “health, prevention, and wellness,” including health insurance premiums, medical, vision, dental or medical health expenses, therapy services, and durable medical equipment. Additional miscellaneous expenses, such as financial management, legal fees, and home improvements or modifications, can also be funded.
Ask your representatives and senators to please co-sponsor HR 647 (sponsored by Rep. Ander Crenshaw R-FL 4th)/S 313 (sponsored by Sen. Robert Casey D-PA) Achieving a Better Life Experience (ABLE) Act of 2013, which will help individuals and families save private funds to support the health, independence, and quality of life needs of individuals with disabilities.

**Complex Rehabilitation Technology (CRT)**

In the previous two spots, I reviewed the “Ensuring Access to Quality Complex Rehabilitation Technology (CRT) Act” (HR 942/S 948). The main goals of this legislation are to create a separate benefit category for customized manual and power wheelchairs (also known as “CRT”) and to eliminate Medicare’s “in the home” restriction. This legislation would account for the level of technology utilized, acknowledge the skill and hours needed to evaluate someone for such a device or the full range of services furnished by companies that provide these products, account for training to ensure proper use of the equipment, and incorporate the complexity and unique nature of the equipment itself. Additionally, it would allow Medicare beneficiaries to get a wheelchair that allows them to be the most independent across all potential environments of use, instead of just within the home.

Thanks to ongoing advocacy efforts, support for this bill continues to grow. In the last update, we told you that six senators and 83 representatives had signed on. We are pleased to tell you that we are now up to 18 senators and 141 representatives, which means support has more than doubled! However, this is not good enough. We need to get this bill passed, and your stories can help. Please reach out to tell your congressmen and -women how important your customized wheelchair is to you or your family member.

To learn more about this bill, monitor the progress, or learn how to contact your congressmen and -women, please visit [access2crt.org](http://access2crt.org).

**National Assistive Technology (AT) Advocacy Project**

As many of you have probably noticed, access to the equipment we recommend for you—standers, E-stim devices, wheelchairs, and so on—has been dwindling. The National AT Advocacy Project is funded through a grant to provide free legal and advocacy services to individuals with disabilities who seek AT devices and are currently struggling with denials and appeals processes.

The following link will lead you to a list, state by state, of offices that are available to assist you: [nls.org/Disability/NationalAssistiveTechnologyProject](http://nls.org/Disability/NationalAssistiveTechnologyProject). Click on the “PAAT Directory” for the most up-to-date list.
Aquatic Therapy Program

The use of water as a means of rehabilitation dates back to ancient civilizations that noted the healing, wellness, spiritual, and social benefits of aquatic therapy. At the International Center for Spinal Cord Injury, our aquatic therapy program has been designed to augment land-based therapy and is used as a treatment modality throughout the rehabilitation process.

Located on the top floor of the Outpatient Center, the Mr. and Mrs. Arthur B. Modell Aquatherapy Center houses two state-of-the-art pools that feature a range of warm water temperatures, built-in treadmills for retraining and observing gait patterns, video systems for monitoring therapy activities, multiple jets for resistance, and floors that operate on lifts to allow easy access for patients in wheelchairs.

“Whatever method our patients use for mobility, such as a wheelchair or walker, we can get them right onto the pool surface and then lowered into the water,” says Christy Sachs, the Institute’s adapted aquatics manager.
Aquatic therapy can be tailored to each patient’s needs by customizing resistance, speed, temperature, and length of session. All settings can also be programmed and saved onto the pool’s computer to aid in therapy progression.

But what makes aquatic therapy so effective are the unique properties of the water itself: its buoyancy, hydrostatic pressure, and viscosity.

Buoyancy is the upward thrust that occurs on a submerged body. The depth of the water is completely adjustable in the pools; therefore, the amount of buoyancy can be adjusted as the patient progresses.

Hydrostatic pressure improves peripheral edema, increases cardiovascular response, balance, and proprioceptive training, and creates a safe, supportive, and forgiving environment.

Viscosity can be used to facilitate movement or provide resistance, depending on the direction and timing of movement, and the use of equipment.

“Water is a great therapy tool,” Sachs explains. “It’s assistive, meaning it helps our limbs to float, so moving them is easier. But it’s also resistive, which helps patients become stronger in the water because they are moving through something. Many patients are able to do more in the water than they can do on land.”

For this reason, aquatic therapy offers many benefits to patients with varying levels of function, including improvements in balance, strength, endurance, range of motion, circulation, self-esteem, and quality of life.

“Aquatic therapy is a novel option when combined with land therapy,” explains Dr. Albert Recio, the Institute’s medical director of aquatic therapy. “The water allows patients to escape the limitations of gravity, helps them to become stronger, and provides them with the ability to do more in the pool than they can on land, so they can more quickly achieve their therapeutic goals.”
ICSCI Events

Dining for Dollars

The 5th annual Dining for Dollars event was held at Liberatore’s Ristorante, in Timonium, Md., on Wednesday, May 7. The night included a buffet dinner, drink specials, raffles, door prizes, a silent auction, and a DJ. Proceeds from this event benefited a special fund to help families in need obtain necessary items or equipment to ensure safe and appropriate discharge to home and the community.

Fourth Annual Contemporary Trends in Spinal Cord Injury Management Symposium

The fourth annual Contemporary Trends in Spinal Cord Injury Management Symposium, hosted by the International Center for Spinal Cord Injury, was held on June 16, 2014. There were approximately 70 attendees at the event and a dozen research posters on display. Speakers for the symposium included Amy Bastian, PhD, PT, director of the Motion Analysis Laboratory, and Benjamin Greenberg, MD, MHS, director of the Transverse Myelitis & Neuromyelitis Optica Program at the University of Texas Southwestern Medical School.

During the symposium, three colleagues were recognized for their commitment to spinal cord injury research and clinical care. Dr. Albert Recio was awarded Leader in Spinal Cord Injury Care 2014, Dr. Visar Belegu was awarded Leader in Spinal Cord Injury Cure 2014, and Anna Schneider was awarded Friend of Spinal Cord Injury Care and Cure 2014.

Transverse Myelitis Association Walk-Run-N-Roll

On Sunday, June 22, 2014, Kennedy Krieger Institute participated in the Transverse Myelitis Association’s first Maryland Walk-Run-N-Roll, held at Goucher College in Towson, Md. The Kennedy Krieger Institute team, organized by ICSCI therapist Elizabeth Neighbors, PT, was proud to be a part of the effort. Thank you to everyone who joined the Kennedy Krieger Institute team, including ICSCI Director Dr. Cristina Sadowsky. Special thanks to Lisa Trotta, Angela Huff, Jody Luttrell, and Janet Dean for being a part of the Walk-Run-N-Roll planning committee and volunteering. The goal of the Maryland Walk-Run-N-Roll Campaign was to raise awareness and funds for research and programs for individuals with acute disseminated encephalomyelitis (ADEM), neuromyelitis optica (NMO), optic neuritis (ON), and transverse myelitis (TM), and their caregivers.
**Pittsburgh Marathon**

This past May, International Center for Spinal Cord Injury staff Erin Michael, Tom Novotny, Sarah Greenemeier, Kaitlin MacDonald, and Julie Cagney went to Pittsburgh, Pa., to support two patients, Paul Libby and James Cook, who participated in the Dick’s Sporting Goods Pittsburgh Full Marathon. Paul and James were able to participate in the handcycling division of the marathons, thanks to scholarships provided to them from funds raised by the Baltimore Running Festival Kennedy Krieger charity team. Both patients had competed in their first full marathon as members of Team Kennedy Krieger in October 2013. James placed third in the event with a time of 1:39:49, and Paul finished at 2:20:36.

**National Complex Rehab Technology (CRT) Leadership & Advocacy Conference**

On April 29–May 1, Erin Michael, Robin Locks, and Elizabeth Farrell, along with one patient, participated in the 2014 National CRT Leadership & Advocacy Conference in Arlington, Va., organized by the National Registry of Rehabilitation Technology Suppliers (NRRTS) and the National Coalition for Assistive & Rehab Technology (NCART). Attendees visited seven congressional offices and were able to personally meet with U.S. Senator Benjamin Cardin and U.S. Representative Christopher Van Hollen.

**Gary Karp Visits Kennedy Krieger Institute**

On July 28, author and inspirational speaker Gary Karp presented “Thriving Through and Beyond Trauma.” A wheelchair user since injuring his spinal cord in 1973 at the age of 18, the Spinal Cord Injury Hall of Fame educator spoke about the exploration of the innate spirit and life force that arises in the face of traumatic injury.

**Roll on Capitol Hill**

This past June, four International Center for Spinal Cord Injury patients and staff, including Erin Michael, Robin Locks, and Briana Gregory, participated in the 2014 Roll on Capitol Hill in Washington, D.C., organized by the United Spinal Association and the National Spinal Cord Injury Association. The event advocates for improved policies that impact health, independence, and quality of life for people with spinal cord injuries and disorders. Roll on Capitol Hill (ROCH) presents a unique forum for leaders to constructively address disability issues that are impacting the lives of those with spinal cord injuries face-to-face with congressional representatives. ROCH attendees have the opportunity to visit the Capitol Hill offices of their representatives and other key legislators to personally discuss legislative issues about the need for better access to healthcare, Social Security benefits, disability rights, employment opportunities, and accessible transportation.

**Support Our Work**

With your support, we are revolutionizing rehabilitation for patients with spinal cord injury and paralysis, offering something many of them have been told was lost forever: hope.
Personal Training Now Offered

The International Center for Spinal Cord Injury is now offering personal training to current patients. The personal training program features one-on-one sessions with a certified personal trainer, and is designed to take clients through a post-rehab functional movement exercise program to help maintain gains made in physical and occupational therapy, as well as build endurance and increase strength. The ultimate goal is to continue progress out of therapy and return to an optimal level of fitness. Sessions are offered in hour or half-hour increments, Monday through Friday, 9 a.m. to 4 p.m., by appointment only.

Congratulations to Dr. Cristina Sadowsky, who was recently named the president of medical staff at Kennedy Krieger Institute.

The International Center for Spinal Cord Injury’s 2013-14 spinal cord injury medicine fellow, Dr. Tae Hwan Chung, was recently awarded a Rehabilitation Medicine Scientist Training Program (RMSTP) fellowship from the Association of Academic Physiatrists.

Kimberly Perone, MBA, MSHA, OTR/L, recently received a $2,000 grant from the Dana and Christopher Reeve Quality of Life Program for her “Living Safely at Home” initiative. The goal of this project is to educate staff and patients on safety, home modifications, and emergency preparedness.

Caleb King’s proposal about his work with Dr. Albert Recio and his virtual sailing research was accepted by the Academic Association of Physiatrists (AAP) and Craig H. Neilsen Foundation Rehabilitation Research Experiences for Medical Students program. As a part of the 2014 summer program, he worked with Dr. Recio and the VSail research program team. He will be presenting the team’s findings at the 2015 AAP Annual Meeting. As he starts his second year in medical school at the University of Oklahoma College of Medicine, Caleb says, “I am indebted to Dr. Recio for teaching and challenging me. It’s been a pleasure witnessing the work of expert therapists and physicians and the extraordinary relationships they have with their patients.”

In July, Steven Sobelman, PhD, and Erin Pressman, LGSW, joined our team. Dr. Sobelman is a clinical psychologist, and Erin Pressman is our new full-time social worker. If you would like to make an appointment with Dr. Sobelman, please call our clinic at 443-923-9230. To make an appointment with Erin Pressman, please contact your therapist or call the clinic.

Recent ICSCI Research and Professional Publications

Cristina Sadowsky and Edward Hammond’s article “The Epidemiology of Childhood and Adolescent Traumatic Spinal Cord Injury in the United States: 2007-2010” was accepted for publication in the Journal of Neurotrauma. This article was written in conjunction with Shalini Selvarajah, Eric B. Schneider, Daniel Becker, and Adil H. Haider.

Edward Hammond, John McDonald, Cristina Sadowsky, and Heather Metcalf’s article “Bone mass in individuals with chronic spinal cord injury: associations with activity-based therapy, functional and neurologic status, a retrospective study” was recently accepted for print in the Archives of Physical Medicine and Rehabilitation.


Cristina Sadowsky, along with Linda Schultz, recently wrote “Sepsis Guide for Individuals with Spinal Cord Injury” for the Christopher and Dana Reeve Foundation, to be published in 2014.
Dear Tom,

I am interested in making a therapy appointment, but my work schedule doesn’t allow me to take off during regular business hours. Are weekend or evening hours available?

Sincerely,

Hoping for flexible scheduling

Dear Hoping,

I’m glad you asked that question. We have recently begun offering limited weekend and evening appointments. Please speak to your therapist if you are already in therapy, or contact our clinic schedulers at 443-923-9230 to learn more about availability.

Sincerely,

Tom

The team appreciates and encourages questions from employees, patients, family members, and all ICSCI supporters. Submissions may be sent to Tom Novotny, Director, Operations and Business Development, by e-mail to ICSCInews@kennedykrieger.org. Not all questions will be published due to space limitations, but unpublished questions will be answered by e-mail.

Recent Events

Progress in Practice Workshops

This past February and September 2014, the International Center for Spinal Cord Injury hosted two-day national workshops titled “Progress in Practice: Activity-Based Restorative Therapy.” The first was held in Tampa, Fla., while the second was hosted at Kennedy Krieger Institute in Baltimore. The events were attended by physical therapists and occupational therapists from rehabilitation hospitals and outpatient units from around the country. Therapists Kimberly Perone, Brooke Meyer, Beth Farrell, and Sarah Greememeier instructed participants in the scientific and therapeutic principles of activity-based restorative therapy and appropriate clinical applications.

Expanding Our ABRT Education and Training Program*

Physical rehabilitation following spinal cord injury–related paralysis in rehabilitation centers has traditionally focused on teaching patients to compensate for their injuries, because of the widely-held belief that most improvement occurs within the first six months following a spinal cord injury, and that improvement after two years is impossible. Due to this belief, few healthcare providers have received formal training in specialized spinal cord injury medicine and rehabilitation. Here at the International Center for Spinal Cord Injury, we know that evidence shows that activity-based restorative therapy (ABRT) can optimize the nervous system for recovery and offset the rapid aging and chronic complications that often result from spinal cord injury. By expanding our ABRT education and training program to target the wide variety of clinical care settings that serve individuals with spinal cord injuries, we hope to bridge this gap in knowledge and services. In addition to our bi-annual workshops, we also offer workshop attendees a year-long subscription to our e-learning platform, which contains additional training resources for continuing spinal cord injury education. Our goal is that ABRT practice will reach more clinics and improve the care of patients with spinal cord injuries across the country.

*This training program and its e-learning component were developed in part with funding from the USAMRMC/USAMRA (Contracts W81XWH-09-2-0186 and W81XWH-10-2-0182) and the Paralyzed Veterans of America Education Foundation (Grant #710).
At the International Center for Spinal Cord Injury at Kennedy Krieger Institute, our team of physicians, therapists, and researchers is opening the door to possibilities, so patients can follow their dreams and live fulfilling, independent lives.

Through innovative research, activity-based restorative therapies, and a focus on long-term recovery, we specialize in helping children and adults with spinal cord injuries improve overall health and learn independence.

Because a spinal cord injury shouldn’t keep patients from living out their dreams.

To learn more, call 888-923-9222, visit spinalcordrecovery.org, or email us at info.sci@spinalcordrecovery.org.