

WITHIN YOUR **Reach**

THE LATEST REHABILITATION NEWS AND ADVANCES FROM CAROLINAS REHABILITATION



Carolin Rehabilitation

SUMMER/FALL 2011



BACK IN BALANCE

Putting evidence-based strategies to work

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INSPIRING PATIENTS

Carolin Rehab physician lives life to its fullest

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Real-life inspiration

RARELY DO REHABILITATION PATIENTS

encounter a physician who can truly say, "I know what you're going through."

Jesse A. Lieberman, MD, a physiatrist with Carolinas Rehabilitation, is one of the few physicians who can. He can also tell many of his patients that there is life after spinal cord injury, and his accomplishments are a testament to that fact.

As a young man, Dr. Lieberman knew he wanted to pursue a medical degree. He focused on science courses in high school and received a zoology degree from North Carolina State University in 1999. He went on to study medicine at Wake Forest University.

One winter day in February 2003, everything changed when Dr. Lieberman fell three stories from his balcony while trying to help a neighbor who was locked out of her condo. At 5 feet 8 inches and 215 pounds, Dr. Lieberman was just weeks away from competing in the Mr. North Carolina bodybuilding contest. The added muscle from his hobby was crucial to his survival.

DETERMINATION PREVAILS

Dr. Lieberman's injury resulted in tetraplegia, or paralysis of the arms, legs and torso. He spent two weeks in a hospital and then came to Carolinas Rehabilitation.

His injury didn't stop Dr. Lieberman from living his life. He stayed focused on the positives: He was still able to become a doctor, his fiancée Michelle supported him and he still had some movement in his shoulders and biceps. He returned to medical school despite his physician's recommendation to take time off. A mere 10 weeks after his injury, Dr. Lieberman was back in school with the help of a motorized wheelchair, Michelle, his family and friends. His determination helped



Jesse A. Lieberman, MD, advises Physical Medicine and Rehabilitation resident Hyung Kim, MD, during rounds while Karen Harman, his nurse assistant, looks on.

him graduate on time in May 2004.

That summer, Dr. Lieberman began his residency in internal medicine at East Carolina University. During that time, he realized he wanted to help people who suffered spinal cord injuries. Dr. Lieberman completed his residency at Carolinas Rehabilitation and a spinal cord injury fellowship at the University of Pittsburgh Medical Center. He returned to Carolinas Rehabilitation in March 2010, as a junior faculty member with a research fellowship.

A BUSY AND REWARDING LIFE

Dr. Lieberman and Michelle were married in 2004, and have twins, a boy and a girl, who are their No. 1 priority.

Currently, Dr. Lieberman is seeing patients and working on numerous research projects. (See *Leading the way in clinical research*.) He makes patient rounds with the help of his nurse assistant, Karen Harman. Except for some aspects of physical examination, Dr. Lieberman is able

to do most everything else unassisted.

Dr. Lieberman and his family are an inspiration not only to his patients, but also to everyone they encounter. He proves to his patients that life continues after a life-altering injury, every single day. ■

Offer hope!

Join us in helping our patients by supporting the Rehabilitation Research and Education Fund.

Mail your tax-deductible contribution to:
Rehabilitation Research and Education Fund
c/o Carolinas HealthCare Foundation
P.O. Box 32861
Charlotte, NC 28232-2861

ON THE COVER: Adaptive kayakers enjoy a day on the water (l-r): Rod Spence, Johnny Ragland, Doug Luther, Erin Kuehn, Damon Myers and Nick Burnham

Leading the way in clinical research

At Carolinas Rehabilitation, research is an integral part of our clinical care mission and resident education. Many of our physicians are actively involved in clinical trials and research to improve patient function and community participation, while increasing knowledge of how patients recover and obstacles to recovery.

Jesse A. Lieberman, MD, is one of a handful of researchers looking at whether nutrition can help prevent cardiovascular disease (CVD) in people with spinal cord injuries (SCIs). His study, "Dietary Patterns and Their Relationship to Cardiovascular Disease Risk Factors in Individuals with Chronic Spinal Cord Injury," investigates whether certain eating habits, particularly whole-grain and dietary fiber intake, have a favorable impact on CVD risk factors in SCI patients.

These risk factors include:

- blood sugar and insulin levels
- cholesterol levels
- inflammation markers associated with CVD and hypertension
- waist circumference and body mass index

To date, 100 participants, ages 38 to 55, are enrolled in the study.

PATIENT REGISTRY

Dr. Lieberman, along with colleagues William L. Bockenek, MD; Michael J. Kennelly, MD, FACS; LaTanya D. Lofton, MD; and William M. Scelza, MD; started a registry for SCI patients who are interested in participating in future studies, including CVD-related research. For more information, contact Carolinas Rehabilitation at:

E-mail: crresearch@carolinashealthcare.org

Research Office: 704-355-1525

Physical Medicine and Rehabilitation

Department: 704-355-9330



Physician Focus

Puneet K. Aggarwal, MD

PUNEET K. AGGARWAL, MD, is a graduate of the Medical College of Virginia. He completed his internship in internal medicine at the University of Virginia-Roanoke and his residency in physical medicine and rehabilitation at Baylor College of Medicine. He also completed an interventional spine fellowship at Medical College of Virginia Hospital and the Sheltering Arms Spine and Sport Center. He is board certified in physical medicine and rehabilitation as well as pain medicine.

Dr. Aggarwal is actively involved in the medical community and presents at national meetings. He's a member of the American Academy of Physical Medicine and Rehabilitation, the International Spinal Injection Society and the American Society of Interventional Pain Physicians.

Dr. Aggarwal is the director of Carolinas Back & Sports Specialists, a multidisciplinary program that combines the services of musculoskeletal-physiatry specialists, board-certified interventional spine specialists and certified sports medicine specialty physicians. The practice has nine physicians who see patients in seven locations.

Soon, the practice will be adding a tenth physician, Thomas Jackson, MD, who will practice at the new Carolinas Medical Center-University office opening this fall. Dr. Jackson is the second interventional spine physiatrist joining Carolinas Back & Sports Specialists.

"If any of my family members needed an interventional procedure, I would definitely send them to Dr. Aggarwal," says Sonya Rissmiller, MD, a physiatrist at Carolinas Back & Sports Specialists. "He is meticulous, cautious and calm, which gives his patients peace of mind."

Dr. Aggarwal enjoys spending time with his wife, swimming, jogging and reading. He is an avid sports fan and enjoys playing racquetball, tennis and Ultimate Frisbee. ■

Meet our dedicated staff

For more information about Dr. Aggarwal or Carolinas Back & Sports Specialists, visit www.carolinasrehabilitation.org.

Bringing Ben home

How uncompromising care and teamwork helped a man who was injured abroad

ON APRIL 10, BEN MAUZÉ WAS

seriously injured in a mountain bike accident in La Paz, Bolivia. To reduce brain swelling and save his life, Ben underwent emergency surgery in La Paz. Luckily, back home in North Carolina, Ben's grandmother had consulted with Shilpa Kasuganti, MD, one of Carolinas Rehabilitation's physicians, to get her recommendation about where Ben should go for rehabilitation. Dr. Kasuganti knew that Carolinas Rehabilitation, a traumatic brain injury model system, was the best place for him.

A WELL-EXECUTED PLAN

While Ben was receiving treatment in La Paz, Carolinas Rehabilitation physicians decided that transferring him to a hospital closer to home would ensure that he was medically ready to participate in an intensive rehabilitation program. Carolinas Rehabilitation's team of experts recommended that it would be in Ben's

best interests to first receive care at Carolinas Medical Center (CMC).

The Carolinas Rehabilitation staff and the Bolivian treatment team carefully coordinated Ben's trip back to the United States. On May 12, Ben was on a flight from Bolivia to Miami International Airport, where a Carolinas HealthCare System MedCenter Air Team was ready and waiting to transport him to Charlotte, NC.

"I didn't think Customs was going to let Ben through when I got word that he was on the way," says MedCenter Air Team Leader Lorri Elliot. "It really was unbelievable and a testament of a mother's love and determination to get her son home," Elliot says.

HELP AND SUPPORT ALL THE WAY

Ben was stabilized in CMC's Neuro Intensive Care (NIC) unit, where he remained for several weeks before transferring to Carolinas Rehabilitation.

"Ben made incredible gains during his stay," says Lori Grafton, MD, director of the Brain Injury Program. "He was initially admitted to our Emerging Responsiveness Program, where he focused on being awake and alert, and then moved to our Acute Brain Injury Program, where he practiced standing and walking. Ben's progress was accomplished through the hard work and dedication of many people, including Ben and his family, and the physical, occupational and speech therapists, rehabilitation nurses and rehabilitation physicians. His family's involvement and a willingness to learn were crucial pieces to Ben's success." After almost two months of therapy and miles of progress, Ben finally made the journey back to his home in Wilson, NC.

"Not once was Ben ever treated like anything but a normal person," says his mother. "And I can't thank the CMC nurses and doctors enough for that." ■

Ben Mauzé and the dedicated care team that helped him recover from a traumatic brain injury



Back in balance

Preventing falls and serious injury

EACH YEAR, ONE IN EVERY THREE

adults ages 65 and older falls, according to the Centers for Disease Control and Prevention. Falls are the most common cause of nonfatal injuries and hospital trauma admissions—more than car accidents or traumatic injuries. Common health problems that can increase the likelihood of falling include:

- environmental hazards in the home
- fluctuating blood pressure
- foot problems
- problems with walking or moving around
- taking four or more medications
- vision problems

HELPING THOSE AT RISK

Carolinas Rehabilitation, along with Healthy@Home, Carolinas HealthCare System's home health provider, created the Better Balance Program to prevent falls and treat patients with high fall risk in the community.

The Better Balance Program uses the most recent evidence-based

treatment strategies for improving balance and reducing falls. Treatment strategies include a comprehensive patient assessment and identification of fall risk factors. Individual treatment plans are developed to help patients improve balance and reduce their fall risks, along with providing instruction in fall prevention strategies. The program includes computerized balance testing and training, patient follow-up and monitoring after discharge and group exercise programs for skills maintenance.

Carolinas Rehabilitation also takes a proactive role in educating the community by providing home-safety tips, suggestions for lifelong exercise and activities to improve balance. Specialty trained physical therapists speak to community groups, local YMCAs, medical providers, employers and others about the importance of fall prevention. Some falls can be prevented with physical training, education and modifications to the home setting. ■

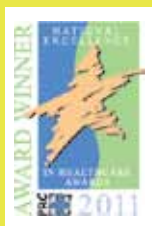


Missy Davis, PT, provides a patient with real-life solutions for navigating stairs.

Partners in safety

Carolinas Rehabilitation works closely with Carolinas Trauma Network on ways to prevent falls in the community.

Carolinas Rehabilitation wins Top Performer award



FOR THE THIRD YEAR

in a row, Carolinas Rehabilitation-Mount Holly has been named a 2011 Top Performer for Overall Quality of Care. The facility is the only rehabilitation hospital in the nation to receive this award from Professional Research Consultants (PRC). The Top Performer award is PRC's highest honor and is only presented to facilities that are ranked in the top 100th percentile

for overall quality of care.

Carolinas Rehabilitation also earned two 5-Star awards, placing those services in the top 10 percent of PRC's nationwide database. These are:

- 5-Star award (Carolinas Rehabilitation-Mount Holly)
- 5-Star award (Carolinas Rehabilitation-Monroe; outpatient therapy)

"Winning a third consecutive Top Performer award is a great honor for our entire team and speaks to the culture

of teamwork at our hospital," says Peter M. Cassidy, FACHE, administrator of Carolinas Rehabilitation-Mount Holly. "It's a privilege to care for and rehabilitate people after illness or injury ... and to do so at Carolinas Rehabilitation-Mount Holly. Top performance means that everyone is bringing his or her 'A' game to work every day. Excellence is palpable from the moment you come through the front door. I feel honored to be a part of this dedicated team." ■

Seating goes high-tech

Providing patients with comprehensive evaluations and education about mobility devices

THE WHEELCHAIR SEATING CLINIC

(WSC) at Carolinas Rehabilitation is one of the only full-time seating clinics in the Carolinas. Staffed by experienced occupational and physical therapists, WSC provides specialized evaluations for complex medical equipment such as power wheelchairs, custom manual wheelchairs, adaptive strollers, car seats and custom bathing equipment.

PERSONALIZED SERVICES

This specialty trained therapy team provides patients with convenient, coordinated and comprehensive healthcare. The interdisciplinary treatment team collaborates with local and regional equipment vendors who provide patients with short-term and loaner wheelchairs.

The staff evaluates and designs mobility devices and equipment based on a comprehensive assessment of the patient's upper and lower extremity range of motion, pelvic and spinal alignment, muscle tone and strength, sensation, pressure mapping and skin integrity, as well as the patient's home environment and activities of daily living.

WSC provides specialized services to assess the patient's needs and determine the most appropriate chair for the

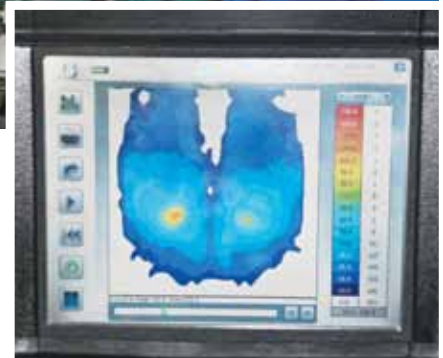


Cathy Lees, MHA, MS, ORT/L, reviews a patient's computerized pressure mapping results, which will be used to fit her for a wheelchair.

individual. Staff members use computerized pressure mapping for evaluation of pressure relief techniques and cushion selection. During follow-up appointments for fitting new equipment, patients receive education about appropriate propulsion and positioning. Those who choose Carolinas Rehabilitation for their wheelchair needs have access to the latest seating and positioning technologies. The highly trained staff is knowledgeable about available equipment, area vendors and suppliers and necessary documentation needed for insurance authorization.

A RESOURCE FOR PATIENTS

"The clinic is an excellent resource to ensure that Carolinas Rehabilitation provides a comprehensive assessment of our clients' needs," says Calvin Hung, PT, MHA, director of Physical Therapy and



the WSC. "Some of the staff members have obtained specialty certification as assistive technology professionals, in addition to their therapy licensure, so clients know that they'll receive the highest level of care. Specialists work collaboratively with the patient, his or her family and other healthcare providers to restore quality of life to our community."

The clinic assists pediatric and adult patients with diagnoses such as spinal cord injury, acquired brain injury, multiple sclerosis, Parkinson's disease, post-polio syndrome, developmental disabilities, cerebral palsy, arthritis, amputation, COPD and stroke. ■

We're here for you

For more information about the wheelchair seating clinic or to schedule an appointment, call 704-355-4440 or visit www.carolinasrehabilitation.org/seatingclinic.

Encouraging expression through art

Volunteers are key to the success of this unique program

ART AS THERAPY IS USED IN

hospitals to bridge a gap in communication between patients and therapists. Through the use of drawing, painting, sculpting and other art forms, patients are able to express certain feelings, conflicts or problems that are otherwise incommunicable.

Carolinas Rehabilitation's art as therapy program, Creative Expressions, is directed by art volunteer Lisa Underwood and recreational therapist Bianca Anthony, LRT/CTRS. As another element in the healing process, the program helps patients develop fine motor skills, cope with their medical prognoses and express their feelings. Patients also gain confidence from the support of their peers.

A HEALING ENVIRONMENT

Underwood has volunteered at Carolinas Rehabilitation since 2009. She holds a bachelor's degree in science and textile design and works in the interior design field. She also teaches private art lessons to adults and children who are coping with debilitating diseases or life-altering events. Her passion is bringing awareness of the therapeutic aspects of art to the medical setting. Underwood's focus at Carolinas Rehabilitation has been to generate a creative environment of healing and communication. She feels that communication flows when people immerse themselves in creative activities.

ADAPTING TO PATIENTS' NEEDS

Our patients are a diverse group. Some suffer from chronic diseases; some are facing changes in their lives following traumatic brain injury, accidental and non-accidental trauma or spinal cord injury; and others are adapting to end-of-life diagnoses. As she provides recreational therapy, Anthony works around perceived

» Creative Expressions members enjoy their time with art volunteer Lisa Underwood.

≈ The group's Tree of Life collage



DID YOU KNOW?

Creative Expressions, the art as therapy program at Carolinas Rehabilitation, meets every Wednesday from 3 to 4 p.m.



barriers resulting from such injuries and illnesses. For example, she uses adaptive equipment for spinal cord injury patients who have trouble using their hands. Straps and special art supplies, such as head sticks for painting, are available for those who thought they wouldn't be able to participate in the program.

FINDING THEIR PASSION

Patients who participate in Creative Expressions are encouraged to explore their feelings and use art as a mode of expression, while working in a positive setting. Patient projects include drawings, painting with watercolors and acrylics, macramé pieces, collages and mandalas. One of the group's standout pieces is a large collage in which pieces of patients' artwork were put together to form the Tree of Life.

Through this art program, our patients have found an underlying passion, self-confidence and a therapeutic form of communication. Underwood and Anthony have collaborated to develop a unique support group here at Carolinas Rehabilitation that not only helps our patients, but also their families and loved ones. ■

Join us!

If you, or anyone you know, would be interested in volunteering for Carolinas Rehabilitation, contact Volunteer Coordinator Erica Campagna, at **704-355-0779** or Erica.Campagna@carolinashealthcare.org.

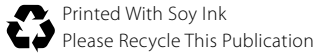


Carolinas Rehabilitation

Uncompromising Excellence. Commitment to Care.

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AWARDS, ACCOLADES & PUBLICATIONS

- Calvin Hung, PT, MHA, director of Physical Therapy and the Wheelchair Seating Clinic, is president-elect of the Greater Charlotte Healthcare Executives Group. As president, Hung will serve members in the western North Carolina region of this professional society for healthcare executives.
- John Roberts, FACHE, was elected to a three-year term as the North Carolina Regent of the American College of Healthcare Executives. Roberts will represent healthcare executives across North Carolina as well as promote board certification and education for healthcare leaders at the national level.
- William Bockenek, MD, Vu Nguyen, MD, and Sonya Rissmiller, MD, were voted Charlotte's Best Doctors by the *Charlotte Business Journal*. Puneet K. Aggarwal, MD, and Sonya Rissmiller, MD, were voted Charlotte's Top Doctors by *Charlotte Magazine*.
- Vu Nguyen, MD, authored the second Process Improvement Project endorsed by the American Board of Physical Medicine and Rehabilitation, which focuses on stroke rehabilitation and its management.
- Mark Alexander Hirsch, MD, a research scientist in the Department of Physical Medicine and Rehabilitation, was one of two American Parkinson's disease researchers to lecture at this year's World Confederation for Physical Therapy in Amsterdam. He has been invited to speak about neurorehabilitation at the XIX World Congress on Parkinson's Disease and Related Disorders, Dec. 11-14, in Shanghai.

HOW TO REACH US

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E-MAIL: carolinasrehabilitation@carolinas.org

VISIT US ONLINE: www.carolinasrehabilitation.org



Kayaker Rod Spence gets a helping hand from Neil Elam with Mecklenburg County Park and Recreation.

Adaptive kayaking

BY COLLABORATING WITH OUTDOOR SPECIALIST

Kevin Pimental with Mecklenburg County Park and Recreation, the Adaptive Sports and Adventures Program (ASAP) offers adaptive kayaking to our community. Participants learn paddling techniques and take part in a guided tour of the lake at Latta Plantation. Adaptive kayaking provides a chance to enjoy the outdoors while making new friends and reconnecting with old ones. The program is available for 25 adults with physical disabilities one Friday each month throughout the summer. ASAP earned a National Association of Counties Achievement Award in 2010. ■

Get paddling!

For more information about kayaking or other Adaptive Sports and Adventures Program activities, contact us at asap@carolinas.org.



TO REFER A PATIENT TO CAROLINAS REHABILITATION, CALL 704-355-3558 OR 1-877-REHAB51