

# the Whole Story

REHABILITATION THAT FOCUSES ON THE WHOLE PERSON

## NYU LANGONE TACKLES THE DIFFICULT CONDITION THAT IS CONCUSSION

By Dina Pagnotta

Nearly four million sports-related concussions occur every year in the U.S, according to the Centers for Disease Control and Prevention (CDC), including some 144,000 children who are rushed to emergency rooms.

Against a backdrop of growing concern by the public and healthcare professionals over the health consequences and rising numbers of concussions, the NYU Langone Concussion Center was launched on March 19, in response to a clearly unmet need. The Center provides the latest diagnostic tools and expert clinicians across a wide range of disciplines to address the potentially serious physical and cognitive effects of concussions.

The Center was announced at a community symposium, “Head Injuries and Concussion in Sports: What You Need To Know,” attended by over 150 parents, coaches, physicians and school administrators. Dr. Steven Flanagan, chair of the Department of Rehabilitation Medicine at NYU Langone and co-director of the new Concussion Center, discussed the dimensions of the problem and how the Center is uniquely equipped to diagnose and treat concussions incurred in any sport or physical activity.

Other co-directors of the Center are Laura J. Balcer, MD, professor and vice chair of the Department of Neurology, and Dennis Cardone, DO, associate professor and chief of primary care sports medicine, Department of Orthopaedic Surgery, and medical director, New York City Public School Athletic League.

“Generally, most people can recover from a concussion within seven to ten days,” Dr. Cardone told symposium participants. “But concussions are complex—some patients may have long-term effects that can impair various physical and mental aspects of their health and require specialized and coordinated care.”

Overseeing the Center’s personalized, multispecialty care is Program Man-



ager, Mara Sproul, RN, BSN, CRRN, RN-BC, who is specially trained in care management and has more than 18 years of experience in rehabilitation, pediatrics, geriatrics, cardiology, and nursing administration. Her role is instrumental in providing each patient with a seamless experience.

In addition to clinical care, education and research round out the Center’s three-pronged approach to advancing knowledge and understanding of the science of concussions. To that end, the Center offers services and resources to schools, families and the community in order to foster awareness, prevention and recognition of head injuries.

Symptoms that should be evaluated by a medical professional following an impact or sudden and sharp movement of the head include:

- Any loss of consciousness.
- Difficulty thinking clearly, concentrating or remembering new information (“feeling in a fog”).
- Headache, blurry vision, nausea, vomiting, dizziness, sensitivity to noise or light, balance problems, fatigue or lack of energy.
- Irritability, sadness, emotional swings, nervousness or unexplained anxiety.
- Sleeping more or less than usual, trouble falling asleep.

To learn more about the NYU Langone Concussion Center, visit [www.NYULMC.org/Concussion](http://www.NYULMC.org/Concussion), or call the Concussion Center line at 855-NYU-2220.

## GIVING CAREGIVERS A STRESS-FREE BREAK

If you’ve ever spent any time caring for a family member or friend in the hospital, you know how stressful it can be. You find yourself asking, “If I step out for a cup of coffee, will I miss the doctor? or, “What if something happens when I’m not at the bedside?” Without even realizing it, you find yourself on high alert.

The Goldman Sachs Dehnert Family Pediatric Rehabilitation Integrative Health Program is designed to relieve some of that stress.

Made possible by the generous support of Goldman Sachs Gives, at the recommendation of Mark Dehnert, the program offers an array of mind-body modalities to reduce pain and anxiety, promote relaxation, improve sleep, teach coping skills, and enhance the general well-being of Rusk pediatric patients as well as their caregivers.

Services, offered free of charge, include:

- Adaptive Yoga, a specially-designed program of gentle stretching that takes into account the physical limitations of young patients.
- Therapeutic massage.
- Relaxation techniques, such as meditation and guided imagery.
- Reiki, a type of subtle energy work.

In the past, NYU Langone Medical Center has offered a wide range of integrative health services to adult patients and their caregivers. Now, thanks to this program, these same mind-body therapies are being extended to Rusk pediatric patients, their families, and staff members.

The Program is headed up by Diane Rosenstein, MSW, LCSW, Director of the Department of Integrative Health Programs at NYU Langone. “Rehabilitation can be as anxiety-filled for parents and siblings as it is for their children,” she explains. “For that reason, we’re making integrative health services a family-based program where caregivers learn the techniques, then serve as teachers and coaches for their children.”

Adds Mary Walsh Roche, OTR/L, LMT, the onsite integrative health practitioner at the Hospital for Joint Diseases (HJD): “It’s great to hear a parent say how relaxed they feel after having a Reiki session. But it’s even better when their child hears this because the more relaxed the parents feel, the more relaxed their child feels.”

In addition to enhancing the overall care and experience of patients and their families, the new pediatric Integrative Health Program provides an opportunity for innovative clinical and academic research. Rosenstein elaborates: “We anticipate such outcomes as enhanced patient satisfaction, decreases in the perception of pain, and shortened recovery times. And we hope that by tracking these outcomes, we can create further awareness of the importance of integrative health, and bring scientific evidence of its benefits into the mainstream.”

For more information about pediatric integrative health services, please contact the Department of Integrative Health Programs at (212) 263-5767.

### IN THIS ISSUE...

**NYU Langone Tackles the Difficult Condition that is Concussion**

**Giving Caregivers A Stress-Free Break**

**For Rusk Therapist, ‘Climb to the Top’ Has Special Meaning**

**Life After Traumatic Brain Injury: Robin’s Success Story**

**As Alzheimer’s Disease Progresses Horticultural Therapy Offers Timely Treatment**

**Sports Performance Center Wins Praise for its Free Community Lecture Series**

**Cerebral Palsy-Challenged Adults Make it to the Top with Some Help From Their Friends at HJD**

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## FOR RUSK THERAPIST, ‘CLIMB TO THE TOP’ HAS SPECIAL MEANING

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By Mary Fischer, PT, DPT, CSCS

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Climbing 66 flights of stairs sounds like something only a firefighter could love. But Marilyn Ingraham, senior occupational therapy assistant (OTA) at Rusk, had her own reasons. She saw this year’s “Climb to the Top of the Rock” as an opportunity to support the National Multiple Sclerosis (MS) Society, and challenge her own physical and emotional stamina.

Marilyn wasn’t alone in her quest. She had the support of the Rusk Climbers, a six-member group of rehab colleagues, as well as her son, Richard. And that made it all the more sweeter when on March 3, Marilyn, who has MS, completed the “Climb to the Top of Rock” (as in Rockefeller Center).



Marilyn says the hardest part was getting her training underway. That meant climbing the stairs at the Hospital for Joint Diseases (HJD) during the work day, then walking to Tisch Hospital to climb 17 more flights with colleagues after work, without feeling overwhelmed.

She credits her success during the MS event with maintaining a steady pace on the stairs—and having Richard behind her every step of the way. When asked how she felt when she reached the observation deck high above Manhattan, the cold breeze hitting her face, she replied, “I couldn’t believe it was over so fast!”

For Marilyn, participating in the “Climb to the Top of the Rock” along with “Bike for MS” each October is the best kind of personal therapy.

**While support groups are a great way to meet other people with MS, participating in team events like those offered by the National MS Society provide a challenge she loves, and help her to stay active and strong at the same time.**

While support groups are a great way to meet other people with MS, participating in team events like those offered by the National MS Society provide a challenge she loves, and help her to stay active and strong at the same time.

The Rusk Climbers—which consists of Marilyn Ingraham, OTA; Richard Ingraham; Mary Fischer, PT; Jaime Cepeda, PT; Mauricio Magana, PT; and Mackenzie Root, PT—raised \$2,765 for MS research and treatment for people with MS from the recent climb. Energized by its success, the team plans to participate again next year—with a new goal of \$5,000!

*For more information on “Climb to the Top of the Rock,” contact Mary Fischer, Geriatric Clinical Specialist, at (212) 263-6074.*

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## LIFE AFTER TRAUMATIC BRAIN INJURY: ROBIN’S SUCCESS STORY

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By Catherine Anne Atkins, PhD

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Robin Newman, a 24-year-old college graduate, was interviewed by a New York City art institute this past April for the opportunity to study under its prestigious Master’s Degree program.

Why is this noteworthy?

For very good reason. On January 9, 2012, Robin suffered a Traumatic Brain Injury (TBI) with significant and complex multiple trauma after jumping from a fourth-floor bedroom window to escape a fire.

According to the Centers for Disease Control and Prevention (CDC), approximately 53,000 people die each year from TBI-related injuries. Those who survive often experience extended periods of disorders of consciousness followed by periods of Post Traumatic Amnesia (PTA). Some 43 percent have a related disability one year after the injury.

Robin was rushed to a New York City emergency room with a level 3 on the Glasgow Coma Scale (GCS), an assessment tool used by healthcare professionals to measure level of consciousness. A “3” indicates complete unconsciousness, compared to a “15”, which indicates normal functioning. He was hospitalized for just over a month, during which time his brain, internal injuries and multiple facial and bodily fractures were cared for until he was deemed medically stable.

On February 7, 2012, Robin was transferred to the Inpatient Brain Injury Rehabilitation Unit of Rusk. Here, he received comprehensive care from a multidisciplinary team led by physiatrists (rehabilitation physicians), neurologists and neurorehabilitation psychologists. Robin and his parents, who flew in from their home in California to be by his side, were also able to draw on the expertise of Rusk professionals in physical therapy, occupational therapy, speech-language pathology, rehabilitation nursing, nutrition, social work, and therapeutic recreation.

Upon his arrival at Rusk, Robin was in a state of Post Traumatic Amnesia (PTA). PTA refers to a period of time after unconsciousness in which a patient seems to be conscious and awake, but is still confused, disoriented, and not able to form continuous day-to-day memories. Robin stayed in this state for approximately 6-7 weeks. During that time, his primary inpatient team met on a very regular basis to discuss, brainstorm, implement, and readjust an intensive treatment program designed to help him come out of PTA.

The team was aware, however, that time was running out to meet that goal: Robin was scheduled for discharge to an outpatient rehabilitation brain injury program in California.



**Then a small miracle occurred: during his seventh week of rehabilitation at Rusk, Robin emerged from PTA, demonstrating complete orientation, attention, and the ability to form new memories.**

What, if anything, did Robin remember from his acute inpatient rehabilitation experience?

Robin eagerly responded, knowing that the information may be helpful to our program, remembering the names of the clinicians who treated him -- “Chris (PT), Liz (OT), Frida (Speech Therapist), and Chris and Kathy (Nursing)”. He also remembered some of the activities during his last week as an inpatient, such as the orientation board in his room, having to hop on one foot to move around, relaxing in the garden, and being brought outside by the treatment team.

To fully appreciate the significance of Robin’s recovery, it helps to put it in the context of the Glasgow Coma Scale and length of Post Traumatic Amnesia. Both measurements put his injury at “severe,” with an estimated recovery time of a year or more, likely with some level of permanent brain damage. There were also real concerns that he might not be able to get back to the level of functional independence—attending school or being employed—that he had before the incident.

What made the difference for Robin? Parents Niki and Craig believe their son got his life back thanks to Rusk and its holistic approach to acute inpatient rehabilitation. Robin also emphasizes the role of the patient. “When you’re in rehabilitation, they ask you to do a lot of things that at the time don’t seem to make much sense,” he says. “It’s important to do them anyway. In the end, it will all become clear.”

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## AS ALZHEIMER'S DISEASE PROGRESSES, HORTICULTURAL THERAPY OFFERS TIMELY TREATMENT

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By Gwenn Fried—Manager, Horticulture Therapy Services

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A diagnosis of Alzheimer's disease or dementia can be traumatic for both the patient and family members. Initially, they are encouraged to join an early stage support group where they can discuss their fears and frustrations with others who are making the same journey. As the disease progresses, however, the patient's ability to carry on and recall conversations becomes limited and, eventually, the group is no longer beneficial for them.

**Enter NYU Langone's Horticulture Therapy Services Department, which has offered for the past five years a unique Alzheimer's and Dementia Support Group for people who are transitioning out of early-stage treatment.**

The activity-based group is facilitated by a horticultural therapist who specializes in working with people living with dementia. Potential members are interviewed prior to joining the group and must commit to weekly attendance, along with a caregiver.

The Alzheimer's and Dementia Support Group provides a familiar place for people to meet and remain active in the community. We start each session by greeting each other and learning about the day's activity, which is always horticulture based and, therefore, usually seasonal. For example, we might introduce a bowl of lemons to an afternoon group in July, passing them around the table for both the patients and caregivers to touch.

Obviously, sensory attributes play a major role. So, in the case of the lemons, we examine their bright yellow color and smell the lemony scent of their skin. We may cut the lemons to taste them, or introduce other objects that have a lemony



scent. Finally, we ask the participants to squeeze the lemons into a bowl. The seeds are then removed, and ice and simple syrup added to make lemonade.

Moreover, the seeds from the lemon or seedlings that sprouted earlier turn into a planting activity which the participants take home with them. After cleaning up, everyone celebrates with a thirst-quenching glass of lemonade, usually accompanied by lemon bars or other lemon-flavored snacks.

The Horticulture Therapy Services group model is repeated week after week with other seasonal activities, such as arranging fresh flowers for Valentine's Day, Mother's Day or Thanksgiving; planting seeds, including clover, vegetables and herbs; and making salsa, hummus, pesto or guacamole.

For caregivers, the program has double-meaning. It enables them to get support and advice from others in the same role, while working with the patient on meaningful and enjoyable activities designed to enhance their strengths and minimize frustrations.

*To learn more about the Alzheimer's and Dementia Support Group, contact Gwenn at [gwenn.fried@nyumc.org](mailto:gwenn.fried@nyumc.org).*

*The Alzheimer's Foundation of America has named Gwenn Fried, manager of Horticultural Therapy Services at NYU Langone, as Dementia Care Professional of the Year for her work in developing the Alzheimer's and Dementia Support Group. Gwenn, an employee of NYU Langone Medical Center since 1997, has been the creative force behind a number of innovative, nature-based therapy programs for children with autism, developmentally disabled adults, isolated seniors, and others with special needs.*

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## CEREBRAL PALSY-CHALLENGED ADULTS MAKE IT TO THE TOP WITH SOME HELP FROM THEIR FRIENDS AT HJD

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By Meghan Robinson, PT, DPT

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Smiling ear to ear, the group of 14 adults who showed up at Brooklyn Boulders on the morning of April 19 couldn't wait to put on harnesses and begin scaling the 30-foot rock wall that towered over them. The fact that each had cerebral palsy (CP) -- a disease that affects brain development and limits one's ability to walk, climb stairs, hold objects, and speak -- only added to the excitement of the challenge.

In the end, each participant showed incredible pride and courage in fulfilling their mission and making it to the top of the wall at Brooklyn Boulders. Several even raised their arms in the air to celebrate their accomplishment.

They were hardly alone, though, in their feat. With them every step of the way were nine physical and occupational therapists from NYU Langone's Hospital for Joint Diseases (HJD). These volunteers worked closely with each of the climbers, strategizing and helping them achieve the day's real goal -- to have fun!

The other key player was the United Cerebral Palsy (UCP) of New York City, which was founded to provide direct services, technology and advocacy to children and adults with CP in all five boroughs. UCP had learned of a group known as the NYC Adaptive Climbing Clinic that met at Brooklyn Boulders. The group was created by Kareemah Batts, a recreational therapy student with a passion for rock climbing and providing resources and encouragement to people with disabilities so they can participate with peers in the sport.

UCP contacted Ms. Batts to schedule a day of fun, learning and recreation. But that created another kind of challenge for Ms. Batts: finding volunteers to support the interested climbers on a workday. Coincidentally, the Hospital for Joint Diseases contacted Ms. Batts around the same time to inquire about her

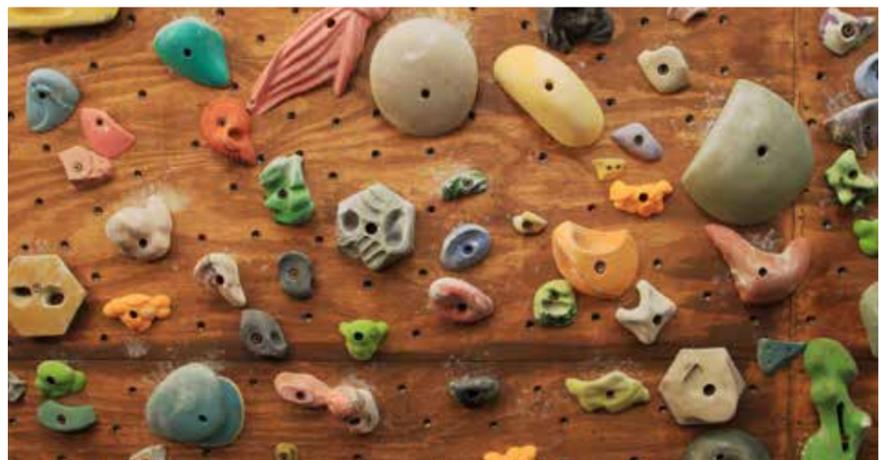
NYC Adaptive Climbing Clinic, and this led to the pairing of UCP climbers with HJD therapists for a thoroughly enjoyable experience.

Says Kareemah, "I started NYC Adaptive Climbing with the intention of sharing what changed my life with others. The sense of accomplishment, independence, and improved health you get is different from any other adaptive sport in New York City. And nothing makes me happier than to see the look of accomplishment on the faces of people when they descend from a climb".

The group of 14 UCP climbers and their HJD support team are a case in point.

**Ranging in age from 23 to 50, some of the participants were able to walk on their own, while others entered the rock climbing gym in a wheelchair; but everyone achieved their goal of completing their very first rock climb, and it showed on their beaming faces as they realized what they had done.**

The day concluded with participants and volunteers sharing smiles and laughter—captured in the many pictures that were taken—and the hope that this would be the first of many more rock climbs.



# SPORTS PERFORMANCE CENTER WINS PRAISE FOR ITS FREE COMMUNITY LECTURE SERIES

By Rick Kassler, MSPT, OCS

Since opening its doors in the spring of 2012, the Sports Performance Center at NYU Langone's Center for Musculoskeletal Care (CMC) has seen its public profile soar. One of the reasons is its highly popular series of community lectures, designed to give athletes at all levels useful information, from injury prevention and management to proper nutrition to performance optimization.

For example, prior to the New York City Marathon, the CMC conducts three lectures to help runners prepare for the 26.2-mile challenge. The first lecture, *Marathon Training: Your Guide to a Smart Start and Safe Finish*, was such a big draw in 2012 that it was repeated the following week. Leading that workshop were physical therapist Colleen Brough and exercise physiologist Alison Peters.

The other two lectures in the series were *Nutritional and Mental Preparation for the Marathon: Optimize your Training and Race Day Performance*, featuring registered dietitian Andrea Chernus, sports psychologist Bonnie Marks, and Alison Peters, and *Managing Your Injuries as Marathon Day Approaches*, led by Dr. Dennis Cardone and physical therapist Melissa Hirsch. (The Sports Performance Center plans a similar series of lectures prior to the 2013 NYC Marathon).

This past winter, Dr. Wayne Stokes, physical therapist Yukiko Matsuzaki, and Alison Peters presented a program on skiing and snowboarding, addressing injury prevention and management, as well as performance improvement. And in keeping with the seasonal nature of sports, the Sports Performance Center presented a comprehensive lecture series on cycling and golf that included:

- *Smart! Injury Prevention and Management*, led by Dr. Claudette Lajam and physical therapist James Koo.
- *Bike Fit! Optimize Performance and Prevent Injury*, led by Chad Butts, an exercise physiologist and professional bike fitter.
- *Bike Smart! Strategies to Optimize Performance*, led by registered dietitian Samantha Heller, sports psychologist Bonnie Marks, and exercise physiologist Alison Peters.
- *Golf Smart! Injury Prevention and Management*, led by Dr. Guillem Gonzalez-Lomas and physical therapist Jennifer Gallinaro.



- *Golf Smart! Strategies to Optimize Performance*, led by exercise physiologist Hiwotie Deres who demonstrated how the latest developments in motion analysis technology can help tune up your golf game.

Other programs include *Get in Shape for the Summer!* offering nutrition and exercise tips, and two lectures for triathletes: *Triathlon Smart! Injury Prevention and Management* and *Triathlon Smart! Strategies to Optimize Performance*.

The Sports Performance Center is focused on improving health, fitness and athleticism in everyone from the elite athlete to the fitness novice within a state-of-the-art environment.

**The Center offers services not commonly found in the tri-state area, such as performance evaluation of runners and triathletes, and maintains on-site the same equipment used at U.S. Olympic Training Centers.**

All health and fitness lectures hosted by the Sports Performance Center are free of charge and open to the public, patients, and NYU Langone Medical Center staff. To register for a CMC wellness lecture, please visit [www.NYULMC.org/CMC-Lectures](http://www.NYULMC.org/CMC-Lectures) or e-mail [richard.kassler@nyumc.org](mailto:richard.kassler@nyumc.org). For information on the CMC and Sports Performance Center services, visit [www.NYULMC.org/CMC](http://www.NYULMC.org/CMC).

# RUSK IN ACTION

