

## A Chance to Walk Again

Wednesday, October 29, 2014, started out like any other day for 27-year-old construction worker, Justin Neff of Madison, New York. He was working on a roof and swinging his hammer when a board popped off causing him to plummet 10 feet to the concrete below.

“I remember tucking my body to keep from landing on my head as I fell. When I hit the ground, I instantly felt an intense pressure in my back – like I had been hit with a baseball, and then I could feel the sensation of numbness in my lower body. I knew that I was messed up pretty badly,” Justin recalled.

Justin was rushed by ambulance to St. Elizabeth's Hospital in Utica where he was diagnosed with a T12 burst fracture in his back and an incomplete spinal cord injury – meaning that there was some preservation of function in his lower spinal cord. He underwent surgery to fuse his vertebrae and prevent further damage to his spinal cord. The fall had left Justin paralyzed from his hips down.

The fact that Justin's spinal cord injury was incomplete gave him hope that there was a chance that if he worked hard enough, he could gain back some of his mobility and possibly even walk again. Both he and his family quickly recognized that he had a long road ahead of him, and that he would require intense rehabilitation to adapt to life in his new body. They turned to Justin's surgeon for a recommendation of a rehabilitation facility, and he responded, “Do you want the best, or do you want close

to home?” Justin's surgeon recommended Sunnyview Rehabilitation Hospital.



Justin Neff demonstrates the ReWalk.

When Justin arrived at Sunnyview on November 8, he required assistance to move in bed and to transfer to his wheelchair. Although his medications were making him

groggy, Justin's optimism and determination prevailed, and with the help of his dedicated rehabilitation team, he began to get his life back. “I knew I either had to work hard or hope for a miracle. I chose to work hard,” Justin explained.

Justin's rehabilitation focused on maximizing his strength and independence and included a variety of therapeutic strengthening exercises; exercises in Sunnyview's therapy pool; and use of a variety of state-of-the-art assistive technologies, such as the TheraStride locomotor training system. Occupational therapists worked with Justin to improve his self-care, household and wheelchair skills and to help him relearn to drive. After a long day of rehabilitation, a tireless Justin would then go to Sunnyview's Wellness Center to strengthen his upper body strength.

Coincidentally, one week before Christmas, Sunnyview acquired the ReWalk™ Exoskeleton Robotic suit – a first-of-its-kind technology in the greater Capital Region – that helps paraplegics and individuals with

*Continued on page 7*

## The ReWalk™ Exoskeleton Robotic Suit

The ReWalk™ Exoskeleton Robotic suit uses patented technology with motorized legs that power the knee and hip movements. A computer-based system with motion sensors controls movement in response to subtle changes in upper body movements and shifts in balance. A harness around the patient's waist and trunk keeps the suit in place, while crutches are used for stability. A backpack carries the computer system and battery that powers the suit. When a forward tilt of the upper body is sensed by the system, it triggers the first step, while repeated shifting of the body generates a sequence of steps to allow natural and

*Continued on page 6*

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*Rehabilitation Insight is a publication of Sunnyview Rehabilitation Hospital. The goal is to bring timely issues of acute medical rehabilitation, including updates and advances of the hospital and its foundation, to the forefront.*

 **Sunnyview Rehabilitation  
Hospital**

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## Welcome

For more than 85 years, Sunnyview Rehabilitation Hospital has provided up-to-the-minute compassionate rehabilitative care. In this issue of *Rehabilitation Insight*, you will read about the evolution of physical therapy. The field of physical medicine has made great strides and continues to evolve as advances in computer technology and materials science become available.

Today's assistive and adaptive technologies help patients accomplish things that 25 years ago would have seemed impossible. Sunnyview remains at the forefront of this new technology as we continue to look for ways to improve and enhance the lives of our patients and their families.

Our Practice Innovation Group is made up of representatives from all of the major disciplines in rehabilitation and continuously reviews the latest literature to learn more about up-and-coming technologies available in the nation and throughout the world. We use this knowledge to make decisions about what advancements will have the most benefit for our patients.

Two years ago, we looked at the robotic exoskeleton and determined that this was something that could improve the lives of our paraplegic patients. After researching a number of robotic exoskeletons available in the market, we decided to purchase the ReWalk™.

The ReWalk arrived at Sunnyview in late December. This amazing technology is enabling incomplete spinal cord injury patients to walk again. We were able to purchase the ReWalk using philanthropic funds raised entirely by the Sunnyview Rehabilitation Hospital Foundation. It is because of the generosity of donors like you that we are able to bring this life-changing technology to our region.

In our cover story, you will read about Justin Neff, an inspirational young spinal cord injury patient, who volunteered to work with our team of therapists as they trained to use the ReWalk system. I encourage you to see Justin using the ReWalk by visiting our website at [expertsinrehab.com](http://expertsinrehab.com).

I am proud of Sunnyview's long history of providing the most cutting-edge advancements in rehabilitative care. I look forward to seeing what new technologies are on the horizon to further enhance the lives of our patients.

I thank you for your continued support and look forward to seeing you at Sunnyview Foundation's Day at the Races event on Friday, August 14. Proceeds from the event will be used to purchase much-needed equipment like the ReWalk.





**Chip Eisenman**  
Chief Executive Officer

### Address Change? Duplicate Mailings?

If your address has changed or if you receive more than one copy of our newsletter, please alert the Foundation office at (518) 382-4586 or [sunnyviewfoundation@nehealth.com](mailto:sunnyviewfoundation@nehealth.com) so that we can streamline our database.

Thank you!

# Focus on: Physical Therapy

An integral component of a comprehensive rehabilitation program, physical therapy uses a combination of manual therapies, various treatment modalities, exercise and education to help patients improve mobility and function, and help manage pain. Physical therapy is used to treat a variety of diagnoses — from stroke and traumatic injury, to orthopedic conditions and post-surgical care.

The first documented account of physical therapy is from the “Father of Medicine” himself -- Hippocrates. As far back as 460 B.C., he recommended massage therapy as a remedy for stress release and for physical healing. Hector, another Greek physician, wrote about hydrotherapy, and other ancient writings from Egypt, China and Persia also mention the benefits of massage, exercise and movement for ailments.

For centuries, the field of “physiotherapy” saw relatively little advancement. It wasn’t until the 1800s that physical therapy began to be recognized as an important health care field.

In Sweden, in 1813, the Royal Central Institute of Gymnastics was established for massage, manipulation and exercise. By 1887, physiotherapists, as they were called, were given official registration by that country’s National Board of Health and Welfare. In no time, other countries followed.

By the early 20th century, physical therapy was gaining steam in the United States. In 1914, Reed College in Portland, OR, began offering physical therapy as a course of study. Graduates, known as “reconstruction aides,” were called on to help with the increasing numbers of injured soldiers returning from World War I.

Soon after, other schools opened ... and the timing was perfect. With a polio outbreak in the 1920s and World War II on its heels, the need for physical therapists was greater than ever before.



In the late 1950s, physical therapists started treating patients in settings other than hospitals and over the next 50 years, the field continued to evolve and develop as new and sophisticated medical advancements were introduced.

In the past decade or so, monumental advances in computer technology and materials science have revolutionized the field. Today’s assistive and adaptive technologies help patients accomplish things that 25 years ago would have seemed impossible!

Proudly, Sunnyview is at the forefront of this new world! Sunnyview’s physical therapists provide assessments and training with a number of breakthrough technologies and devices, including: ReWalk™ – a robotic exoskeleton that allows paraplegics to stand and walk; the Bioness L300 System that assists those with foot drop to regain a normal gait; the TheraStride Locomotor Training System that improves walking ability for individuals with spinal cord injury, stroke, traumatic brain injury, multiple sclerosis (MS) and Parkinson’s disease; the InMotion ARM Robot that provides high intensive repetitive therapy for the arm resulting in increased mobility; the FSA Pressure Mapping System to help wheelchair users determine the most comfortable wheelchair cushion; and many, many others.

## From ‘Reconstruction Aide’ to Doctor of Physical Therapy

Today, the field of physical therapy, like medicine, is highly specialized and physical therapists are required to have a higher level of education than ever before.

In fact, as of 2015, entry-level physical therapist education programs in the United States only offer the Doctor of Physical Therapy (DPT) degree to new students.

Most DPT programs require applicants to earn a bachelor’s degree first, although some offer a “3+3 curriculum” in which students complete three years of undergraduate course work before advancing into a three-year professional DPT program.

Of course, once a student completes a DPT program, he/she must pass a state licensure exam.

## Specialty Certification

Many physical therapists also seek specialty certification through the American Board of Physical Therapy Specialties (ABPTS) and other accrediting bodies. Certification provides formal recognition for those with advanced clinical knowledge, experience and skills in a special area of practice.

Sunnyview boasts several physical therapists with specialty certification. Patti Valenza, PT, DPT, ATP, achieved Assistive Technology (ATP) certification in 2007 from the Rehabilitation Engineering and Assistive Technology Society of North America. ATP certification recognizes the 20-year employee’s demonstrated competence in analyzing the needs of consumers with disabilities, assisting them in the selection of appropriate technology and providing training in the use of the selected device(s).

“I think that having someone who is ATP certified assures both the patient and family that they are seeing a specialist in the field,” Patti remarked. “And, certification man-

*Continued on page 7*



# Art for the View

On Friday, November 7, Honorary Co-Chairs Wayne and Debbie Freihofer, Steering Committee Chair Jim Nolan, PhD, and the Sunnyview Rehabilitation Hospital Foundation hosted Art for the View – a celebration of artwork by artists with physical disabilities. Wayne and Jim both know first-hand about the expert care provided at Sunnyview and were instrumental in making the event such a success! Jurors Megan Hyde, Museum Educator for College and Public Programs at the Frances Young Tang Teaching Museum and Art Gallery at Skidmore College and Ardie Russell, owner of Studio 518 in Saratoga Springs chose 69 pieces of work created by 48 phenomenal artists to be displayed at the event. More than 250 entries from around the

world were submitted for consideration. The event, which was held at Proctors Fenimore Gallery, raised nearly \$60,000, with a record 17 pieces of art being purchased – seven of which were donated back to Sunnyview for its Viewpoint Gallery collection.

Viewpoint Gallery is the largest collection of artwork by artists with physical disabilities in the region. Proceeds from the event were used to purchase the ReWalk® Exoskeleton Robotic suit. Be sure to read our cover article about Justin Neff, an inspiring young spinal cord injury patient who benefited from this exciting new technology.

Thank you to the following sponsors for their continued support of Art for the View.



A special thank you to Honorary Co-Chairs Wayne and Debbie Freihofer.



Artist Greg Rogers of Boston Massachusetts shares his work.



Sunnyview Foundation Board Member Bob Fazio gives the thumbs up to the beautiful artwork.



Ed Selig, Renee Walrath, Janet Eisenman, and Jim Nolan share a laugh.

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# Change a Life. Leave a Legacy

In December, Sunnyview acquired the ReWalk™ Exoskeleton Robotic system – a first-of-its-kind technology in the greater Capital Region and one of only a few in New York State – that helps paraplegics and individuals with lower limb disabilities such as spinal cord injuries walk again. At a cost of almost \$100,000, Sunnyview was able to purchase the ReWalk robotic exoskeleton entirely with philanthropic dollars.

Leave a legacy. It's easy to do. A simple directive can bring much needed hope to

Sunnyview patients and will make a real difference. Start today by contacting your financial advisor or attorney and ask for help in establishing a charitable gift to Sunnyview Hospital and Rehabilitation Center Foundation, Inc. (EIN 22-2505127). We promise that with your help, Sunnyview will



**Justin Neff, one of Sunnyview's first patients to use the ReWalk Exoskeleton Robotic System.**

continue to enhance the lives of those we serve.

Make this your legacy. If you would like to confidentially sit down and discuss a legacy gift, please contact Kathie Ziobrowski, Sunnyview Rehabilitation Hospital Foundation Executive Director at (518) 382-4586, or email her at [Kathleen.Ziobrowski@sphp.com](mailto:Kathleen.Ziobrowski@sphp.com).

## Sunnyview Nurses Attain Certification

In January, Sunnyview held a celebration ceremony to recognize five RNs who recently received certification in rehabilitation nursing. Congratulations to Nancy Alexaitis, Crystal Kane, Denise Thomsen, Megan Schienberg and Patrick Burke for achieving this prestigious symbol of professional development.



Certification Board (RNCB) and is accredited by the Accreditation Board of Specialty Nursing Certification. Nurses seeking certification must have two years of practice as a registered nurse in a rehabilitation setting and must pass an exam validating a documented level of knowledge of rehabilitation nursing practice.

### Why Certification?

According to Rosann DeMeo, vice president, patient care services, "Nurses who achieve the Certified Rehabilitation Registered Nurse (CRRN) credential demonstrate knowledge, experience and commitment to excellence in comprehensive care for people with physical disabilities and chronic illnesses." She noted that the CRRN credential has been a widely accepted and trusted nursing certification for more than 25 years.

"We are especially proud that this brings the total number of CRRNs at Sunnyview to 31, a very impressive number," she added.

The CRRN certification program is administered by the Rehabilitation Nursing

According to research conducted by the *American Journal of Nursing* (2001), certified nurses reported feeling more confident in their ability to detect early signs and symptoms of complications, and were better able to initiate early and prompt interventions. According to the same study, certified nurses also reported more personal growth and job satisfaction. Another study, published in *Rehabilitation Nursing* (2007) found a correlation between the percentage of registered nurses certified in rehabilitation nursing at a facility and a reduction in patient length of stay.

## Thank You

It is thanks to the generosity of our donors that Sunnyview is able to provide up-to-the-minute treatment modalities and cutting-edge technologies.

The following donor list represents all 2014 gifts of \$100 or more to Sunnyview Rehabilitation Hospital Foundation. Every effort has been made to ensure a complete and accurate list. Please call us at (518) 382-4586 with any errors or omissions.

Thank you for partnering with Sunnyview to further our mission of improving the lives of people with disabilities and the lives of their families.

### You make a difference!

For a complete listing of our donors, please visit [Sunnyviewfoundation.org/2014Donors](http://Sunnyviewfoundation.org/2014Donors).



# Why a Wish List?

Sunnyview Rehabilitation Hospital maintains a capital budget to purchase much-needed equipment. Every item from the wish list that the Sunnyview Foundation is able to fill is one less strain on our not-for-profit budget.

Thank you for helping us to fulfill our mission of improving lives of people with disabilities and their families!

## Top priority items needed:

### Hospital-wide \$4,516 each (many needed)

Sunnyview has used low position beds successfully to minimize the potential for injury with patients at risk of falling. Increasing the number of beds will allow Sunnyview to meet peak demand when there are a large number of at-risk inpatients.

### Speech and Hearing \$12,000

Sunnyview has an immediate need for an audiometer. The current audiometer is more than 10-years-old and replacement parts are longer available. The equipment is used to test hearing, both under headphones and in a sound field with speakers. The new audiometer will include all speakers, headphones, cables and visual reinforcement equipment.

### Speech \$475 each (two needed)

The Student Version of the Functional Assessment of Verbal Reasoning and Executive Strategies (S-FAVRES) is designed for use with adolescents with traumatic brain injury. The tests evaluate challenges in cognitive communication skills that are still under development in adolescents such as sarcasm, humor, intent, gist, or central theme, social communication, verbal reasoning, problem-solving, meta-cognition, executive functions and social perception. The test examines the interplay between cognitive, communication and emotional regulation skills in real life, integrative tasks. They include timed scores to evaluate speed of processing.

### Cardiopulmonary \$13,000

Sunnyview is in need of a replacement EKG machine used to test patients for problems with electrical activity of their heart. If we cannot obtain the upgrade, patients will have to stay in their bed and be monitored - delaying their therapy.

### Neuropsychology \$1,653

Our neuropsychology department administers testing to measure intellectual ability. The department is seeking to purchase the Wechsler Intelligence Scale which will be administered to all the children treated by the department.

### Hospital-wide Automated Vital Signs Monitor (three needed) \$2,500 each

Sunnyview needs automated vital signs monitors that measure blood pressure, temperature and pulse rate in 30 seconds or less.

### Radiology \$229,000

The department would like to purchase the C-Arm imaging scanner, a special image intensifier device used in medical imaging involving X-rays. It allows for lower X-ray doses to be used on patients by magnifying the intensity produced in the output image, enabling the viewer to easily see the structure of the object being imaged.

### Hospital-wide \$700 each (many needed)

The hospital is in need of new over-the bed tables where patients can place their belongings and enjoy their meals while they are with us.

### Nursing \$40,000

Sunnyview would like to purchase medication bar code readers which can help prevent human error in the distribution of prescription medications.

## The ReWalk™ Exoskeleton Robotic Suit

### Continued from page 1

efficient walking without the need for tethers. The system mimics the natural gait pattern of an able-bodied person and provides functional walking speed for standing, walking and turning. “The ReWalk Exoskeleton system is truly revolutionary technology that helps liberate paraplegics and patients with spinal cord injuries,” points out Lynne Nicolson, MD, chief medical officer for Sunnyview Rehabilitation Hospital, “With ReWalk, patients have the ability to stand upright and walk again, which is a remarkable step forward in their rehabilitation and recovery. In addition, it has been found to provide many benefits to paraplegic patients, including weight bearing/bone density, improved bladder

and bowel function, changes in lean body mass as well as improved mood/decreased depression.” Although there are several robotic exoskeletons for use within rehabilitation facilities, the ReWalk Exoskeleton is the first and currently the only one to receive FDA approval for a home unit. The ReWalk was developed in Israel by Dr. Amit Goffer, who became a quadriplegic in 1997. He began prototyping it in his garage as he recognized the need for people with paralysis to be able to be up and walking. The ReWalk Exoskeleton is designed and has approval to be utilized with complete or incomplete spinal cord injury patients, from level T4 (thoracic level) and below.

# Now Hear This: The Sunnyview Difference

More than 30 million Americans live with a hearing loss — that's about one in 10 people! Is it any wonder why consumers are bombarded with newspaper and TV ads selling hearing aids that promise to be an instant answer to a hearing problem?

The fact is, hearing aids alone are seldom the only answer. In fact, hearing aids are just one part of the treatment process, a process that a licensed audiologist is best able to provide.

Kevin Ihrman, Au.D., chief of audiology at Sunnyview's Hearing Center, explains that unlike a "hearing aid specialist," an audiologist is a health care professional who diagnoses, manages and treats hearing and balance problems in individuals from birth through adulthood. An audiologist has received an Au.D. (Doctorate in Audiology) or a master's degree from an accredited university graduate program in audiology.

"The audiologists at Sunnyview all have Doctorates in Audiology, are Fellows of the American Academy of Audiology and most are board-certified by the American Board of Audiology or the American Speech and Hearing Association (ASHA)," noted Dr. Ihrman.



"By contrast, there are very few educational requirements needed before a non-audiologist can sell hearing aids. In fact, in many states, the minimum requirement is a high school diploma, passing a license exam, and some form of brief apprenticeship with a licensed hearing aid specialist."

Sunnyview's Hearing Center has a long history of providing comprehensive care for hearing disorders in infants, toddlers, children, adults and the elderly. The center's goal is to help individuals identify and understand their hearing impairment and then find the correct solution.

In addition to hearing evaluations and hearing aid selection, fitting and repair, the center also offers specialty evaluations and treatments for tinnitus, central auditory processing disorder, noise-induced hearing loss, balance/dizziness disorders and other conditions.

If you or a family member suspect that you have a hearing problem, contact the Hearing Center at Sunnyview at (518) 382-4550.

## Focus on: Physical Therapy

*Continued from page 3*

dates continuing education, therefore, I am continually keeping up-to-date on advances in technology so I can provide my patients with well-informed choices and make the best recommendations to meet their needs."

Therapist Sharon Manon, PT, DPT, OCS, has held an Orthopedic Specialty Certification since 2006.

A Neurologic Certified Specialist (NCS) from the American Board of Physical Therapy Specialists, Kerri Maloney, PT, DPT, NC S, added "By improving my knowledge and competence in neurological rehab, I am a better therapist and also better able to mentor new therapists, something I especially enjoy."

## A Chance to Walk Again

*Continued from page 1*

lower limb disabilities such as spinal cord injuries stand upright and walk.

A team of four therapists was selected and trained in using the ReWalk along with two patients. "Justin's motivation, positive attitude and determination made him an ideal first candidate for the ReWalk," explained Patti Valenza, PT, ATP, and assistant director of the Neuro-Rehab Institute. "In addition, the ideal candidate needs to have good upper extremity strength, good trunk control and hand function. They should be between 5'3" and 6'2" tall and weigh less than 220 pounds, have good bone density and lower extremity range of motion."

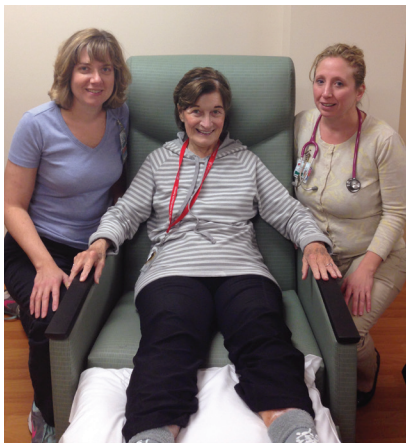
At first, the therapy team assisted Justin with his balance and helped him shift his weight while using the ReWalk. "The exoskeleton helped me remember how to walk. I think my biggest challenge was learning the timing and increasing my pace. The more experience we had using the robot, the easier it became," recalled Justin.

Justin was discharged from Sunnyview on January 31, he continues with his rehabilitation at Sunnyview as an outpatient four times per week. He has made amazing progress since he first arrived in November — improving both his strength and mobility. He is able to walk on his own with leg braces and arm crutches and he is able to stand and walk up to 800 feet with the help of the ReWalk. "This is my new job now," says Justin when describing his therapy. "The harder I work, the easier things will be for me."

## First Patient Completes Intensive Day Treatment Program

After her total hip replacement surgery last fall, Constance Astmann became the first patient to complete Sunnyview's Intensive Day Rehabilitation program, a new and innovative program for patients recovering from joint replacement surgery.

Available at only a handful of rehabilitation centers in the country, Sunnyview's program provides patients with the most advanced rehabilitation therapy during the day, and allows them to return



**Constance Astmann marks the completion of her intensive day rehabilitation with Theresa Galvin, PT, (left) and Laurie Boyd, RN (right).**

to the comfort of their own home each night. The program provides three hours of intensive physical therapy each day as well as occupational therapy, if needed, nursing care, medication management, education, laboratory services, group support and activities and a nutritious lunch.

To learn more about Sunnyview's Intensive Day Rehabilitation program, please call (518) 831-4810.

## Save the Date



### Day at the Races

Friday, August 14

Saratoga Race Course

Gates open at 11:30 am

*"At The Rail Pavilion," Saratoga Springs*

### Auxiliary Fashion Show

Monday, September 21

Glen Sanders Mansion