

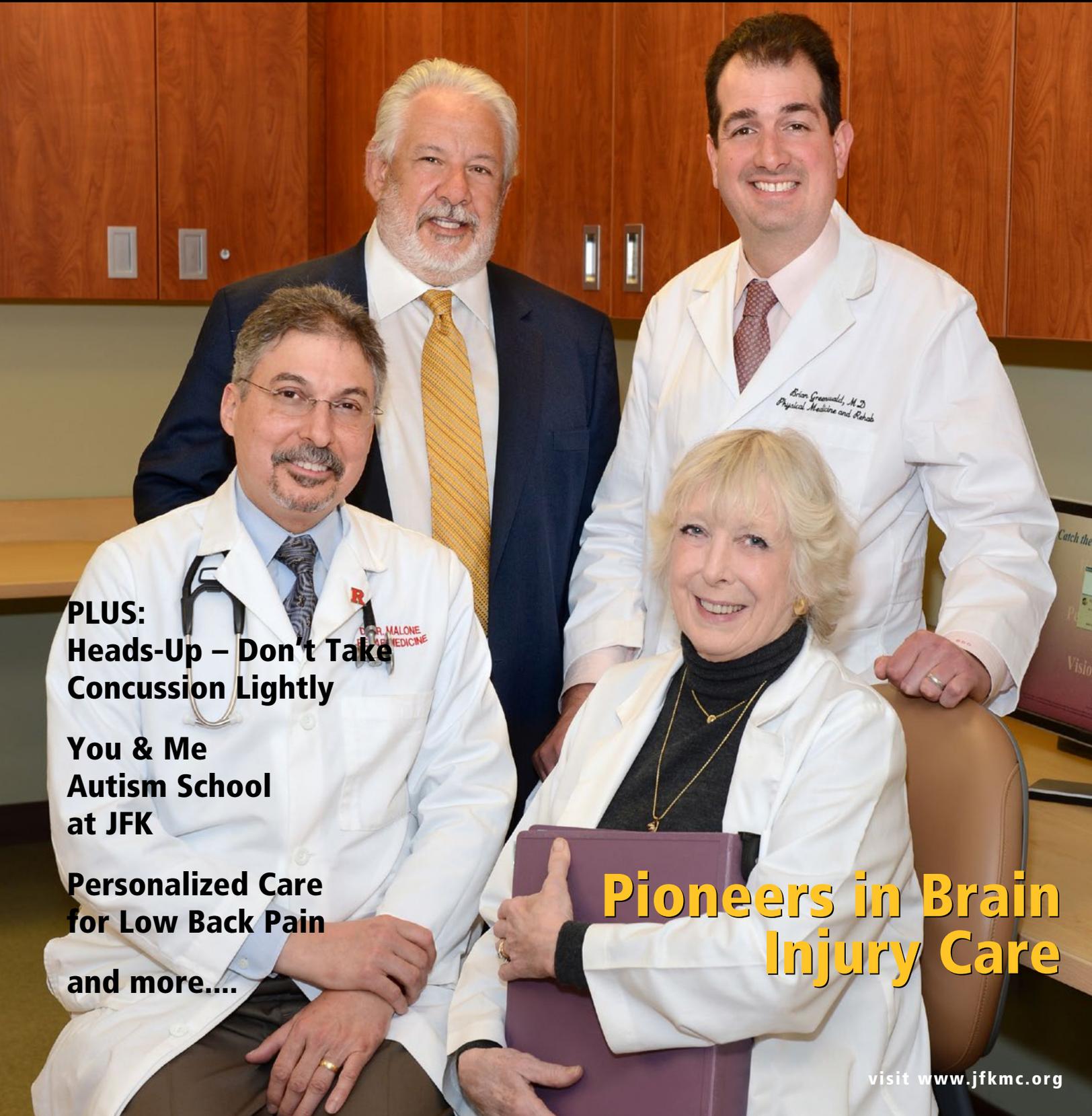
Spring 2013

NoLimits

JFK

JOHNSON
REHABILITATION
INSTITUTE

Community Newsletter from the JFK Johnson Rehabilitation Institute



**PLUS:
Heads-Up – Don't Take
Concussion Lightly**

**You & Me
Autism School
at JFK**

**Personalized Care
for Low Back Pain
and more....**

**Pioneers in Brain
Injury Care**

visit www.jfkmc.org



A Note From Our Medical Director

Welcome to the Spring Issue of *No Limits* – the community newsletter from the JFK Johnson Rehabilitation Institute. I am pleased to once again share with you exciting programs and services that will benefit the health of you and your family.

Our individually tailored rehabilitation programs are designed to help you achieve personal goals and reach your maximum potential. Expertise in rehabilitation care for adults and children has long been a trademark of JRI. JRI has well developed programs in such specialties as stroke rehabilitation, orthopedics, cardiac rehabilitation, women's health, pediatrics, post-amputation and brain injury rehabilitation.

This issue of *No Limits* will introduce you to some of the varied services available in rehabilitation; such as our Autism Program at the You & Me School and physical therapy plans for low back pain and Parkinson's disease. You will also learn about our team of experts in Audiology who both test and assist patients in selecting the best hearing aid(s) for their hearing loss.

Recently recognized by the Brain Injury Alliance of New Jersey for her outstanding contribution to the field, it gives me great pleasure to spotlight Dr. Caroline McCagg, a pioneer Medical Director and true leader in brain injury care who helped to develop JFK's unparalleled brain injury continuum. We are also pleased to welcome Dr. Brian Greenwald, our new Medical Director of JFK Johnson Rehabilitation Institute's Center for Head Injuries, who brings with him a breadth and depth of knowledge that will continue to support the mission and vision of the JFK Johnson Rehabilitation Institute.

Please remember that no matter what the season, JFK Johnson Rehabilitation Institute is here for you, our community. Thank you for your support in helping us build and maintain a solid foundation in the community over the years. We look forward to continuing to enhance the lives of our patients for many years to come.

I also want to remind you that early spring is a time to stretch and slowly strengthen muscles for healthier summer fun!

Yours in Good Health,

A handwritten signature in black ink, appearing to read 'Thomas Strax'.

Thomas Strax, MD

Vice President & Medical Director
JFK Johnson Rehabilitation Institute

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JRI Department Phone Numbers

Admissions	732-321-7733	Pediatric Rehabilitation	732-548-7610
Cardiopulmonary Rehabilitation.....	732-321-7722	Physical/Occupational Therapies	732-321-7056
Cognitive Rehabilitation	732-906-2640	Prosthetic & Orthotic Lab	732-248-0774
Day Rehabilitation.....	732-321-7707	Rehabilitation Physicians	732-321-7070
Driver's Training	732-321-7056	Speech Pathology &	732-321-7063
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Outpatient Center at Metuchen.....	732-548-9800	Vocational Rehabilitation	732-321-7069
Outpatient Center at Monroe	609-409-1170	Women's Therapy	732-321-7056
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Dr. McCagg Builds Lasting Legacy

Many would be surprised to learn that one of JFK Medical Center's most respected and accomplished physicians, Caroline O. McCagg, MD, wasn't always interested in medicine. In fact, the former Medical Director of JFK's Center for Head Injuries and Associate Medical Director of the JFK Johnson Rehabilitation Institute had quite a different career in mind. "I was planning on becoming an opera singer," she recalled with a chuckle. Fortunately – for JFK and thousands of grateful patients – the course of her life changed when she met a group of "pre-med" students and considered a new pursuit. "As it turned out," added Dr. McCagg, "I was better at science than singing!"

Dr. McCagg graduated from Yale University School of Medicine and immediately broke new ground, becoming one of the first women to complete a Surgical Internship at Yale-New Haven Hospital. She went on to a Residency in Anesthesiology at the same institution followed by a Fellowship in Computer and Statistical Analysis of Medical Data at West Haven Veterans Administration.

During her training, Dr. McCagg was profoundly touched by an encounter with a quadriplegic patient, which inspired her Residency in Physical Medicine and Rehabilitation at New York University Medical Center – as



Caroline O. McCagg, MD

well as her life's passion. "What attracted me to rehab is the unique opportunity to get involved with a patient's whole life, not just the illness or disability," she explained.

In 1980, Dr. McCagg found

her way to JFK Medical Center. "I learned they were developing a wonderful rehabilitation center," she said. "And once I arrived I could see that this wasn't a place that just had potential... it was a place that was realizing potential."

The Center for Head Injuries began as an outpatient cognitive program. It soon became clear that there was a need for patients to receive rehabilitation as inpatients before they were ready for the outpatient program. Starting with four beds, the program quickly expanded to 26 inpatient beds and then an additional sub acute unit for extended recovery was introduced at Hartwyck at Oak Tree. The

Center for Head Injuries thus is one of the few programs that is able to offer a full continuum of care to brain injured patients.

“As more people survived head injuries, due to improved emergency medicine, neurological care and diagnostic imaging, we recognized the need to expand,” asserted Dr. McCagg. Breakthroughs dramatically changed the scope of care along with outcomes for brain injury patients. Astonishingly, it was 12 years into her career before she saw her first CT scan, now a critical tool in evaluation and treatment. She also acknowledges the impact of increased awareness. “The casualties of war and competitive sports have generated more understanding about brain injuries, leading to more research, therapies and other advances,” she said.

Over the past two decades, Dr. McCagg has kept JFK’s Center for Head Injuries on the forefront of brain injury rehabilitation, while also serving as an Associate Professor at Robert Wood Johnson Medical School and Seton Hall University. “We started our inpatient program with four patients, then opened a sub-acute unit to avoiding sending them out of state for extended recovery,” explained Dr. McCagg. The program now boasts 76 beds between the two units.

Most recently, Dr. McCagg helped redesign the Brain Trauma Unit (BTU), creating a state-of-the-art facility to optimize comfort, efficiency and healing. As the daughter of two architects, as well as a board certified physician in physical medicine and rehabilitation, she provided extraordinary insight and leadership for the \$1 million renovation.

“We’ve had patients enter our program in a coma and then go on to graduate from college.”

While the progress has been fulfilling, it’s the people Dr. McCagg treasures most. “I work with a fabulous group of therapists, nurses, social workers and other colleagues who are devoted to our patients and families,” she said. “I call it an orchestra, because we work so closely together.”

“Sometimes it’s sad because there are patients we can’t help, despite

our best efforts,” she continued. “But it’s also very satisfying to help families overcome the shock of a brain injury and cope with loss, while helping patients accept their limitations and live the best life possible within their capabilities.”

“We’ve had patients enter our program in a coma and then go on to graduate from college,” she added, noting that one young woman published a book about her journey to inspire other brain injury survivors.

After more than 25 years at the helm, Dr. McCagg proudly passes the baton to the program’s new Medical Director, Dr. Brian Greenwald, and plans to focus on what she enjoys most: caring for patients.

“Dr. McCagg is a true leader and pioneer in brain injury rehabilitation. Because of her efforts, skills and dedication, the Center for Head Injuries is second to none, and we look forward to building upon her accomplishments,” stated Anthony Cuzzola, Vice President/Administrator, JFK Health System. “Her legacy will live on forever... not only here at JFK, but with the many patients and families she’s touched.”

Heads-Up!

Don't Take Concussion Lightly

While working with her students as a physical education teacher at a local high school, Mary suffered two separate head injury incidents. Afterward her symptoms began to alarm her and they included ringing in her ears, vertigo (spinning sensation) and dizziness. Her inability to concentrate was interfering with her ability to perform at her job. Finally, when she noticed that she couldn't turn her head while walking in the supermarket, she sought-out a neurologist, who diagnosed that she had a concussion and referred her for physical therapy.

After a thorough evaluation, with a physical therapist at the JFK Johnson Rehabilitation Institute, a specific rehabilitation program was designed for her with a focus on eye and head exercises. Mary's physical therapist incorporated activities that were specific to her symptoms, such as, walking in busy environments and simulation of activities that she performed at her job. She was also introduced to state-of-the-art equipment, called the Biosway Biodex Balance System, which provides patients with a choice of interactive teaching modes or standardized testing environments including the Clinical Test of Sensory Integration of Balance (CTSIB). BioSway provides the necessary reporting for establishing need, progress and outcome. Patients are challenged to shift and control their center of gravity through an interactive balance game and other rehabilitative training strategies.

With the expertise of her physical therapist and her commitment to following her home exercise program, she steadily progressed and was able

to walk in all environments without symptoms. Soon after Mary was able to return to work and perform all aspects of her daily activities without any concussion symptoms.

A concussion is a type of mild traumatic brain injury sustained by a bump, blow, or jolt to the head. This can cause the brain to move around inside of the skull. This type of movement can cause micro-damage that is usually not visible in a Magnetic Resonance Imaging (MRI) test. Any injury to the head whether it's from a



sports injury, a fall or a car accident (including whiplash) can cause a concussion.

"The most common myth regarding concussion is that you would have to lose consciousness to have one. This is simply not true," explains Brian D. Greenwald, M.D., Medical Director, JFK Johnson Rehabilitation Center for Head Injuries. "Any direct or indirect injury to the head should be taken very seriously and be evaluated by a physician." Symptoms associated with concussion may include physical, mental and emotional issues. Immediately after a concussion, a person may appear

dazed, unsteady and forgetful about events that happened right before or after the injury. This may be followed by complaints of headache, dizziness, difficulty balancing, blurred vision, sensitivity to lights or sounds, difficulty with memory and concentration, confusion, slowed mental processing, anxiety, depression or even aggressive behaviors. Most concussion symptoms last between 7 and 10 days. However, children and individuals with a prior history of a concussion may have a longer recovery time. During this time, rest and avoiding stress is the best course of care. You should not return to sports until you are symptom-free and cleared by a doctor. A physician may also order a short course of Physical Therapy to ensure that all symptoms have subsided. In addition, cognitive testing may be required.

When concussion symptoms last longer than three months, this is called Post-Concussive Syndrome. Approximately 15 percent of people who have a concussion will develop this condition. It can be a very debilitating condition. "Some signs that children are still experiencing post-concussive syndrome symptoms are, grades slipping, acting out, complaints of fatigue and difficulty concentrating in class," explains Keith Cicerone, Ph.D, medical director JRI's Center for Head Injuries. "Similar symptoms are also seen in adults related to their daily activities and work. Post-concussive Syndrome is best treated by a coordinated team that may include a neurologist, neuropsychologist, and physical therapist working with the patient and the family to return the

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STUDENT BLOSSOMS WITH EXPRESSION AT JFK's You & Me School

For Derex Demarae Carter, being able to barely express himself is now a thing of the past. Derex is nine-years-old and attends the Autism Program at the You & Me School, an early intervention program for children with Autism Spectrum Disorders. It is part of the JFK Johnson Rehabilitation Institutes' Pediatric Rehabilitation Program and it utilizes the principles of applied behavioral analysis within a natural environment, emphasizing language-based and sensory strategies.



“The You & Me School has done more than provide a way for the doors to be opened for our son,” according to his parents Marilyn and Derek Carter. “Every day that Derex attends the school it seems that bricks of a wall are removed and replaced with building blocks for his future.” Derex parents continue, “his personality is coming out like a fresh coat of paint on a wall. Slowly but surely he has learned to use life skills that we worried he would never even understand. He is more alert to the environment around him. He has even started speaking to us in partial conversation. Before this, we would never hear Derex express himself. Now, he can ask a question or tell us what he wants to eat; he will even let us know if he is not

interested in something. These gestures may seem so simple for children without Autism, but to our family they are huge milestones that we thought we would never hear or see.”

The Carter family continues to be amazed at the improvements and accomplishments reached by Derex. His teachers communicate with the family each day and through individualized planning tools the family learns how Derex improves in many areas, such as, transitioning skills, expressive language and receptive language, as well as oral motor and pragmatic skills.

Through these lines of interpersonal communication, it becomes easy to understand how the role of the clinical team is critical to

meet all of Derex's needs and wants appropriately.

“We still have a long way to go but look forward to the possibilities and adventures we can make of the future,” continues Marilyn and Derek. “Thank you so much to everyone at the You & Me School for being there and helping us get started on this amazing journey with our precious little boy.”

The You & Me School for Children with autism offers a 2 to 1 student-to-staff ratio. The staff brings a high level of commitment, dedication and experience to the program. [Click here to learn more about the School](#) or call 732-548-7610.

WHEN HEARING AIDS *End-up in the Drawer*

"After years of denying that my hearing loss was interfering with my day-to-day communication, I finally made the decision to purchase a hearing aid. Knowing that they could be expensive, I began my quest the same way I approach the purchase of any other big item, with determination to get the best price. I was very proud of my hard work as I found a hearing aid dispensary in a big box store with bargain basement prices. I couldn't have been happier. Little did I know the bargain basement priced hearing aids would end-up sitting in my drawer at home, not being worn. Not only was I not able to hear, but I was out my investment as well."



Does this scenario sound like you or someone you know? The unfortunate theme of this story is much too common. According to a study, of the 12.5 million Americans who own hearing aids, 1.4 million do not use them (Kochkin, S, 2005 MarkeTrak VII). Too often, the hearing aids are in the drawer rather than in the ears. While some hearing aids end-up in drawers because they are in need of repair or replacement, the three most common reasons are poor benefit, background noise and fit and comfort issues.

At JFK Medical Center, audiologists use best practice when tailoring the programming of a hearing aid to the individual's

lifestyle and listening environments. State-of-the-art technology is used to verify hearing aid performance and ensure that hearing aid settings are programmed appropriately with a comfortable fit. One-on-one counseling is provided to ensure that you understand how to use your hearing aid properly and what to expect from it.

The audiologists at JFK Johnson Rehabilitation Institute are highly skilled, licensed professionals. Each hold a clinical doctorate in audiology. The pursuit of research based standards helps us achieve a state-of-the-art audiology service offering the highest level of patient care. All of our audiologists hold the following credentials:

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Not All **BACK PAIN** is the Same

John, a 71 year-old salesman from Avenel, has a history of low back pain that has affected him throughout his adult life. After a painful episode, John's orthopedist insisted that he seek help at JFK Johnson Rehabilitation Institute.

During his assessment, the physical therapist asked John what his intensity of pain was, on a scale of 1 to 10. John responded that his pain was a "10" and it travelled from his lower back to his legs. He also had trouble turning in bed, raising to stand, and had been using a cane to help him walk for the past few of weeks.

During his first visit, Jen, his physical therapist worked with him and showed him an exercise to reduce the pain that traveled down his legs. During subsequent visits, Jen focused on treatment to abolish his lower back and leg pain using manual therapy techniques that included massage and joint mobilization, heat therapy, specific strengthening and flexibility exercises as well as posture education.

As his back pain subsided they worked on proper lifting techniques. Jen also examined his walking ability with a goal of no longer needing a cane. At the end of his physical therapy, his pain was reduced to zero out of 10, at best. On occasion he would have pain on the

scale of two out of 10, but was able to negate it on his own using the tools he learned at JRI. More importantly, John finished physical therapy with very little, if any pain.

It is estimated that 80 to 85% of people will experience low back pain (LBP) sometime during their life. Often low back pain occurs from overuse, strain or injury. It can be caused by too much bending, twisting, lifting and even too much sitting.

Most low back pain symptoms resolve within a few weeks without any medical intervention. However, within one year following the first episode of LBP, 60 to 80% of people will have a reoccurrence. In most cases of LBP, certain muscles that stabilize the spine shut down; these muscles do not spontaneously recover even if a person is pain free and returns to normal activities. The muscles need to work together to support and stabilize the spine to help prevent future LBP episodes. In addition, if a person continues to

use poor body mechanics and positions, it is most likely that the pain will return.

At JFK's Johnson Rehabilitation Institute, licensed physical therapists focus on using research proven techniques to help reduce and eliminate pain accompanied



Elizabeth Hussey, Physical Therapist works with Richard Holcli of Edison, to treat his low back pain.

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JRI'S ANNUAL

First Swing Golf Clinic

“This event has changed my life, no doubt,” according to Chris Harvey, who attended the First Swing Seminar and Learn to Golf Clinic. The annual event is for people interested in playing golf after an amputation or other physical disabilities.

Chris has an above the knee amputation and has never played golf before. He immediately fell in love with the sport. Chris did well at last year's Clinic and later participated in an Eastern Amputee Golf Association Tournament where he won the prize of *most improved golfer*. Golf has become an important hobby for Chris and he now gets out on the golf course with his friends on average of two-times per week.

This year's Clinic, sponsored by JFK's Johnson Rehabilitation Institute and the JFK Prosthetic and Orthotic Lab, is set for **Tuesday, May 7, 2013, at the Inman Golf Center Driving Range at 1000 Inman Ave, Edison, at 9:00 am.**

“The First Swing Clinic helps



Bob Buck and Chris Harvey.

people set new goals and boost their confidence levels,” according to Don Miehling. “After participating, I was convinced that over time I would golf again – this piece of my former life could be recovered.”

The featured instructor will be Bob Buck, Executive Director of the Eastern Amputee Golf Association. Bob is an avid golfer and an amputee. He has been teaching the First Swing

Golf Clinic for many years. Bob will speak on adaptive golf techniques for physically challenged individuals.

The session will be followed with interactive instruction swinging clubs and hitting golf balls.

“I enjoy being a part of this event because we are able to assist the physically challenged to perform a basic golf swing with a driver or an iron as well as utilize special adaptive equipment to actually learn a new activity or improve their current range of motion,” explains Heikki Uustal, M.D. at JRI.

Golf clubs and balls will be provided. First time golfers are welcome, previous

golfing experience is not necessary. Instruction will also be given at a wheelchair level. Breakfast will be provided. The clinic will be held rain or shine.

For additional information or to sign up please contact Sue Callaghan at scallaghan@jfkhealth.org or call 732-321-7056

NJ Audiology License, NJ Hearing Aid Dispensing License, and a Certificate of Clinical Competence in Audiology from the American Speech Language Hearing Association.

Hearing aid settings need to be programmed correctly. Since each persons ear canal size is different, which impacts the way amplified sound is delivered to the eardrum and subsequently heard, the settings of the hearing aid need to be measured while the aid is in the ear; this is called “verification.” Two people with the same hearing loss and have the same hearing aids programmed the same way, can have very different sound quality based solely on the differences in ear canal size. The result being one person is very satisfied with his/her hearing aid and the other falls victim to the “hearing aid in the drawer syndrome.” Measuring the ear canal size allows the audiologist to program the hearing aid appropriately, resulting in greater benefit. Therefore, it is critical that hearing aid settings are measured and verified while in the individual’s ear.

The second most common reason for not using a hearing aid is difficulty hearing in background noise. Hearing in the presence of



background noise is challenging but with the correct programming of your device, maximum improvement can be achieved so that sounds are not missed and conversations become more pleasurable. Understanding the hearing loss and setting realistic expectations in different listening situations is key to helping patients improve their hearing.

The last reason that people may not use their hearing aid, is poor fit and comfort issues. It is true that some ear canals may be more anatomically challenging than others so with a little extra time and attention, fit and comfort of a custom product can be resolved.

So remember that a bargain basement price may not be a bargain at all.

with instruction of specific exercises, proper posture and body mechanics. JRI provides patients with tools to take better care of their backs. We teach proper lifting, bending and sitting, as well as encourage participation in regular exercise, good body alignment and correct body positioning at work, home and during leisure activities.

Because not all low back pain is the same, the program at JFK JRI is tailored to each patient’s specific symptoms and condition. Once the examination is complete, we will identify the factors that contribute to the back injury and design an individualized plan of treatment. As experts in restoring and improving mobility and movement in people’s lives, physical therapists play an important role not only in treating low back pack but also in preventing it and reducing the risk of reoccurrence.

For your convenience The JFK Johnson Rehabilitation Institute also offers Outpatient Physical and Aquatic Therapy at its Metuchen location and Occupational, Physical and Speech Therapy, as well as Audiology at their Monroe location. For more information call 732-321-7056.

individual to normal function including, sports and work.

Physical therapy is an essential part of the assessment and treatment for post-concussion syndrome. It involves an examination of eye movements, dizziness, walking, balance, assessment of the joints and muscles (especially the neck), and blood pressure/heart rate response to activity. The results of these tests are imperative to guide the therapist to developing a comprehensive, individualized plan for treatment. At JFK Johnson Rehabilitation Institute Outpatient Department, The Physical Therapists treat patients with concussion on a regular

basis. Staff at JRI treat patients with concussion diagnosis from return to play assessments to some of the most complex post-concussion cases. In addition, Occupational Therapy services are available for complex visual concerns.

If you or a loved one is experiencing symptoms from a head injury or possible concussion, seek medical attention and obtain a prescription for Physical Therapy. For an appointment, contact The JFK Johnson Rehabilitation Institute Outpatient Physical Therapy Department at 732-321-7056.



JFK Johnson Rehabilitation Institute The Leader in Providing Quality Rehabilitation Care

Since 1974, JFK Johnson Rehabilitation Institute has been helping people rebuild their lives after a serious illness or injury. We do this by delivering comprehensive rehabilitation services based on cutting-edge treatment techniques, innovative research and excellent, personalized medical care.

Headquartered at the JFK Medical Center in Edison, JRI is a comprehensive rehabilitative service provider focused on educating the community on rehabilitative health and helping adults and children with disabilities reach optimal function and independence. The Institute offers a complete array of inpatient and outpatient programs and services in rehabilitative health, including stroke, orthopedics, prosthetic and orthotics, electrodiagnosis, fitness, cardiac, women's health, pain management, pediatrics, speech pathology and audiology, industrial and vocational rehab, and brain injury rehabilitation programs and services. JRI includes a 94-bed inpatient center in Edison. Outpatient centers are located in Edison, Metuchen and Monroe. The JFK Johnson Rehabilitation Institute is accredited by both the Joint Commission and the Commission on Accreditation of Rehabilitation Facilities (CARF) in Comprehensive Integrated Inpatient Rehabilitation and Comprehensive Vocational Evaluation. Affiliated with the JFK Johnson Rehabilitation Institute is the Shore Rehabilitation Institute, a 40-bed inpatient and outpatient comprehensive rehabilitation hospital located in Brick, NJ. For more information about the JFK Johnson Rehabilitation Institute, visit us at www.jfkmc.org.

www.jfkmc.org

JFK HEALTH SYSTEM



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