Welcome to this special edition of our JFK Johnson Rehabilitation Institute magazine. I am proud to share with you stories of the outstanding work of our nationally recognized rehabilitation institute — a center with a long tradition of providing exceptional patient care. This edition focuses on our Center for Brain Injuries, one of our premier programs.

Open since 1974, the JFK Johnson Rehabilitation Institute is a Center of Excellence of JFK Medical Center — one of the most comprehensive health care networks in New Jersey. We also are the Physical Medicine and Rehabilitation Department of Rutgers Robert Wood Johnson Medical School. Over the past 40 years, we’ve developed programs in specialties such as stroke rehabilitation, orthopedic programs, fitness, cardiac rehabilitation, women’s health, pediatrics, brain injury rehabilitation, orthotics, prosthetics and neuromuscular rehabilitation.

We have the privilege of treating many exceptional individuals, some names familiar, some not. One recognizable individual who shared his story of recovery with people around the nation is Tracy Morgan, the actor and comedian. Tracy Morgan continues to inspire our patients as well as the staff members who played a part in helping him reclaim his immense talent.

You’ll read in these pages about our Center for Brain Injuries, where patients benefit from our Continuum of Care, a model conceived and pioneered by Caroline O. McCagg, MD. Dr. McCagg built a strong foundation of excellence in patient care. She retired recently, but her legacy continues at JFK Johnson. I hold a special place in my heart for Dr. McCagg, a mentor and friend throughout my training and career.

Finally, I am proud to report, as a resident alum of the JFK Johnson Rehabilitation program and the Residency Program Director, that Doximity awarded Five Stars — the highest possible rating — to our Physical Medicine and Rehabilitation Residency Program. Doximity is the leading network for American physicians. In addition to our residency program, we also have ACGME fellowships in Brain Injury Medicine and Pain Medicine.

At JFK Johnson, we’re now expanding many of our existing services, including those focused on spasticity, Parkinson’s, pain management, cardiac rehabilitation, and men’s and women’s health services. We’re also expanding our research capabilities to ensure that our patients receive the best in new innovations that translate to improvements in clinical care. I am proud of the dedication of the talented staff at JFK Johnson and the compassion and care they deliver to the patients and community they serve each and every day.

Yours in Good Health,

Sara Cucurullo, M.D.
Vice President & Medical Director
JFK Johnson Rehabilitation Institute
Chairman, Department of Physical Medicine & Rehabilitation
Rutgers Robert Wood Johnson Medical School
CONTENTS

4 Tracy Morgan’s Journey to Recovery

6 Greater Understanding of Concussion Leads to Better Patient Outcomes

8 The Continuum of Care

12 From Coma to College: A Young Man’s Story

13 Giving Back After Brain Injury

14 Pioneer in Brain Injury Medicine Retires

15 McCagg Legacy Continues
Dr. Jaime M. Levine Leads Extended Recovery Unit

16 Fellowship Program Trains National Leaders in Brain Injury Medicine
JFK Johnson Residency Program Receives Five-Star Rating

17 Meet the JFK Johnson Physicians Certified in Brain Injury Medicine

18 Highlights of Our Scholarly Activities

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Photo credit: Paul Mobley
When Tracy Morgan steps onstage as part of his nationwide comedy tour, “Picking Up the Pieces,” he barrels straight into riffs about his 2014 accident on the New Jersey Turnpike.

He is funny and fearless as he finds humor in his journey to recovery after traumatic brain injury. Morgan jokes that during his eight-day coma he saw “the white light. But I didn’t go through because I thought it was the police.”

He puts audiences in stitches when he describes how he was inspired to get out of his wheelchair and take a first step after his baby daughter took her first step. She was in Pampers. He was in Depends.

And where did the comedian, who was injured when a Walmart truck rear-ended his limo, buy his Depends? “I still shop at Walmart. I was in a wheelchair, but you still can’t beat their prices,” he tells audiences.

Morgan, a 47-year-old Saturday Night Live and 30 Rock alum, tells the story of his recovery in live performances and television interviews that show he has not lost his ability to make people laugh.

Yet to the staff at the JFK Johnson Rehabilitation Institute, Morgan’s success is something more: a visible example of how the work they do every day advances what’s possible for patients with even the most serious brain injuries. Morgan’s story is inspiring to both staff
Morgan was released, he returned for a follow-up appointment with Dr. Greenwald and visited the Brain Trauma Unit. “I saw Nurse Jackie and I grabbed her and wouldn’t let her go. I said, ‘I’m sorry. I’m sorry.’ She just said, ‘I told you everything was going to be all right,’ ” Morgan said.

In June, when Morgan’s show brought him to New York, more than a dozen therapists, nurses, physicians and technicians from JFK Johnson went to see their celebrity patient riff on his experiences in brain injury rehabilitation. He described how he was blind for six days after he emerged from the coma. “Where I come from, you don’t wanna be blind for a second,” he said onstage, referring to his childhood in Bedford-Stuyvesant, Brooklyn.

A few of the health care professionals recognized themselves in Morgan’s stories. After the performance, Morgan met with JFK Johnson staff members and handed out the first “Tracy Morgan Award for Excellence in Rehabilitation Nursing,” created to honor a rehabilitation nurse at JFK Johnson.

He presented the award to Chirichella. It will be given out annually to a JFK Johnson nurse who exhibits the highest levels of skills and compassion in rehabilitation nursing.

Sara Cuccurullo, MD, Vice President and Medical Director of JFK Johnson, and Chair of the Department of Physical and Rehabilitation Medicine at Rutgers Robert Wood Johnson Medical School, was also present for the New York show. She said Morgan’s show puts focus on the goals of rehabilitation in a creative way.

“We created this award to thank Tracy Morgan for the inspiration he continues to provide to our patients and for the light he shines on the skill, compassion and specialized training of rehabilitation nurses,” she said. “Tracy Morgan’s kind words about our nurses put focus on the skill and compassion of rehabilitation nurses everywhere.”

After the show, many said they were moved by the experience of seeing their former patient on stage.

“Tracy’s timing was impeccable and he was sharp and really, really funny. It is so great to see how his recovery allowed him to reclaim his talent,” said Jim Anderson, a physical therapist.

“It was overwhelming to see him doing so well,” Chirichella said.

Dr. Greenwald recalls that early in Morgan’s recovery, the comedian feared he had lost his ability to make people laugh. So he would try out material on Dr. Greenwald and his staff members, gaining confidence with each joke that caused the staff to start laughing. “I remember laughing and telling him, ‘You will be back on stage,’” Dr. Greenwald recalled.

Morgan’s recovery continues to inspire patients.

“I know my own patients have found his recovery a real inspiration,” said Roberta Lentz, Administrative Director of Inpatient Brain Injury Services. “They hope to have a recovery as good as Tracy’s recovery. The staff here really cared about Tracy and his family. To see him on TV, doing so well, and to feel we were part of his recovery, is a great feeling. But we really and truly feel the same way about every one of our patients.”

“You are the people who saved my life,” an emotional Morgan told the rehabilitation team members present at the New York show. “I can never really thank you enough.” He reminisced with those present — many he knew by name.
GREATER UNDERSTANDING of CONCUSSION LEADS to BETTER PATIENT OUTCOMES
As the public’s understanding of concussion has advanced in recent years, so, too, has the science of brain injury.

“Teachers, coaches and parents today all show more compassion when an athlete or student experiences concussion,” said Christine Greiss, DO, director of the Concussion Program at JFK Johnson Rehabilitation Institute Center for Brain Injuries.

At the same time, she said: “We have so much more understanding now of how the brain works and what patients with concussion need to heal. Even in the past two years, the science has accelerated and we are able to do more to help our patients than ever before.”

The medical advances are critical. According to the Centers for Disease Control and Prevention, the incidence of recorded concussions has soared nearly 70 percent in the past decade, propelled by an increase of fall-prone older adults along with more children and teenagers engaging in contact sports and risky activities, such as using hoverboards and jumping on trampolines.

A concussion is a type of traumatic brain injury caused by a bump, blow or jolt to the head. The effects can be serious, including impairment of thinking or memory, of movement, of visual or hearing sensation, or of emotional functioning, such as personality changes or depression.

The latest research, Dr. Greiss explains, now shows that concussion can cause damage that affects the chemistry of the brain, including hormone balance. Testosterone levels can be affected. Thyroid hormones can be impacted, causing sluggishness and weight gain. Serotonin levels can be disrupted, causing mood changes and instability. Even the bowel function may be affected. This “hormonal disregulation” is now recognized as a potential direct consequence of concussion.

The JFK Johnson Concussion Center offers patients a range of experts under one roof who work to advance recovery. The first step is evaluation by a doctor, such as Dr. Greiss, who is certified in brain injury medicine. The doctor may perform a clinical interview, a physical/neurological exam, and balance testing. A neuropsychologist may perform neurocognitive testing if warranted. Further therapies may be needed, such as direct-attention training, time-pressure management, active listening, and compensatory memory strategies. Other therapies offered include vestibular rehabilitation if a patient is suffering from vertigo and dizziness, vision rehabilitation for difficulties with focus and depth perception, headache management, fatigue management, emotion management, and mind-body therapy that uses meditation to reduce stress.

For concussion patients who experience sleep difficulties or emotional ups and downs, another potential avenue of treatment is medication — particularly for patients with the toughest cases who are struggling to function. Some medications can alleviate depression, and certain drugs have off-label uses that may help patients who are dealing with insomnia. Supplements also may have a place in a patient’s treatment regimen.

At JFK Johnson, physicians work closely with patients, particularly those with difficult cases that seem resistant to healing. “We have an open door on communication,” Dr. Greiss stressed. “I work with my patients as long as they need me.”

Many young people resist cognitive rest. “Yet nobody who breaks an ankle questions why they should stay off their feet,” Dr. Greiss said. “It is the same with the brain.” Resting the brain means almost no playing on the computer, no studying, no TV, no reading, and no texting.
Model Pioneered at JFK Johnson Gives Patients with Traumatic Brain Injuries the Best Possible Outcomes

For patients with complex brain injuries, receiving the right treatment at the right time by specialized physicians, nurses and therapists is critical to achieving the best outcomes.

At the Center for Brain Injuries at JFK Johnson Rehabilitation Institute, patients receive intensive and integrated care that evolves as their needs evolve. The Continuum of Care provides patients with highly specialized rehabilitation at every step of their journey toward recovery.

The Center for Brain Injuries has seven physicians certified in Brain Injury Medicine, among the most of any rehabilitation center in the nation. The American Board of Medical Specialties certifies the new subspecialty. Meanwhile, the Academy of Certified Brain Injury Specialists has certified many of the Center’s nurses; speech, physical, occupational and recreation therapists; neuropsychologists; social workers; nutritionists, and technicians.

“We know our Continuum of Care and our highly trained and experienced professionals give our patients the best recovery possible,” Brian D. Greenwald, MD, Medical Director of the Center for Brain Injuries, said.

Dr. Caroline O. McCagg, who recently retired as Medical Director of the Center for Brain Injuries, began the model of care more than 25 years ago. Her pioneering vision built the foundation of the Continuum of Care and influenced the field of brain injury medicine.

“Our patients with brain injuries stay with our physicians, nurses and therapists even as they move from the trauma center to acute rehabilitation to extended recovery to out-patient rehabilitation. We have a long history of treating the most complex brain injuries.”

— Brian D. Greenwald, MD
Medical Director of the Center for Brain Injuries
FIRST PHASE // Trauma Center Rehabilitation

Immediately after a traumatic brain injury, perhaps a car or bicycle accident, maybe a fall or assault, the patient may be facing multiple and critical injuries. Yet brain injury rehabilitation must nonetheless begin, even for patients with tracheostomy tubes, on ventilators or with serious orthopedic injuries.

“So much has to start right away,” said Anna Maria Dunn, MD. She is a physiatrist and brain injury specialist with JFK Johnson yet she spends most of her time at the Level I Trauma Center at Robert Wood Johnson University Hospital, where she works side-by-side with trauma physicians. Patients with brain injury also come to JFK Johnson from trauma centers, hospitals and emergency departments throughout the region.

Dr. Dunn sees patients immediately after a traumatic event. She may prescribe neuropharmaceuticals to stimulate brain function or to reduce a patient’s agitation. She works to retain the patient’s range of motion and prevent joints from “locking.”

Pivotal research by Christine Greiss, D.O., a physiatrist at JFK Johnson, found that specialized care started early by a dedicated physiatrist gives traumatic brain injury patients improved function when they ultimately leave rehabilitation. Dr. Greiss’ research was published last year in the Journal of Trauma and Acute Care Surgery.

Dr. Dunn also said an important part of her work focuses on supporting families. They often are frightened and confused. Dr. Dunn educates families about traumatic brain injury and what they can expect.

SECOND PHASE // Brain Trauma Unit

Unlike a freestanding rehabilitation center, the Brain Trauma Unit at JFK Johnson is connected to an acute care hospital, JFK Medical Center. That means patients with both complex brain injuries and complex medical problems can be treated in one place. Patients with brain injury often have other medical concerns, such pulmonary, cardiac and orthopedic complications.

Many members of the professional staff in the 26-bed inpatient unit have years, even decades, of experience in brain rehabilitation.

“One day the patient is talking and the next day the patient sleeps all afternoon. With brain injury, things wax and wane. That’s normal.”

— Anna Maria Dunn, MD
Physiatrist and Brain Injury Specialist

“These families are devastated,” Dr. Dunn said. “There are many tears. … I need to explain to the families what is going to happen and set the scenario for what’s ahead and what brain recovery looks like.”

Her work is so early in the patient’s treatment that many of her brain-injured patients, some in a coma, do not remember her. “The families remember me, although the patients rarely do,” Dr. Dunn said. “But I know my efforts will improve their outcomes and make a difference in their lives.”
“The work in the Brain Trauma Unit is challenging,” said nurse manager Chris Wade, who has worked in the unit for 26 years. “But all of us here have a special affinity for our work and for our patients. We develop relationships with our patients and treat them like they are our own family members. When patients are discharged to the next level of care, they almost always come back to visit us. And we don’t just take care of the patients, we take care of the whole family.”

The program is certified by the Commission on Accreditation of Rehabilitation Facilities (CARF) and takes care of the full spectrum of patients with brain injuries, including those with stroke, aneurysms and tumors as well as brain trauma. It is in the Brain Trauma Unit that patients start learning how to walk, talk, dress and eat again. They receive at least three hours of intense therapy each day in a structured, therapeutic environment with an individualized plan that addresses awareness, behavior and safety.

“If our patients have a change in mental status, or a seizure or other health care issue, we have resources right here to help them that are second to none,” said Richard J. Malone, DO. “We are an elevator ride to an ICU. And because of our resources we can start rehabilitation early, and rehabilitation can continue even if a patient needs additional medical treatment.”

Some patients may emerge from a coma with significant medical, physical and cognitive problems, while others are able to walk but need support with thinking and communication. A multidisciplinary team works on a plan individualized for each patient. A full-sized kitchen and laundry area helps patients relearn the tasks of daily living.

Said Dr. Greenwald: “We provide the full spectrum of care and are holistic in our approach. We look at every person as an individual and not as a diagnosis.”

THIRD PHASE // Extended Recovery Unit

The subacute rehabilitation program was created within JFK Johnson for patients who were more stable medically but not yet ready to return home. These patients benefit greatly from continued intensive rehabilitation. The Extended Recovery Unit is the only state-certified subacute brain injury rehabilitation program in New Jersey.
“Our patients continue to need the watchful eye of nurses familiar with brain injury,” said Jaime M. Levine, DO, Director of Brain Injury Medicine at the Extended Recovery Unit. “Some are more severely injured and need extended recovery.”

The goal is to ensure that each patient receives the highest level of therapy he or she can tolerate at each phase of the continuum. Some patients in extended recovery can tolerate more therapy than they could during their acute rehabilitation.

Some patients work on relearning how to swallow or improving their speech. They may work in group settings, or focus on tasks involving music or recreational activities. The aim is to help prepare them to return to the community.

“It’s an exciting time in brain injury medicine,” Dr. Levine said. “We are learning more and more about the brain and what we as physicians can do to augment that recovery with medications and therapeutic techniques.”

Dr. Levine believes her own attitude and the approach of the staff is critical to the recovery of her patients.

“What I love about this field is that I can let my natural optimism come to the forefront,” she said.

FOURTH PHASE // Outpatient Comprehensive Neuro Rehabilitation

Many patients well enough to go home can still benefit greatly from ongoing, highly specialized outpatient therapy that includes neuropsychology and all the therapies — from recreational to speech to vocational to academic. Patients in outpatient cognitive rehabilitation can receive one to 25 hours of therapy each week.

“We can see improvement continually as we help patients adapt to the challenges of living with a brain injury,” said Keith D. Cicerone, PhD, ABPP, FACRM, and the Director of Neuropsychology and Rehabilitation Psychology.

Cicerone said highly specialized assessments pinpoint, for instance, the nature of a person’s memory deficits. Not all memory deficits are equal, he said. “The emphasis is teaching patients new ways to remember things,” he said.

He said the medical community now thinks of brain injury more as a chronic illness that can be managed instead of a one-time event with an endpoint. Science no longer sees the brain as unchangeable in adults.

“We don’t really know the endpoint for neurologic recovery. We now know the brain continues to adapt to new experiences. It’s a revolution of hope, if you will,” Dr. Cicerone said. “There is not a revolution in therapies yet, but there is an understanding that you can continue to adapt and have functional and practical changes in the brain.”

Outpatient therapy includes academic support for students returning to college, for instance, and helps people return to their previous jobs — or find new jobs better suited to their post-recovery life.

Dr. Cicerone is the author of more than 75 peer-reviewed studies in traumatic brain injury and neuropsychological rehabilitation. His work has shown the value of interventions of cognitive rehabilitation after traumatic brain injury and stroke. He has found that highly specialized outpatient therapies help people with brain injuries gain improved function and satisfaction in life.

Not every patient moves through every phase of the Continuum of Care. Some go home after the first phase; others with a mild impairment may improve with just outpatient cognitive therapy.

The goal is to find the right interventions for each patient at the right time.

“Our Continuum of Care works because we create programs that adjust to the patient and where the patient is at any point in his or her recovery,” said Greenwald. “Our aim is to help every patient obtain the best outcome possible.”

“People can learn techniques to compensate for memory deficits, or they can restructure the home environment, and we can help them cope with on-going stresses in their new life.”

— Keith D. Cicerone, PhD, ABPP, FACRM, Director of Neuropsychology and Rehabilitation Psychology

“The Continuum of Care works because we create programs that adjust to the patient and where the patient is at any point in his or her recovery,” said Greenwald. “Our aim is to help every patient obtain the best outcome possible.”

— Richard J. Malone, DO

“We are unique. Because we are a rehabilitation institute within an acute care hospital, we can take the most medically complex patients. We have all the resources and specialists right here.”

— JFK
John Francisco was a 19-year-old Rider University student when he suffered a traumatic brain injury from a car accident and was in a coma for two weeks. At the Brain Trauma Unit at JFK Johnson Rehabilitation Institute, in those early weeks and months, Francisco could not speak, swallow or move the right side of his body. He was fed through a tube.

That was in 2014. Today he is sprinting on a treadmill and taking courses at Ocean County College. Francisco has moved through the JFK Johnson Continuum of Care and now receives care from the fourth and final phase: Cognitive Rehabilitation.

One recent afternoon, his therapist, Susan Paradise, M.Ed., Educational Specialist, showed him cards with questions about complex topics, such as human verbal and non-verbal communication. She told him to say the definitions out loud, or use a highlighter to focus on important elements.

Francisco read the card with perfect diction. “Non-verbal communication is how people say things, not just what they say but how they say it. How they move,” he explained about the definition on the card.

He has made remarkable progress through the Continuum of Care.

“A year ago he could not smile. Or walk. Or even talk. He could not swallow. When you think about where he is now and where he was … it just floors you,” his therapist said. Special swallowing technology and therapy, including neuromuscular electrical stimulation, helped him learn to eat food again.

The therapist is working to help Francisco find new ways to learn to support his return to college.

“We look at how John was a learner before the accident and enhance those aspects now. He likes to write. It helps his memory. He keeps logs. We look at what’s working best and we can work together to support his work in college,” the therapist said.

“What do you think?” she asked Francisco. “Can you do it?”

“Absolutely. I know I can,” he said.

His mother, Emilia Francisco, said in an interview that she watched every step of her son’s progress through the Continuum of Care. “At one point I wondered, ‘Would he ever be able to eat? To tie his shoes?’ ” she said. “The staff was excellent. Johnny went from not walking at all to baby steps to bigger steps to the treadmill.”

Francisco said he was continually encouraged to improve as he passed each milestone in his recovery.

He remains under the care of Dr. Brian D. Greenwald, Medical Director of the JFK Johnson Center for Brain Injuries. Dr. Greenwald makes sure Francisco continues to receive the medications and therapies that move his recovery forward.

“They did not baby me,” Francisco said. “Everyone was smart about pushing me and always trying to teach me something new. They pushed me forward in good ways and always had a lot of positive thoughts. And that made me positive.”
Noelle McNeil, an equestrian and college student, suffered a life-threatening brain injury after being thrown from a horse with so much force the rim of her helmet broke. She was just 20 years old, with an injury so severe she was completely unresponsive.

After emergency treatment, she was transferred to the Center for Brain Injuries at JFK Johnson Rehabilitation Institute and eventually could blink her eyes.

Her mother, Rosemary Richards, recalls: “I remember the therapists started moving her limbs. I thought they were crazy, I was thinking, ‘She can’t move! Her arms were frozen.’ But they kept working on her and also gave her medication and she started to become more alert. They trained our family members to work with her, too.”

McNeil began in the Brain Trauma Unit and eventually went to the Extended Recovery Unit and then to Cognitive Rehabilitation as an outpatient. She learned to walk and talk and live again. The therapists used family photos to help jog her memory.

“What you need changes, sometimes week to week. The care was fantastic and always advancing,” McNeil said.

McNeil often returns to JFK Johnson to inspire patients. Her family terms her recovery unprecedented considering the severity of her injury, called diffuse axonal injury. McNeil said she often hears from families of patients with brain injury because of her speaking engagements and her book.

“I tell everyone about my remarkable experience at JFK Johnson Rehabilitation Institute,” she said.
Caroline O. McCagg, MD, a pioneer in brain injury medicine, retired recently, leaving a legacy that has changed the field of rehabilitation for patients with brain injuries. Dr. McCagg’s innovative work at JFK Johnson Rehabilitation Institute created the Continuum of Care that continues to advance treatment for patients today.

Dr. McCagg’s visionary approach to care continues throughout the JFK Johnson Center for Brain Injuries and has influenced the entire field of brain injury medicine.

Dr. McCagg graduated from Yale Medical School in 1962 and completed her residency in Physical Medicine and Rehabilitation at the Rusk Institute at New York University. She worked at Cornell Medical Center and then Columbia Presbyterian Medical Center, focusing on patients with spinal-cord injuries. She saw that many of those patients also had traumatic brain injuries that received little attention at the time. Dr. McCagg focused on these patients and developed a passion to develop innovative treatments to help them.

In 1984, she came to JFK Johnson to create a comprehensive, in-patient rehabilitation center with a special emphasis on patients with brain injury.

Dr. McCagg’s compassionate care and her expertise were showcased in the 2007 HBO documentary, “COMA.” The brain injury program she developed also was portrayed in a 2005 Discovery Health Documentary, “The Man Who Slept for Nineteen Years.”
The Extended Recovery Unit comes full circle after Dr. Caroline O. McCagg’s retirement with the naming of Dr. Jaime M. Levine as the new director.

Dr. Levine comes to the JFK Johnson Center for Brain Injuries from Rusk Rehabilitation at NYU Langone Medical Center. She attributes much of her success at Rusk to her earlier Brain Injury Medicine fellowship at JFK Johnson, where she worked closely with Dr. McCagg.

“Everybody in the field knows the work of Dr. McCagg. So, yes, I feel humbled but also inspired to build on Dr. McCagg’s groundbreaking work,” said Dr. Levine. As Medical Director of Brain Injury Rehabilitation at the Extended Recovery Unit, Dr. Levine works with patients who have moved out of the acute medical phase.

“Coming here presents an exciting opportunity because we can focus more strongly on the rehabilitation phase,” she said.

The overall goal of the Extended Recovery Unit is to help support patients as they move back into the community. The focus is on getting patients back into a previous role — work-related, educational, within the family, or in the community — or finding a new role for them.

“A remarkable part of how we treat patients is how closely we follow the individual patient within our Continuum of Care,” Dr. Levine said. “Doctors don’t have to ‘advocate for their patient,’ because keeping the patients close as they transition from one center within our continuum to another is already an ethos of the organization.” The ethos was originally imagined and developed by Dr. McCagg.

Dr. Levine said patients may be recovering from a catastrophic illness or injury, and have goals that may stretch over years or even a lifetime. “These goals are often oriented toward optimizing quality of life,” Dr. Levine said. “But just as important, we have to ensure that we are supporting the patient’s quality of life right now, at this very moment.”

The Extended Recovery Unit’s therapeutic recreation activities range from art projects, to walks or drives outside, to visits to offsite restaurants.

“What we’re doing here is already more than what you will see in similar units, and we don’t need to change the menu,” said Dr. Levine. “But that doesn’t mean we won’t keep trying to perfect the recipes.”
The study and treatment of brain injury has advanced so far in the past decade that many in the field saw the need to create a subspecialty certification. As a result, in 2011 the American Board of Medical Specialties officially established the subspecialty of Brain Injury Medicine — creating a clear way to identify properly trained and experienced physicians in the subspecialty.

Soon thereafter, the one-year Brain Injury Medicine Fellowship offered at JFK Johnson Rehabilitation Institute became one of the first such programs to be accredited by the Accreditation Council for Graduate Medical Education (ACGME).

JFK Johnson has been fellowship-training physicians in this field for nearly a decade. Some of the nationally recognized leaders in the field of brain injury medicine did their fellowship training at JFK Johnson. The fellowship is available through a collaborative effort of the Center for Brain Injuries at JFK Johnson and the Department of Physical Medicine and Rehabilitation at Rutgers Robert Wood Johnson Medical School.

The Brain Injury Medicine Fellowship attracts applicants from across the country, in part because of the breadth of educational opportunities at the Center for Brain Injuries. Spanning the spectrum from injuries such as concussions (from sports, falls, motor vehicle accidents, etc.) to disorders of consciousness, the Center offers unparalleled clinical experience for fellows.

JFK JOHNSON RESIDENCY PROGRAM RECEIVES FIVE-STAR RATING

JFK Johnson Rehabilitation Institute has received Five Stars — the highest rating — for its Physical Medicine & Rehabilitation Residency Program from Doximity, the leading network for U.S. physicians.

The rating comes from Doximity’s Residency Navigator, which provides information about residency programs to medical school graduates. More than 52,000 physicians have contributed nominations, ratings, and hand-written reviews.

“For new doctors, selecting a hospital for their residency is one of the most important decisions they will make. We know our residency program is among the nation’s best in rehabilitation, and we appreciate this recognition from Doximity,” said Sara Cuccurullo, MD, Medical Director of JFK Johnson and Chair of the Department of Physical Medicine and Rehabilitation at Rutgers Robert Wood Johnson Medical School.

The Physical Medicine and Rehabilitation (PM&R) Residency Program is a joint endeavor with JFK Johnson and Rutgers Robert Wood Johnson Medical School. Each year, more than 500 medical students apply for four spots in the program.

The residency has vibrant and engaged alumni, including many who now work as medical directors and residency directors in hospitals and rehabilitation institutes across the nation. The residency program is fully accredited by the Accreditation Council for Graduate Medical Education (ACGME).
MEET OUR BRAIN INJURY CERTIFIED PHYSICIANS

JFK Johnson Physicians Certified in Brain Injury Medicine

In 2011, the American Board of Medical Specialties officially established the subspecialty of Brain Injury Medicine. JFK Johnson Rehabilitation Institute now has seven physicians certified in the sub-specialty, among the most of any rehabilitation institute in the nation.

Brian D. Greenwald, MD
“We look at every person as an individual and not as a diagnosis. Our care must adjust and revolve around the needs of our patients. We’re always asking ourselves, ‘How can we advance the outcomes for every one of our patients?’”

Christine Greiss, DO
“Our strong focus on research and scholarly activities gives our patients access to the latest interventions. And it’s important to me to always have an open door on communication. I work with my patients as long as they need me.”

Jaime M. Levine, DO
“It’s an exciting time in brain injury medicine. We are learning more and more about the brain and what we as physicians can do to augment that recovery with medications and therapeutic techniques.”

Lei Lin, MD, PhD
“It’s important to work with the whole family. When I see the entire family, and the patient says, ‘I was able to take my grandchild to the park, ’ and they could not do that a month ago, that’s what makes me so happy.”

Lisa Luciano, DO
“Brain injury recovery is a journey with endless possibilities for everyone involved. I continue to learn, and each patient teaches me. I cannot describe how truly rewarding this field of medicine is for me.”

Richard J. Malone, DO, FAAPM&R
“Despite the challenges of this work, many of our physicians and staff have been here for a long time. There’s little turnover. That’s because the administration and department chair have always been so supportive of us and of our patients. It’s a wonderful place to practice medicine.”

Krishna Urs, MD
“There is a great deal of satisfaction in working with our population of patients. You can see the development over days, weeks, even months in how they improve neurologically. Our goal is always to return our patients to their prior level of function. That’s very rewarding.”
HIGHLIGHTS OF OUR SCHOLARLY ACTIVITIES

A. CURRENT RESEARCH IN PROGRESS
1. Cuccurullo, Sara, MD, Bagay Leslie, MD, IRB Approval “Physical Medicine and Rehabilitation Evaluation Project: Development of standardized rotation specific resident evaluation forms that incorporate the PM&R Milestones”, October 2016
2. Rossi, Roger, DO, Ongoing Research, Exercise and rTMS (repetitive transcranial magnetic stimulation) in Parkinson’s Disease-p20 study in collaboration with New York University (NYU) Langone Medical Center and the Parkinson’s Disease and Movement Disorders Center, January 2016
3. Cuccurullo, Sara, MD, Fleming, Talya, MD, Eckert Anne, PhD, Christine Greiss DO, Anna Dunn, MD, JFK IRB Approval Obtained Ongoing Research Project – Stroke Recovery Program – Outcomes Trial, and Functional Outcomes Trial, Multi-Center Collaborative Initiative, JFK Rehabilitation Institute, Rutgers, Robert Wood Johnson Medical School, January 2016
4. Escaldi, Steven, DO, Research Project with Rutgers Bioengineering Department in conjunction with JFK Johnson Spasticity Clinic, January 2016
7. Goldin, Yelena, PhD, Cicerone, Keith, PhD, Ongoing Research Project, “Examining Attention Networks in Non-Traumatic Acquired Brain Injury Following Computer Based Cognitive Rehabilitation” January 2016
8. Goldin, Yelena, PhD, Cicerone, Keith, PhD, Ongoing Research “Examining Attention Networks in Traumatic Brain Injury Following Computer Based Cognitive Rehabilitation” January 2016
9. Goldin, Yelena, PhD, Cicerone, Keith, PhD, Ongoing Research “An Exploration of the Role of Exercise in Older Adults with Acquired Brain Injury” January 2016

B. TEXTBOOKS

C. PEER REVIEWED PUBLICATIONS
3. Cicerone, Keith, PhD, Comments on Defining the Targets, Mechanisms, Active Ingredients of Rehabilitation, Rehabilitation Psychology, 2015; 60: 136-137
5. Rossi, Roger, DO, Dilated Cardiomyopathy in DMD: Atypical Presentation as Gastrointestinal Symptoms, 2015; 15(S) pp. 226-228

D. ABSTRACTS
2. Esterev, Dmitry, DO, Cuccurullo, Sara, MD, Kim, Kin, MS IV, Poster Presentation, “Acute Rehabilitation of MI Complicated by Cardiogenic ECMO Resulting in Necrotizing Fascitis”, Presented at the American Academy of Physical Medicine and Rehabilitation Annual Assembly, New Orleans LA, October 2016
4. Lin, Lei, MD Poster Presentation – An Evidence Based Assessment of Fall Risk and Prevention” Presented at the American Academy of Physical Medicine and Rehabilitation Annual Assembly, New Orleans LA, October 2016

E. BOOK CHAPTERS
1. Rossi, Roger, DO, Fleming, Talya, MD, Urs, Krishna, MD, Cuccurullo, Sara, MD “Geriatric Rehabilitation from Bedside to Curbside, Osteoporosis in the Elderly Adult”, October 2016
Since 1974, the 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 JFK Medical Center in Edison, JFK Johnson 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, prosthetics and orthotics, electrodiagnosis, fitness, cardiac, women’s health, pain management, pediatrics, speech pathology and audiology, industrial health and vocational rehab, and brain injury rehabilitation programs and services. JFK Johnson 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 the Inpatient Rehabilitation Adult Program, Inpatient Rehabilitation Adult Brain Injury Specialty Program, Stroke Specialty Program, Interdisciplinary Outpatient Medical Rehabilitation Adult Brain Injury Specialty Program, and Comprehensive Vocational Evaluation Services. 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.