



Hackensack  
Meridian Health

ADVANCING WHAT'S POSSIBLE | 2022

# JFK Johnson Rehabilitation Institute

## Back to Work and Life After Cardiac Rehab

*State-of-the-Art Cardiac and  
Pulmonary Rehabilitation Speeds  
Recovery, Saves Lives*

**INSIDE:**  
Update on  
Stroke-HEART™  
Trials

FROM OUR MEDICAL DIRECTOR



I hope you enjoy our 2022 magazine, which focuses on cardiac and pulmonary rehabilitation. I am so proud of the physicians, nurses, exercise physiologists and other professionals who enable our patients to significantly improve their lives. We are grateful to the patients who shared their stories and I hope you find them as inspiring as I do.

We have had an eventful year. U.S. News and World Report's 2021-2022 rankings named us one of the top rehabilitation hospitals in the nation in the prestigious "Best Hospitals" list.

I also want to let you know that we have unified the three rehabilitation hospitals that are part of Hackensack Meridian Health with new names that reflect our shared vision and mission to provide the highest level of rehabilitation care to our patients. The new names will strengthen our already existing collaboration and clarify that connection to the public. Our reach now is 184 in-patient rehabilitation beds and extensive outpatient programs throughout New Jersey. The new names are:

- Hackensack Meridian JFK Johnson Rehabilitation Institute
- Hackensack Meridian Johnson Rehabilitation Institute at Ocean University Medical Center
- Hackensack Meridian Johnson Rehabilitation Institute at Riverview Medical Center

Johnson Rehabilitation Institute also just began a clinical affiliation with St. Joseph's Health in Wayne, New Jersey. We know that top-quality rehabilitation medicine can make an enormous difference in the lives of people with injuries, illness, and disabilities and we all are proud to increase our reach.

At JFK Johnson, we also have increased our concussion program, and our Post-COVID Rehabilitation program is helping people with the lingering effects of the novel coronavirus. Meanwhile, we are expanding our Parkinson's program. And please read the latest data from our groundbreaking research from our Stroke-HEARTTM Trials in this issue of our magazine, showing that this program can reduce deaths and improve cardiovascular performance and overall function — in addition to reducing all-cause hospital readmissions post-stroke.

To strengthen our outreach, we've expanded our social media network to educate the community about rehabilitation medicine. Please consider following us. You can start with the QR code for our LinkedIn on the bottom of the page.

Yours in Good Health,

*Sara Cuccurullo M.D.*

Sara Cuccurullo, M.D.  
 Professor and Chairman  
 Residency Program Director  
 Department of Physical Medicine and Rehabilitation  
 Hackensack Meridian School of Medicine  
 Rutgers-Robert Wood Johnson Medical School  
 Vice President and Medical Director  
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 JFK Johnson Rehabilitation Institute



Hackensack Meridian  
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 Rehabilitation Institute

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| Cognitive Rehabilitation .....        | 732.906.2640 | Parkinson's Disease Clinic/<br>Rehabilitation Medicine ..... | 732.321.7070 |
| Driver's Training .....               | 732.321.7056 | Pelvic Floor Rehabilitation .....                            | 732.321.7056 |
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# CARDIAC REHAB



Albert Salvesen consults with Dr. Jafri.

“Many patients go through our continuum of care. We also have strong alliances with cardiologists throughout New Jersey and with heart and lung transplant centers. They recognize that we have amazing inpatient and outpatient rehabilitation programs and can care for the most medically complex patients.”



— Iqbal H. Jafri, M.D.,  
medical director of the  
Center for Cardiac and  
Pulmonary Rehabilitation

## AT THE HEART OF HEALING

JFK Johnson Has the Expertise for the Most Challenging Cases

ALBERT SALVESEN cycles vigorously on an exercise bicycle as cardiac nurses monitor his heart rate, and an exercise physiologist oversees his training. He speaks with just a slight breathiness as he pedals.

“Everyone here knows what they are doing, and they watch out for you,” Salvesen says. “That gives you the confidence to push yourself further so you can keep getting stronger.”

JFK Johnson Rehabilitation Institute’s Center for Cardiac and Pulmonary Rehabilitation speeds the recovery and extends the lives of people such as Salvesen, who experienced cardiac arrest in 2021 when his heart stopped beating for three minutes and 30 seconds.

Salvesen is committed to cardiac rehabilitation with a clear goal: get back to his life and his job as

a battalion chief at North Hudson Regional Fire and Rescue. The 58-year-old husband and father of two from Old Bridge had no clear risk factors for heart disease. He was not overweight, did not smoke, regularly exercised, and ate well. Yet minutes after a routine stress test in the spring of 2021, his heart stopped beating. He was revived from cardiac arrest and underwent surgery to open four blocked arteries.

Salvesen quickly realized that his life-saving treatment was just the first part of his journey toward recovery.

“The rehabilitation has made an enormous difference,” he says. “People encourage you here and monitor you. It’s like a safety net in case something happens. You just can’t do this on your own.” As he nears the last of his 36 sessions, Salvesen says, “I am thankful, and I feel great.” >>

## CONTINUUM OF CARE

The Center for Cardiac and Pulmonary Rehabilitation is part of the continuum of care at JFK Johnson Rehabilitation Institute and JFK University Medical Center. The continuum includes emergency care, acute inpatient care, inpatient cardiac and pulmonary rehabilitation, and outpatient cardiac and pulmonary rehabilitation. Many patients move through the entire continuum while others are transferred from referring acute care hospitals that know their patients would benefit from JFK Johnson's state-of-the-art rehabilitation.

The Center has the expertise and experience to treat the most challenging cases, such as those with heart transplants, Left Ventricular Assist Devices (LVADs), lung transplants, and other serious conditions. The Center provides closely monitored, individualized exercise as well as nutritional counseling, stress management, and behavioral modification. The goal is for people to recover faster, live longer, and feel better.

"Our patients see amazing benefits," says Sara Cuccurullo, M.D., Medical Director and Vice President of JFK Johnson Rehabilitation Institute. "They build up their cardiac and pulmonary strength through cardiac conditioning. Many quit smoking and benefit from consultations with our dietitians and psychologists. We see our patients' overall health and quality of life dramatically improve."

The benefits of cardiac and pulmonary rehabilitation are long-established and a high-quality center such as the one at JFK Johnson, a nationally ranked rehabilitation institute,



Specialized nurses monitor every patient.

provides patients with the greatest opportunities to improve their health after a serious cardiac event or pulmonary disease. For some cardiac events, rehabilitation reduces mortality in the first year

**“Cardiac and pulmonary rehabilitation significantly reduces the chance of a second event or hospitalization as well as death. It’s really astounding. We monitor our patients carefully and because we are part of an acute care hospital, we can provide everything our patients need right here.”**



— Steven Markos, M.D., an attending physician in the Center for Cardiac and Pulmonary Rehabilitation

by 47 percent. The goals of cardiac rehabilitation are for patients to improve their cardiovascular fitness; improve their modifiable risk factors; and improve their medication adherence.

Ultimately, says Iqbal H. Jafri, M.D., medical director of the Center for Cardiac and Pulmonary Rehabilitation: "Cardiac and pulmonary rehabilitation reduces your chances of dying. It also reduces the chance you will have another cardiac event, such as a second heart attack. And it improves your quality of life." People in the program, he says, often also reduce their cholesterol and blood pressure and, if they have diabetes, gain better control over their blood sugar.

After heart surgery or heart attack, some patients may have difficulty even walking. Some may have thought they were too ill to exercise at all. They might begin rehabilitation barely able to get out of bed or a wheelchair. Yet they begin their rehabilitation on carefully selected equipment and follow an exercise plan created specifically for them.

"Sometimes I check in on a patient three or four weeks into their rehabilitation and I hardly recognize them," Dr. Jafri says. "They are upbeat. They are getting around and healthy looking. Our work here is so rewarding." Patients have been in their 90s and as young as their 20s. In the past year, the Center is also working with patients whose lungs or hearts have been damaged by COVID-19.

The program is accredited by the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR).



The skilled nurses, physiologists and other professionals at the Center for Cardiac and Pulmonary Rehabilitation.

## CONQUERING FEARS AND GAINING CONFIDENCE

The Center's specially trained physicians, cardiac nurses, exercise physiologists, and other professional staff members educate patients about the process and explain the close monitoring of their hearts as they exercise. Medically fragile patients begin rehabilitation in the 94-bed inpatient rehabilitation unit. The goal is to improve their endurance so they can go home and continue rehabilitation on an outpatient basis. If patients have an LVAD, they must learn specific aspects about the devices, such as how to prevent infection or keep the device working properly, such as knowing how to change the batteries.

"Our patients who are inpatient get three hours of rehabilitation each day," says Tracy Hallbauer, MSN, BSN, RN, CRRN, Nurse Manager of inpatient acute rehabilitation. The process requires the expertise of therapists and nurses who understand how to condition people with LVADs or with heart transplants. Low blood pressure, for instance, is typical of patients with LVADs. Heart transplantation results in denervation of the donor heart and patients will

experience pain differently than they did before the transplant.

"Some patients want to start running on a treadmill and others are petrified to move. There is a need for a lot of education of the process," Hallbauer says.

*Cardiac and pulmonary rehabilitation is for anyone who has experienced a heart attack or undergone angioplasty or stenting; heart valve replacement or repair; open heart surgery, such as coronary artery bypass surgery; heart transplant; or a diagnosis of angina or heart failure. Rehabilitation also helps those with lung transplants or COPD.*

Psychologists Gina C. Danner, Ph.D., and Elissa M. Kaplan, Ph.D., are available to support patients who may be struggling emotionally as a result of their health challenges.

"The old-school thinking was if you were sick you should rest. We

support our patients and talk to them about the value and goals of rehab. We talk to people about prevention and wellness. Some people realize they need to make real changes in their lives," Danner says.

The rehabilitation also includes consultation with a dietician. Diane Weeks, RDN, MS, CD, E., talks to patients about dietary changes in a way that is individualized. She talks to each patient to learn about their risk factors and about the foods they enjoy. Some patients reached their cardiac or pulmonary crisis after a lifetime of poor eating habits.

"We won't succeed if we just say, 'Don't eat this and don't eat that,'" Weeks says. "We talk to patients about how what they eat affects their heart. Maybe we discuss the role of food and diabetes. Some people are surprised to learn a food they thought was healthy actually contains a good deal of sugar," she says. "Food is something you can control. Even small changes can have a positive impact." >>

# IMPROVING IN WAYS SOME DID NOT THINK POSSIBLE

Patients are often inspired and even surprised by how the rehabilitation process improves their lives.

"Many of our patients have experienced slowly diminishing function and quality of life. Then a cardiac intervention, maybe a stent or bypass procedure, followed by cardiac rehabilitation, turns the tables for them," says Steven Markos, M.D., an attending physician in the Center.

"Maybe their goal is to walk around the house independently or get in the car and visit their grandchildren. Maybe they get back to work. It's rewarding to see people move forward in ways some of them did not think possible before rehabilitation," says Dr. Markos.

JFK Johnson Rehabilitation Institute is attached to JFK University Medical Center, providing immediate access to an emergency department and hospital if necessary, though complications are rare. Patients gain confidence knowing an acute care hospital is right down the hall.



Dr. Jafri and Dr. Markos

**“I want to keep working. Not long ago, I pulled a man out of a fire and revived him. I saved a life, and in turn my life was saved. I think about that and think there is a reason I am still here.”**



— Albert Salvesen  
Battalion chief and cardiac  
rehabilitation patient

## JOURNEY TO RECOVERY

For Salvesen, a routine heart evaluation in 2018 hinted at something wrong with his heart and he was told to follow up. But then the COVID-19 pandemic hit, and he postponed his follow-up. Then, through *A Gift from Capt. Buscio*, a program that supports comprehensive physical examinations for first responders, he underwent a checkup. He was told to follow up with a nuclear stress test, which uses a small amount of radioactive tracer and an imaging machine to show blood flow. He was sitting on the table during the cool down period when a nurse asked him if he was alright.

Suddenly his heart stopped beating as he experienced cardiac arrest, which has low survival rates even in health care settings. Health care workers used a defibrillator to restart his heart. As a firefighter for 29 years, Salvesen expected cancer or smoke-related lung issues would be his downfall.

"I was dead for three minutes and 30 seconds. I did not like dying," he says today as he nears his final rehabilitation session and has returned to work. His close call with mortality has prompted him to think about his own life and his commitment to his family and his job as a first responder.

"I want to keep working. Not long ago, I pulled a man out of a fire and revived him," he recalls. "I saved a life, and in turn my life was saved. I think about that and think there is a reason I am still here." **JFK**

## Rehabilitation: Essential to Every Step of His Recovery from Heart Transplant and COVID

Sam Persad was 56 years old when a heart attack changed his life. He recalls one day when he was working with his company's owner tidying up the shop when he felt pain in his chest. He ignored it — "like a goofy man," he says — until the tightness persisted and he called his wife. Then he called 911.

Surgeons placed stents in three severely blocked arteries. But his heart was apparently too damaged for repair. A few days later he was placed on an LVAD (left ventricular assist device) and began cardiac rehabilitation at the Center for Cardiac and Pulmonary Rehabilitation.

"The first thing they asked me was, 'What is your goal?' I said, 'I want to be able to walk up and down the stairs. Get to the bathroom.' And by the end of two weeks, I was walking with a cane. Getting around, even up the stairs."

Yet his heart was still failing, and

it was determined that he needed a heart transplant. Persad was hospitalized during the six weeks it took for him to receive a donor heart, which took place on October 3, 2020.

Persad returned to the Center for Cardiac and Pulmonary Rehabilitation for inpatient rehab. He told the physical therapists and nurses to "kick my butt. I want to walk again. I want to be where I was before my heart attack," he recalls. "They pushed me. You don't realize how much of your strength you lose waiting for a heart transplant," he says.

As the COVID pandemic continued, Persad completed his rehabilitation exercises in his room. He was fearful of harming his new heart, but he trusted the nurses and therapists to monitor him. They helped him with his fear that he would damage his new heart.

"It is amazing to me how strong I

have gotten," he says. "You need the rehabilitation to connect your new heart with your body. Get in shape. You can't waste this gift you have been given."

Eventually, he went home with the plan to continue outpatient rehabilitation at the Center. Several months later he contracted COVID-19, which lingered for several weeks. He credits the strength he gained through the rehabilitation process for helping him through COVID.

Recently he returned from a trip to Missouri to see his first grandson, and he and his son went out for target practice.

He considers rehabilitation essential. "The rehabilitation process totally changes your mind and heart," he says. "You learn you can push through this, you can get moving, and you can get through this challenge."

*"If I didn't have rehabilitation, I would be sitting in the rocker right now just clicking channels. I wouldn't have the understanding and the drive to get up and move."*



## Getting Stronger Without Fear

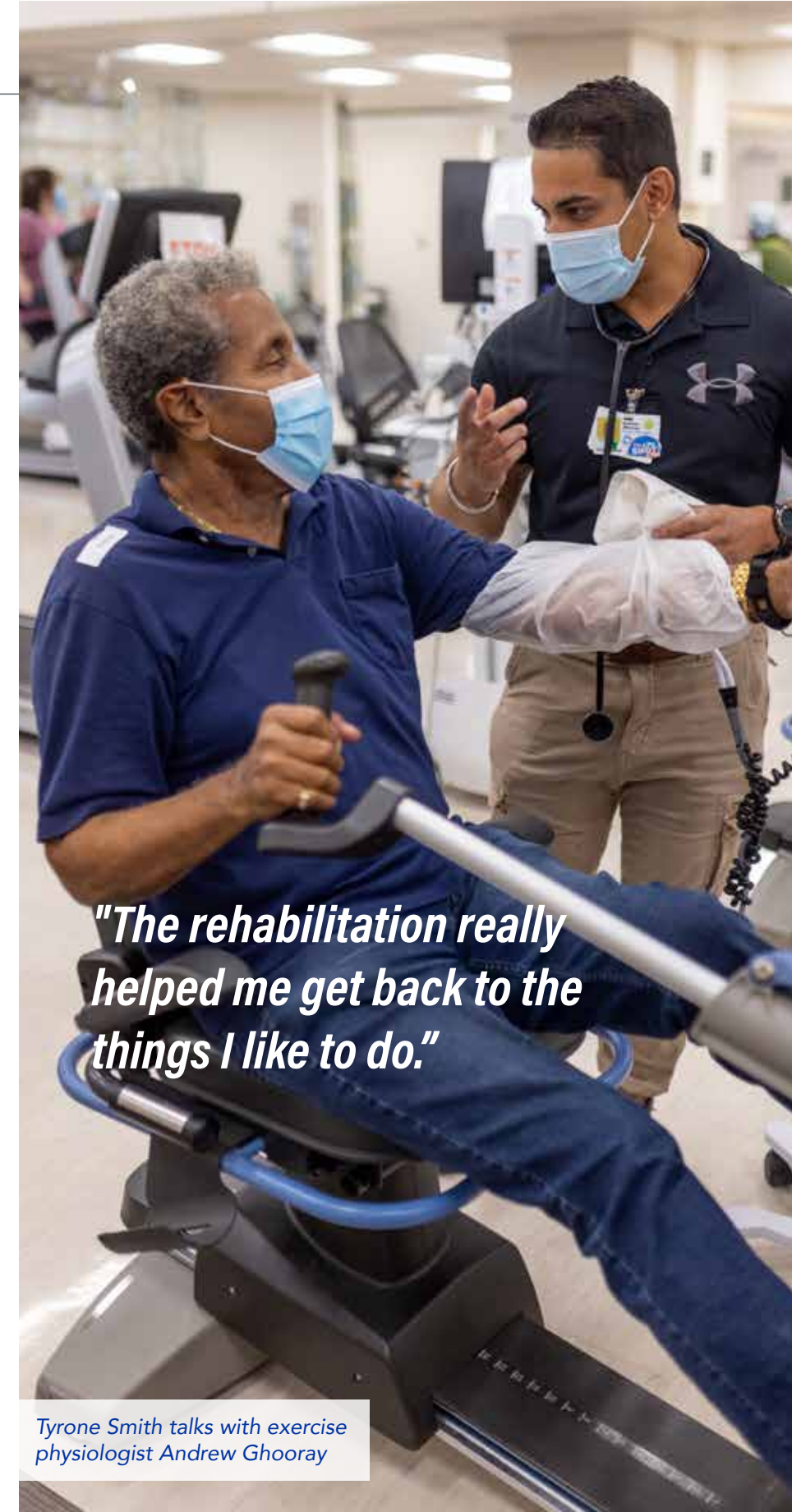
Tyrone Smith, rarely ever sick, retired after 43 years working for General Motors in various plants in New Jersey. One day he felt crushing pain and called 911 and was swiftly transported to JFK University Medical Center, where he recalls a team was waiting for him. He was diagnosed with a heart blockage and underwent surgery to open a blocked artery.

The next step was cardiac rehabilitation. He worked out on a treadmill, hand ergometer, and exercise bicycle under the direction of Andrew Ghooray, Exercise Physiologist MS, BS, who develops, monitors, and evaluates exercise programs for patients.

"You have to gauge how patients are doing every day and know when to increase the exercise," says Ghooray.

Smith, who is 78, says the team recognized a spike in his blood pressure and he was medically evaluated. It was determined that spike in blood pressure was connected to stress related to the devastating flooding from Hurricane Ida and he was appropriately treated. "Everyone worked with me and so I was not worried," he says.

Reached at home after he completed all 36 sessions, Smith, who lives in Plainfield, says he feels good and walks several miles each day, cuts his grass, and tends to his compost. He recently attended a concert and has plans to cut his hedges soon. "I am doing well and can't complain," he says. "The rehabilitation really helped me get back to the things I like to do."



*"The rehabilitation really helped me get back to the things I like to do."*

Tyrone Smith talks with exercise physiologist Andrew Ghooray

## Rehabilitation Helps Post-COVID Patient 'Live a Better Life'

After experiencing the COVID-19 virus, Patrice Dietrich of Old Bridge expected to fully recover. She was treated with antibody infusions and never admitted to the hospital. But, as the weeks went by, she still could not breathe easily or get around without extreme fatigue.

"I could not walk from here to there," Dietrich says as she points to two spots just a few feet away. A pulmonologist diagnosed her with Chronic Obstructive Pulmonary Disease (COPD), a disease she never experienced before COVID.

And, after crushing chest pain, she was also diagnosed with a clogged artery and treated with a surgical stent. Yet despite the surgery, she still could not function well. The double whammy of post-COVID pulmonary and heart conditions — her doctor called it a "superstorm" — left her unable to walk across a room without losing her breath and experiencing enormous exhaustion.

*JFK Johnson Rehabilitation Institute has created the Post-COVID Rehabilitation Program to enable patients to recover as fully as possible from the lingering effects of the novel coronavirus. The program helps post-COVID patients who have been hospitalized with serious illness as well as those who recovered at home but continue to experience symptoms, such as fatigue, muscle weakness, and respiratory and cardiac problems. Just a handful of elite rehabilitation institutes such as JFK Johnson have post-COVID rehabilitation programs.*

*To find out more, call 732-321-7000 (ext. 62134)*

Her physicians recommended she begin the program at JFK Johnson Rehabilitation Center for Cardiac and Pulmonary Rehabilitation. Dietrich began slowly and appreciated the careful guidance and monitoring. She improved her strength with each session.

The 51-year-old mother of two also benefitted from the nutritional and psychological support offered by the Center. She has successfully changed her diet and lost 40 pounds.

"In past diets, it was, 'Don't eat this, and don't eat that.' Here, the dietician (Diane Weeks, RDN, MS, CD), asked me what I like to eat, and we talked about how to make changes ... maybe adding something to offset the hunger, adding protein and less carbs," she says. "We're finding ways to reduce fat, sugar, and sodium."

Dietrich has benefitted from

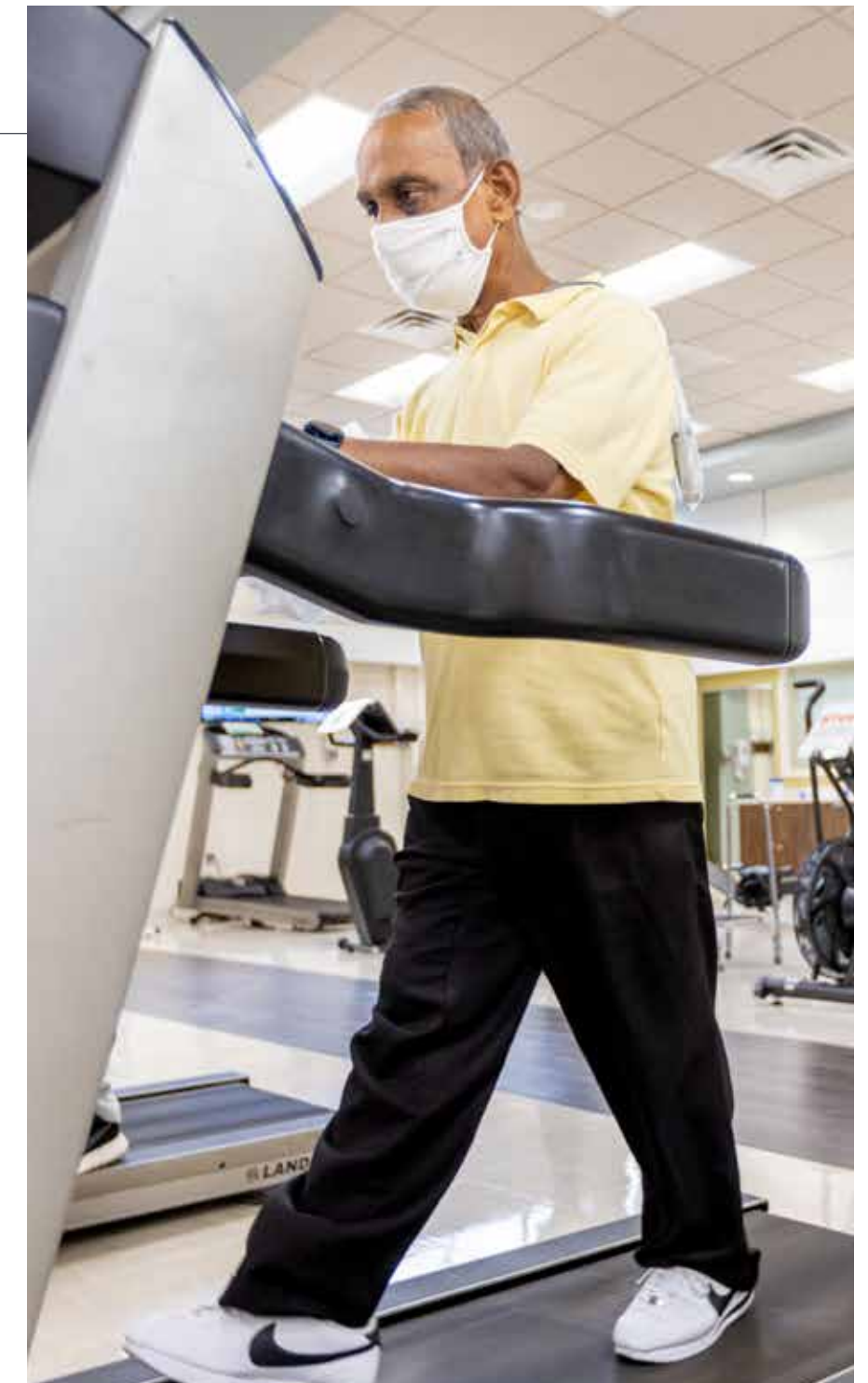
*"It's such a supportive environment here. I'm living a better life. It's my second chance"*

psychological support after a traumatic illness, and after the death of her father, who died from COVID right before she contracted the illness. She fears she may not recognize the symptoms of another serious health issue since she did not recognize the symptoms of a blocked heart artery.

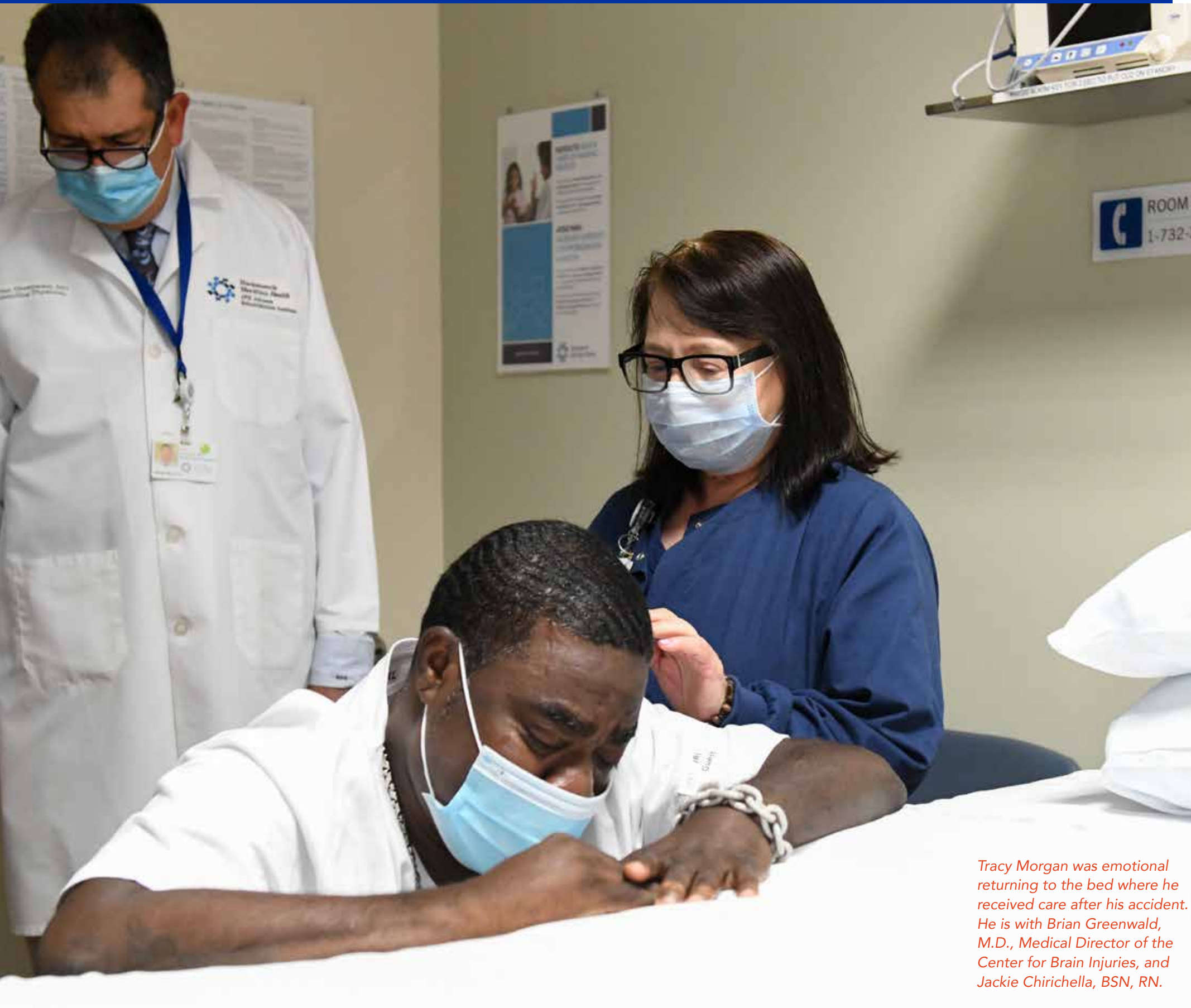
"How could I not know that? Now every twitch or pain I feel, I wonder, 'Is this the end?' " she says laughing with recognition of her sensitivity. "I was afraid to move!"

She is now walking a mile on the treadmill and completing rigorous exercises on the machines — and sees her life turning around.

"It's such a supportive environment here," she says. "They encourage you to keep getting stronger, but they don't force you to do something you can't. I am living a better life. It's my second chance." **JFK**



*SURESH PATEL pedals on his exercise machine as part of his cardiac rehabilitation following open heart surgery. "The staff here is very attentive. I am feeling good," he says as he nears the end of his 36 sessions. At home, he takes long walks and will continue his exercise with his home stationary bicycle. The 68-year-old from Union continues working part time at his Hindu temple. "This program is so valuable," he says.*



*Tracy Morgan was emotional returning to the bed where he received care after his accident. He is with Brian Greenwald, M.D., Medical Director of the Center for Brain Injuries, and Jackie Chirichella, BSN, RN.*

# WE ARE ALL MIRACLES, MAN

## Comedian Tracy Morgan Continues to Support JFK Johnson's Center For Brain Injuries and Inspire Patients Everywhere

Actor and comedian Tracy Morgan, returning to visit JFK Johnson Rehabilitation Institute last fall, knelt and prayed at the bed where he began his journey to recovery after a serious brain injury in 2014. Morgan was overcome by the experience of remembering his struggle to learn to walk, talk, and live his life after emerging from a coma.

"I didn't know if I would ever walk again. Or talk again," he told the therapists, nurses and physicians who took care of him after the accident on the New Jersey Turnpike. "You said I would get my life back. You were right. Not a day goes by that I don't think of you all. You were there for me," Morgan said. He hugged one of his nurses, Jackie Chirichella, BSN, RN, and thanked his physician, Brian Greenwald, M.D., Medical Director of the Center for Brain Injuries.

Since his injury, Morgan has continued to support the JFK Johnson Center for Brain Injuries, a federally designated Model System Site, one of only 16 in the nation, leading brain injury research. Brain-injured patients around the nation have been inspired by Morgan's recovery as he reclaimed his talents after such a profound injury and returned to the screen and stage. In his visit to JFK Johnson, Morgan met with patients and their families. He spoke one-on-one with a patient in the Center's Brain Trauma Unit and later spent time with a group of patients who also underwent brain injury rehabilitation at JFK Johnson. Some were accompanied by family members or friends.

"We've been fortunate to have some very good people taking care of us here," he told the group. "You, me ... we've been fortunate to survive. Now we must take that good fortune and go out in the world and share >>

it. Not just me because I'm on TV. We all have to share our experiences with the people who need us. You can say, 'I'm a survivor and I'm here.' You pass it on."

Morgan invited all those with brain injuries to join him for a group hug.

"It's incredible," he said. "That we are all sitting here is incredible. We all have brain injuries. ... We are all miracles, man. You have to see yourself as a miracle."

Morgan starred for seven seasons on NBC's Emmy and Golden Globe Award-winning "30 Rock." He appeared opposite Tina Fey and Alec Baldwin as "Tracy Jordan," the unpredictable star of a hit variety show. He also was a cast member for seven seasons on Saturday Night Live. He continues to tour nationwide and currently stars as Tray Barker in the TBS comedy "The Last O.G.," which he also executive produces.

**Whatever it is in your life, go for it. You got a second chance. Don't let nobody tell you that you can't. Believe in yourself because if you don't have self-confidence, you don't have nothing. You got the will to live. All of us sitting in this room today, we got a second chance."**

Morgan has said he is proud to inspire others with brain injuries. He regularly presents the "Tracy Morgan Award for Excellence in Rehabilitation Nursing" to a JFK Johnson rehabilitation nurse who exhibits the highest levels of skill and compassion in rehabilitation nursing, and he often speaks to brain-injured people who come to his live shows.

One of the patients in the gathering asked Morgan if humor helped his recovery.

"My sense of humor is one of my strengths," he said. "After my brain injury, I thank God that He didn't take



*Morgan invited all those with brain injuries to join him for a group hug, and later spoke and supported patients individually.*

my sense of humor. That was a gift that really helped me." He said he felt connected to the people at the gathering who also experienced brain injuries.

"Nobody's been through what we've been through," he said, getting choked up as he spoke. "They don't know. Other people just don't know. But we all got a second chance. All of you in the room, I love you. I love you all." **JFK**

## ■ UPDATE

### Groundbreaking Stroke-Heart Trials at JFK Johnson Show Rehabilitation Reduces Re-Hospitalizations By 22 Percent

*Comprehensive Rehabilitation Could Save \$1B in Health Costs*

The latest research from the groundbreaking Stroke-HEART™ Trials at JFK Johnson Rehabilitation Institute shows that a stroke recovery program with cardiac rehabilitation can reduce hospital readmissions by 22 percent, a finding that could lead to significant cost savings.

The study, published in the *American Journal of Physical Medicine and Rehabilitation*, builds on the ongoing Stroke-HEART™ Trials that have consistently shown the meaningful benefits of a stroke recovery program for patients in the first year after a serious stroke. JFK Johnson is now expanding the study through partnerships with major rehabilitation institutes around the nation.

The latest study reports that the cost of conventional care for stroke patients (traditional outpatient therapy and average readmissions) to the Centers for Medicare & Medicaid Services (CMS) is estimated at \$9.67 billion annually. The annual cost for these services — should the SRP be funded and provided to patients and the readmissions reduced — is estimated to be \$8.55 billion, a reduction of more than \$1 billion.

"We've shown that we can improve quality of life and function, and reduce mortality," said Sara J. Cucurullo, MD, Chairman and Medical Director of JFK Johnson and a Co-Principal Investigator of the study. "This latest part of the research now shows that we can also reduce hospital readmissions and, as a result, reduce overall health care costs."

Earlier studies that were part of the Stroke-HEART™ Trials showed that patients who completed the JFK Johnson Stroke Rehabilitation Program (SRP) were nine times less likely to die in the first year after a stroke than those who did not complete the program. The study of nearly 800 patients showed that those who completed the program improved on every measure studied: mortality, cardiac performance, and overall function.

The SRP provides cardiac rehabilitation that is modified for people who have experienced serious strokes. The program includes 36 sessions of medically monitored interval cardiovascular training — as well as follow-up visits with a Physical Medicine and Rehabilitation

physician, psychological, nutritional, and educational support, and risk factor management (such as smoking, diet and exercise). This is in addition to standard physical, occupational and speech therapy.

Dr. Cucurullo and Talya Fleming, M.D., Director of the Aftercare and Stroke Recovery Programs and Co-Principal Investigator of the study, have met with officials from the Centers for Medicare & Medicaid Innovation Center (CMS) to discuss this innovative program. The CMS officials reacted positively to the Stroke Recovery Program and requested additional research into the potential financial implications of widespread adoption of stroke recovery programs.

Currently, CMS and most insurers regularly cover cardiac rehabilitation for survivors of cardiac events, such as heart attack, but do not generally cover cardiac rehabilitation for stroke survivors — even though both events involve the vascular system.

The Stroke-HEART™ Trials have shown that patients recovering from stroke, even those who may experience hemiplegia, can exercise safely with some modifications, such as the use of recumbent bicycles.

The study looks at 800 patients with stroke serious enough for the patients to require inpatient rehabilitation. A sub-set matched 193 acute care stroke survivors. The SRP participants and nonparticipants were matched exactly for stroke type, sex, race, age, baseline functional scores and medical complexity scores.

Among those who did not participate in the program, 67 percent were readmitted to the hospital in the first year after their stroke. In contrast, 45 percent of the people who completed the program were readmitted to the hospital. Those who completed the program reduced their chances of being re-hospitalized by 22 percent.

Survivors of serious stroke are at high risk of death, rehospitalizations and disability.

"We absolutely can and must do more to help patients who survive serious stroke," Dr. Fleming said. **JFK**



# HIGHLIGHTS OF OUR SCHOLARLY ACTIVITIES

## A. CURRENT RESEARCH IN PROGRESS

1. **JFK Johnson Rehabilitation Institute Awarded Traumatic Brain Injury Model System (TBIMS)**  
Sponsored by the National Institute on Disability, Independent Living, and Rehabilitation Research, Administration for Community Living, US Department of Health and Human Services, research to meet the needs of individuals with traumatic brain injury. September 2017-2022 (5 year grant).

2. **Cuccurullo, Sara, MD, Fleming, Talya, MD, Greiss, Christine, DO, Eckert Anne, Ph.D., Scarpati, Rosann, RN, HMH-IRB, Stroke Recovery Program Clinical Outcomes Trial, Mortality, Incidence of New Strokes and Readmissions and Functional Outcomes trial.** JFK Johnson Rehabilitation Institute, Rutgers, Robert Wood Johnson Medical School, 2015 - Present

3. **Bartone, Dana, Dibling, Janice ,SLP, Cuccurullo, Sara, MD, Fleming, Talya, MD, Eckert, Anne, AuD, MBA, CCC/A, HMH-IRB , "** Functional Outcomes of Speech Language Pathology Intervention Post-Stroke" 2018 - Present

4. **Greiss, Christine, DO, Cuccurullo, Sara, MD, Fleming, Talya, MD, HMH-IRB ,Stroke Recovery Program – Changes in AMPAC Following SSRI Administration, 2018 - Present**

5. **Joki, Jaclyn, MD, Cuccurullo, Sara, MD, Fleming, Talya, MD, Rutgers-IRB, Transcatheter Aortic Valve Replacement (TAVR) versus Minimally Invasive Aortic Valve Replacement (miniAVR) and their effects on cognition and function, 2018 - Present**

6. **Joki, Jaclyn, MD, Cuccurullo, Sara, MD, Fleming, Talya, MD, Rutgers-IRB , Transitions of Care for Stroke Patients, 2018 - Present**

7. **Brown, David, DO, Pediatric Guillain Barre EMG Series Study and Phrenic Nerve EMG Study Pre and Post EMG findings after Pacer Implant, 2015 - Present**

8. **Bagay, Leslie, MD, Luke, Ofure, MD, Landolfi, Joseph, DO, Cuccurullo, Sara, MD, Fleming, Talya, MD, Porbeni, Charles, MD, HMH-IRB– Brain Tumor Rehabilitation Program Utilizing Cardiovascular training, Malignant Glioma Outcomes Trial 2019 - Present**

9. **Cuccurullo, Sara, MD, Bagay, Leslie, MD, NY/NJ COVID-19 Rehabilitation Consortium, 2020**

10. **Brown, David, DO, Continues Ongoing Phrenic Nerve EMG Study Pre and Post EMG findings after Pacer Implant, December 2019 - Present**

11. **Goldin, Yelena, PhD, Cicerone, Keith, PhD, Ongoing Research Project: "Examining Attention Networks in Non-Traumatic Acquired Brain Injury Following Computer Based Cognitive Rehabilitation"** December 2019 - Present

12. **Goldin, Yelena, PhD, Cicerone, Keith, PhD, Ongoing Research Project "Examining Attention Networks in Traumatic Brain Injury Following Computer Based Cognitive Rehabilitation"** December 2019 - Present

13. **Goldin, Yelena, PhD, Cicerone, Keith, PhD., Ongoing Research Project: "An Exploration of the Role of Exercise in Older Adults with Acquired Brain Injury"** December 2019 - Present

14. **Rossi, Roger, DO, Safety Monitor, MOH-NINDS-R15, Utilizing Gaming Mechanics to Optimize Tele Rehabilitation Adherence in Persons with Stroke, Ongoing- January/February 2020 - Present**

15. **Parikh, Sagar, MD, Cuccurullo, Sara, MD, Petrosyan, Hayk, Ph.D., Leonardi, Christopher, MD, "Physical Medicine and Rehabilitation Pain Physician as the Gate Keeper in the Comprehensive Management of Low Back Pain", December 2021 - Ongoing**

## B. TEXTBOOKS

1. **Cuccurullo, Sara, MD, Editor-in Chief, (2004) Physical Medicine and Rehabilitation Board Review, First Edition , Textbook 848 pages, Demos Publishing, N.Y., N.Y.**

2. **Cuccurullo, Sara, MD, Editor-in Chief, (2010) Physical Medicine and Rehabilitation Board Review, First Edition , Textbook 938 pages, Demos Publishing, N.Y., N.Y.**

3. **Cuccurullo, Sara, MD, Editor-in Chief, (2014) Physical Medicine and Rehabilitation Board Review, First Edition , Textbook 953 pages, Demos Publishing, N.Y., N.Y.**

3. **Cuccurullo, Sara, MD, Editor-in Chief, (2019) PM&R Board Review, Fourth Edition , 1001 pages, Demos Publishing, N.Y., N.Y.**

## C. PEER REVIEWED PUBLICATIONS

1. **Liu, Eric, MD, Salazar, Tomas, MD, Tabora, Roy, MD, Fleming, Talya, MD, Bagay, Leslie, MD, Brown, David, DO, Cuccurullo, Sara, MD, "Focal Peripheral Neuropathies Associated with COVID-19: A Case Series, American Journal of PM&R, Accepted 2021**

2. **Maltser D, Trovato E, Fusco HM, Sison CO, Ambrose AF, Herrera J, Murphy, S, Kirshblum S, Bartels, MN, Bagay, Leslie, MD, Oh-Park, M, Stein, AB, Cuccurullo, Sara, MD, Nori, P, Donovan J, Dams-O'Connor, K, Amorphanth P, Barbuto, SA, Bloom, O, Escalon, MX, "Challenges and Lessons Learned for Acute Inpatient Rehabilitation of Persons With COVID-19: Clinical Presentation, Assessment, Needs and Services Utilization", American Journal of PM&R, 2021, Dec1;100(12):1115-1123.PMID: 34793372;PMCID: PMC8594401**

3. **Cuccurullo, Sara, MD, Fleming, Talya, MD, Kostis, JB, MD, Greiss, Christine, DO, Eckert, Anne, AuD, MBA, CCC, Ray, Arlen, PT, Scarpati, Rosann, RN, Zinonos, Stavros, Ph.D, Gizzi, Martin, MD, Ph.D., Cosgrove, Nora, RN, Cabrera, Javier, Oh-Park, M., MD, Kostis, WJ, MD, Ph.D., "Impact of Modified Cardiac Rehabilitation Within a Stroke Recovery Program on All-Cause Hospital Readmissions", American Journal of PM&R, February 2021, PMID: 33657031**

4. **Allison Bean, MD, PhD, Allison Schroder, MD, Gina P.McKernon, PhD, Matthew Mesoros, Julie D. Silver, MD, Monica Verduzco-Gutierrez, MD, Sara Cuccurullo MD, Kevin Franzese, DO, "Factors Associated with Burnout in PM&R Residents in the United States", American Journal of Physical Medicine and Rehabilitation, June 2021.**

5. **Kohar, A, Tran, D, Perret, d, Chi, B, Bagay, Leslie, MD, Hata, J, Cuccurullo, Sara, MD, "Physical Medicine and Rehabilitation Milestone Evaluation Project: Development of Standardized Rotation – Specific Milestone Evaluation Tools" American Journal of PM&R, December 2020, PMID: 33278132**

6. **Silver, Julie K, Cuccurullo, Sara, MD, Ambrose, Anne Felicia, Bhatnagar, Saurabha, Bosques, Glendaliz, Fleming, Talya, MD, Frontera, Walter, Karimi, Danielle, Perret, Oh-Park, Mooyeon, , Visco, Christopher , Weiss, Lyn, Knowlton, Tiffany, "Association of Academic Physiatrists Women's Task Force Follow-up Report", American Journal of PM&R, December 2020, PMID: 33350644**

7. **Pisano,T., Joki, Jaclyn, MD, Hon. Beverly. MD, Cuccurullo, Sara, MD, "Pulmonary Embolism After Acute Spinal Cord Injury and COVID-19: A Case Report", American Journal of PM&R, November 2020, Volume 99, Issue 11, PMID 33057730**

8. **Gordon DJ, Persaud UD, Beitscher I, Brickfield L Greenwald, BD. Comprehensive community reintegration programming for persons with acquired brain injury. Professional Psychology: Research and Practice. 2021.**

9. **Moore M, Goldin Y, Patel H, Greenwald BD. Low Vitamin D Level Is Associated with Acute Deep Venous Thrombosis in Patients with Traumatic Brain Injury. Brain Sci. 2021 Jun 25.**

10. **Kolakowsky-Hayner SA, Shen J, Goldin Y, Kingsley K, Alzueta E, Arango-Lasprilla C, Perrin PB, Baker FC, Constantinadou F, Bodganova Y. The COVID-19 pandemic: age differences in sleep quality and mental health across 59 countries. *Epidemiology and Public Health Research.* 2021.**

Rabinowitz AR, Kimar R, Sima A, Venkatesan UV, Juengst S, O'Neil-Pirozzi TM,

11. **Watanabe T, Goldin Y, Hammond FM, Dreer L. Aging with traumatic brain injury: deleterious effects of injury chronicity are most pronounced in later life. *Journal of Neurotrauma.* 2021.**

12. **Novack TA, Zhang Y, Kennedy R, Rapport LJ, Watanabe T, Monden KR, Dreer LE, Bombardier C, Brunner R, Goldin Y, Marwitz J, Niemeier J. Return to driving following moderate-to-severe traumatic brain injury: a traumatic brain injury model system study. *Archives of PM&R.***

13. **Matthew R Kaufman, Thomas Bauer, Onders, Raymond, David Brown, Eric I Chang, Kristi Rossi, Andrew I Elkwood, Ethan Paulin, and Reza Jarrahy, "Treatment for Bilateral Diaphragm Pacemakers", Interactive CardioVascular and Thoracic Surgery, January 2021**

14. **Matthew R. Kaufman, Thomas Bauer, David Brown, "Surgical Treatment of Phrenic Nerve Injury", UpToDate 2020 www.uptodate.com**

15. **Aggarwal A, Bamgartner M, Lever JEP, Njoku I, Fleming TK. Response to "Promoting Diversity, Equity, and Inclusion: Building Community for Underrepresented in Medicine Graduate Medical Education Trainees". J Grad Med Educ. 2021 Jun;13(3):445-446. PMID: 34178286; PMCID: PMC8207911.**

16. **Fleming TK, Hunter TL. Letter to the Editor on "African American Patient Disparities in COVID-19 Outcomes: A Call to Action for Physiatrists to Provide Rehabilitation Care to Black Survivors". Am Journal of PM&R. 2021 May 1;100(5):439-440. PMID: 33819925.**

17. **Herrera JE, Niehaus WN, Whiteson J, Azola A, Baratta JM, Fleming TK, Kim SY, Naqvi H, Sampsel S, Silver JK, Verduzco Gutierrez M, Maley JH, Herman E, Abramoff B. Response to Letter to the Editor Regarding "Multi-Disciplinary Collaborative Consensus Guidance Statement on the Assessment and Treatment of Fatigue in Patients with Post-Acute Sequelae of SARS-CoV-2 infection (PASC). PM R. 2021 Oct 6. PMID: 34617402.**

18. **Herrera JE, Niehaus, WN, Whiteson J, Azola A, Fleming, TK, Kim SY, Naqvi, H, Silver JK, Verduzco Guterrez M, Maley, J, Herman E., Abramoff B. Multidisciplinary Collaborative Consensus Guidance Statement on the Assessment and Treatment of Fatigue in Post-Acute Sequelae of SARS-CoC-2 infection (PASC) Patients, PM&R 2021, August 4, PMID: 34346558**

19. **Njoku IO, Aggarwal A, Bamgartner, M, Lever JEP, Fleming, TK, Letter regarding "Outcomes of a COVID-19 recovery program for patients hospitalized with SARS-CoV-2 infection in NYC: A prospective cohort study" PM&R 2021 Aug 3(8):925-926. Epub 2021 July 20. PMID: 34143534**

20. **Greenwald, Brian, MD, Patel, K. Greenwald, BD, Sabini RC, Rehabilitation Outcomes with West Nile Neuro-Invasive Disease, Brain Sciences, 2021; 11 (10):1253**

21. **Se Won Lee, MD, Phuong Uyen, DO , Craig Van Dien, MD, Stephanie Lai, DO, Eric Aguila, MD, "Localization of Hand and Wrist Anatomic Structures Among PM&R Residents: Implication of Ultrasonography in Palpation Skill Verification", HCA Healthcare Journal of Medicine,**

22. **Se Won Lee, MD, Craig Van Dien, MD, Sun Jae Won, MD, PhD., "Adipose Tissue as Pain Generator in the Lower Extremity: Application in Musculoskeletal Medicine", HCA Healthcare Journal of Medicine, Volume 1, Issue 5, Article 2, 2020**

23. **Gerard Francisco, Alexander Balbert, Ganesh Bavikatte, Djamel Bensmail, Stefano Carda, Thierry Deltonbe, Nathalie Draulans, Escaldi, Steven, DO, Raphael Gross, Jorge Jacinto, Nicholas Ketchum, Franco Molteni, Susan Moraleda Perez, Michel W. O'Dell, Rajiv Reebye, Patrik Satero, Monical Verduzco-Gutierrez, Heather Walker, Jorg Wissel, "A Practical Guide to Optimizing the Benefits of Post-Stroke Spasticity Interventions with Botulinum Toxin A: An international Group Consensus. Journal of Rehabilitation Medicine (2020) doi:10.2340/16501977-2753**

24. **Waldron-Perrine B, Mudar R, Mashima P, Seagly K, Sohlberg M, Bechtold K, Paul D, Milman L, Ashman T, Pena K, Dunn R. (2021). Interprofessional collaboration and communication to facilitate implementation of cognitive rehabilitation in persons with brain injury. *Journal of Interprofessional Care, 35, 767-782***

25. **Silver, Julie, MD, Cuccurullo, Sara, MD, Weiss, Lyn, MD, Visco Christopher, MD, Oh-Park, Mooyeon, MD, Karimi, Danielle, MD, Frontera, Walter, MD, Ph.D., Fleming, Talya, MD, Bosques, Glendaliz, MD, Bhatnagar, Saurabha, MD, Ambrose, Anne Felicia, MD, Nguyen, Vu, MD, "The Vital Role of Professionalism in Physical Medicine and Rehabilitation", American Journal of PM&R April 2020, Volume 99, Issue 4, PMID 31609732**

26. **Giacino, JT, Whyte, J., Nakase-Richardson R, Katz, DI, Arciniegas, DB, Blum, S, Greenwald, Brian, MD, Hammond, FM, Pape, TB, Rosenbaum, A, Seel, RT, Weintraub, A, Yablon, S, Zafonte, RD, Zasler, N, "Minimum Competency Recommendations for Programs that Provide Rehabilitation Services for Persons with Disorders of Consciousness: A Position Statement of the American Congress of Rehabilitation Medicine and the National on Disability, Independent Living and Rehabilitation Research Traumatic Brain Injury Model Systems", Archives of PM&R, June 2020, 101 (6): 1072 – 1089**

27. **Sherer M, Katz DI, Bodien YG, Arciniegas DB, Block C, Blum S, Doiron M, Frey, K, Giacino JT, Graf M, Greenwald, Brian, MD, Hammond FM, Kalmar k, Kean J, Kraus MF, Richardson RN, Pavawalla S, Rosenbaum A, Stuss DT and Yablon, SA., "The Post-Traumatic Confusional State: A Case Definition and Diagnostic Criteria", Archives of PM&R, 2020; doi:10.1016/j.apmr.2020.06.021**

28. **Thakkar P, Greenwald, Brian, MD, Patel, P. "Rehabilitation of Adult Patients with Primary Brain Tumors: A Narrative Review". Brain Sci. 2020;10(8):E492. Published 2020 July 29**

29. **Hammond FM, Perkins SM, Corrigan J, Nakase-Richardson R, Brown, A, O'Neill-Pirozzi TM, Zasler N, Greenwald, Brian, MD, "Functional Change from 5 to 15 Years Following Traumatic Brain Injury , 2020 September 10. J Neurotrauma. 2020;doi:10.1089/neu.2020.7287**

30. **Lee, Se Won, Le, Phuong U, Van Dien, Craig, MD, Hansen, Mike, Tiu Timothy, "Evaluation of Resident Palpation Skills in Foot and Ankle Anatomic Structures Using Bedside Ultrasound, HCA Healthcare Journal of Medicine: Vol. 1: Iss 3, Article 9. (2020)**

## D. ABSTRACTS

**Association of Academic Physiatrist National Meeting February 2021**

1. **Tabora,R, MD, Chiu,E, DO, Escaldi,S, DO, Cuccurullo, S, MD, Shenouda,M, MD, "Diagnostic Tibial Nerve Block in Combination with Botulinum Toxin Injection to treat Refractory Post Traumatic Dystonia"**

2. **Tabora,R, MD, Lee,D, MD, Chiu,E , DO, DeCapua M, MD, Cuccurullo,S, MD, "COVID-19 Induced Sepsis Leads to Bilateral Sciatic Neuropathy Affecting Both Tibial and Deep Peroneal Divisions: A Case Study"**

3. **Lee,D, MD, Carson,M, MD, Urs,K, MD, Cuccurullo, S, MD, "A Rare Presentation of Brain Metastasis in Mesothelioma: A Case Study"**

4. **Lee,D, MD, Abissi,G, MD, Greenwald,B, MD, Cuccurullo,S, MD, "A Rare Occurrence of Heterotopic Ossification in an Anoxic Brain Injury: A Case Report**

5. **Lee,D, MD, Tabora,R, MD, Carson,M, MD, Urs,K, MD, Cuccurullo, S, MD, "Gadolinium-Induced Encephalopathy After Intrathecal Administration During a Spine Procedure"**

6. **Lee,D, MD, Abissi,G, MD, Greiss, C, DO, Cuccurullo,S, MD, "Hemorrhagic Cerebrovascular-Accident Associated with Prior Neurocysticercosis: A Case Report",**

7. **Lee,D, MD, Hon,B, MD, Cuccurullo,S, MD, "A Rare Case of Paraplegia Following Epidural Steroid Injection"**

8. **Lee,D, MD, Liu,E, DO, Shenouda,M, MD, Hon,B, MD, "An Atypical Neurological Deficit After Resection of a Cervical Meningioma: A Case Report"**

9. **Chiu,E, DO, Tabora,R, MD, Liu,E, DO, Brown,D, DO, Cuccurullo,S, MD, "Pediatric Chronic Inflammatory Demyelinating Polyradiculoneuropathy: A Case Report"**

10. **Chiu,E, DO, Tabora,R, MD, Liu,E, DO, Brown,D, DO, "A Rare Complication of Shoulder Surgery: A Case Report"**

11. **Chiu,E, DO, Liu,E DO, Tabora,R, MD, Brown,D, DO, Cuccurullo,S, MD, "Successful Reinnervation After Nerve Graft Repair for Unilateral Diaphragmatic Paralysis Due To Phrenic Neuropathy: A Case Report"**

12. **Babar, K, MD, Ace,J, MD, Salazar,T, MD, Cuccurullo,S, MD, Greenwald,B, MD, "The Rare Diagnosis and Management of Cortical Deafness: A Case Report",**

13. **Liu,E, DO, Chiu,E, DO, Chan,S, MD, Brown,D, DO, "A Police Officer Presenting with Worsening Weakness: A Case Report"**

14. **Liu,E, DO, Chiu,E, DO, Brown,D, DO, "Spinal Accessory Neuropathy Following a Gym Related Incident: A Case Report"**

15. **Liu,E, DO, Salazar,T, MD, Chan,S, MD, Brown,D, DO, Cuccurullo,S, MD, "Guillain Barre Syndrome During Pregnancy: A Rare Presentation of the Axonal Variant"**

16. **Liu,E, DO, Chiu,E, DO, Brown,D, DO, "An Adolescent Female Presenting with Persistent Wrist Pain: A Case Report"**

17. **Gayed,M, DO, Abissi,G, MD, Urs,K, MD, Cuccurullo,S, MD, "Occupational Hazards Delaying Recovery from COVID-19"**

18. **Gayed,M, DO, Abissi,G, MD, Shenouda,M, MD, Uustal,H, MD, Cuccurullo,S, MD, "Complications of Tendon Lengthening Surgery in Anti-NMDAR Encephalitis Related Spasticity"**

19. **Joki,J, MD, "Pulmonary Embolism after Acute Spinal Cord Injury and COVID-19: A Case Report"**

**American Academy of Physical Medicine and Rehabilitation, November 2021**

1. **Ace, J, MD, Carson,M, MD, Hon,B, MD, "How Comprehensive Diagnostics and Rehabilitation Lead Us to the Diagnosis, Creutzfeldt-Jakob Disease: A Case Report"**

2. **Lee, D, MD, Salazar,T, MD, Abissi,G, MD, Brown,D, DO, "A Rare Case of Phrenic Nerve Injury After Catheter Ablation of Atrial Fibrillation"**

3. **Fleming, T, MD, Cuccurullo,S, MD, Vendola,N, MD, Xia,H, MS, Petrosyan,H, Ph.D., "Early Clinical Implementation of Risk Factor Education and Physiatrist Follow-up in Stroke Survivors: A Feasibility Study"**

4. **Fleming, T, MD, Cuccurullo,S, MD, Vendola,N, Xia,H, MS, Giordano,R, Petrosyan,H, Ph.D., Kostis,J, Zinonos,S, Cabrera,J, Kostis,W, "Predictors of Discharge Destination from an Inpatient Rehabilitation Facility for Patients with Stroke"**

5. **Jensen, A, DO, Altonji,K, MD, Hassaballa, DO, Institution: Shirley Ryan AbilityLab, McGaw Medical Center of Northwestern University, "Use of Zolpidem for Akinetic Mustism in Left Thalamic Hemorrhagic Stroke: A Case Report"**

## E. BOOK CHAPTERS

1. **Uustal, Heikki, MD, "Amputee Care and Prosthetic Prescription" Physical Medicine and Rehabilitation Oral Board Review, Editor, R. Samuel Mayer, Second Edition, Publisher Demos Medical, Spring 2021**

2. **Greenwald, BD, Greiss, C, Gayed, M, "Initial Rehabilitation Interventions in the Acute Hospital Setting and Transitioning to the Next Level of Care", Zollman, FS, Editor. Manual of Traumatic Brain Injury : Assessment and Management, 3rd Edition, New York, NY Demos Medical Publishing: 2021 P. 231-238**

3. **Greenwald, BD, Moore, M, "Disorders of Consciousness, Zollman FS, Editor. Manual of Traumatic Brain Injury: Assessment and Management, 3rd Edition, New York, NY, Demos Medical Publishing: 2021 P. 239-249**

4. **Greenwald, Brian, MD, Goldin, Y., Anderson, JM, "Functional Assessment in Traumatic Brain Injury. In: Zasler ND, Katz DI, Zafonte RD, editors; Brain Injury Medicine; Principles and Practice, 3rd Edition New York NY, Demos Medical Publishing, 2021, P, 299-316**

5. **Greenwald, Brian, MD, Ripley, DL, "Posttraumatic Brain Injury Fatigue; Assessment and Treatment. In: Zasler ND, Katz, DI, Zafonte RD, Editors. Brain Injury Medicine: Principles and Practice. 3rd Edition New York, NY, Demos Medical Publishing: 2021, P. 613-24**

## F. NATIONAL PRESENTATIONS

1. **Cuccurullo, Sara, MD, "Contract Negotiation Lecture", Resident Wellness Subcommittee, Financial Wellness-Contracts, AAP, January 26, 2021**

2. **Cuccurullo, Sara, MD, "Contract Negotiation Lecture", Montefiore Medical Center, February 11, 2021**

3. **Cuccurullo, Sara, MD, RFPD Council Workshop, "Best Practices in the COVID-10 Era for Trainees – Chair NY-NJ Strong COVID Consortium", AAP Annual Meeting, February 2021**

4. **Cuccurullo, Sara, MD, Women in Academic Psychiatry Workshop – Career Pearls, "Contract Negotiations", and "Curriculum Vitae Review" AAP Annual Meeting, February 2021**

5. **Cuccurullo, Sara, MD, Bagay, Leslie, MD, #NY-NJ Strong COVID Consortium-Rehabilitation Through COVID-19, AAP Annual Meeting, February, 2021**

6. **Cuccurullo, Sara, MD, National Chair Council, Chair Council President Year in Review, AAP Annual Meeting, February, 2021**

7. **Greenwald, Brian, MD "The Comprehensive Rehabilitative Care of Patients from Concussion to Coma" AAP Annual Meeting, February, 2021**

8. **Greenwald, Brian, MD, "Updates in the Evaluation and Care of Patients with Disorder of Consciousness" ReMed**

Rehabilitation Center, February 17, 2021

9. **Cuccurullo, Sara, Fleming, Talya, MD, "Stroke Recovery Program-An Innovative Model for Healthcare Delivery", Vanderbilt University Medical Center, May 13, 2021**

10. **Uustal, Heikki, MD, "Complex and Interesting Prosthetic Cases", Walter Reed National Military Medical Center, May 12, 2021**

11. **Greenwald, Brian, MD, "Journey of an Acquired Brain Injury Due to Opioid Overdose: An Acute to Subacute Rehabilitation Perspective", Brain Injury Alliance of NJ Annual Seminar, May, 2021**

12. **Chen, SuAnn, MD, Fish, P, "A Progressive Shift in Traumatic Brain Injury (TBI) Populations: Unique Challenges in Treating TBI in the Elderly, Brain Injury Alliance of NJ Annual Seminar, May 2021**

13. **Uustal Heikki, MD, Prosthetics and Orthotics Course for Physicians and Surgeons, NYU-Langone Medical Center, May 4 -5, 2021**

14. **Cuccurullo, Sara, Fleming, Talya, MD, Grand Rounds, Montefiore Medical Center, The University Hospital for Albert Einstein College of Medicine, "Stroke Recovery Program – Cardiac Rehab Research for Patients with Stroke", June 8, 2021**

15. **Fleming, Talya, MD, AAPM&R National Grand Rounds-Long COVID; The Future is Now – PM&R's Role with Combating Long COVID, Rehabilitation Across the COVID Continuum, June 9, 2021**

16. **Cuccurullo, Sara, MD, Fleming, Talya, MD, JFK Medical Center 6th Annual NJ Collaborative Stroke Management, "Advances in the Stroke Recovery Program, Edison, NJ, September 24, 2021**

17. **Cuccurullo, Sara, MD, Fleming, Talya, MD, Utah Regional Stroke and Neurorehabilitation Conference, "Stroke Recovery Program, Envisioning an Innovative Healthcare Model for Stroke Survivors", October 1, 2021**

18. **Greenwald, Brian, MD, Pre- Conference for AAPMR, "Teleconference- Brain Injury Medicine Current Fellows and Future Candidates- Neurorehabilitation Career Paths: A Panel Discussion", October 15, 2021**

19. **Fleming, Talya, MD, National Center for Healthcare Research Conference, "What Does Research Teach Us About Long COVID?", November 15, 2021**

20. **Fleming, Talya, MD, Cuccurullo, Sara, MD, "Envisioning a New Healthcare Delivery Model for Stroke: Improving Transition of Care and Overall Outcomes" AAPM&R November 2021**

21. **Fleming, Talya, MD, Community Session Faculty, Exercise as Medicine – From Lab to Practice – Translating Science into Programmatic Enhancements AAPM&R November 2021**

## G. INTERNATIONAL

1. **Cuccurullo, Sara, MD, Fleming, Talya, MD, 4th World PM&R Conference, United Kingdom "Measuring the Impact of a Stroke Recovery Program Integrating Modified Cardiac Rehabilitation on All-Cause mortality, Cardiovascular Performance and Functional Performance", February 22, 2021**

## H. AWARDS

1. **Greiss, Christine, DO, "Teacher of the Year Award", June 4, 2021**

2. **Hon, Beverly, MD, The "Kathy Wong Award", June 4, 2021**

3. **Joki, Jaclyn, MD, - Rutgers-Robert Wood Johnson Volunteer Faculty Award, June 23, 2021**

4. **Leslie Bagay, MD, -Rutgers-Robert Wood Johnson Volunteer Faculty Award, June 23, 2021**

5. **Krishna Urs, MD, - Rutgers-Robert Wood Johnson Volunteer Faculty Award, June 23, 2021**

6. **Cuccurullo, Sara, MD, Fleming, Talya, MD, AAP Excellence in Research Writing Award for the article titled "Impact of Stroke Recovery Program Integrating Modified Cardiac Rehabilitation on All-Cause Mortality, Cardiovascular Performance and Functional Performance" This award recognizes the best paper published in the American Journal PM&R each year, March 2020**

7. **Hon, Beverly, MD, Bors Award for Scientific Development, June 2020**



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