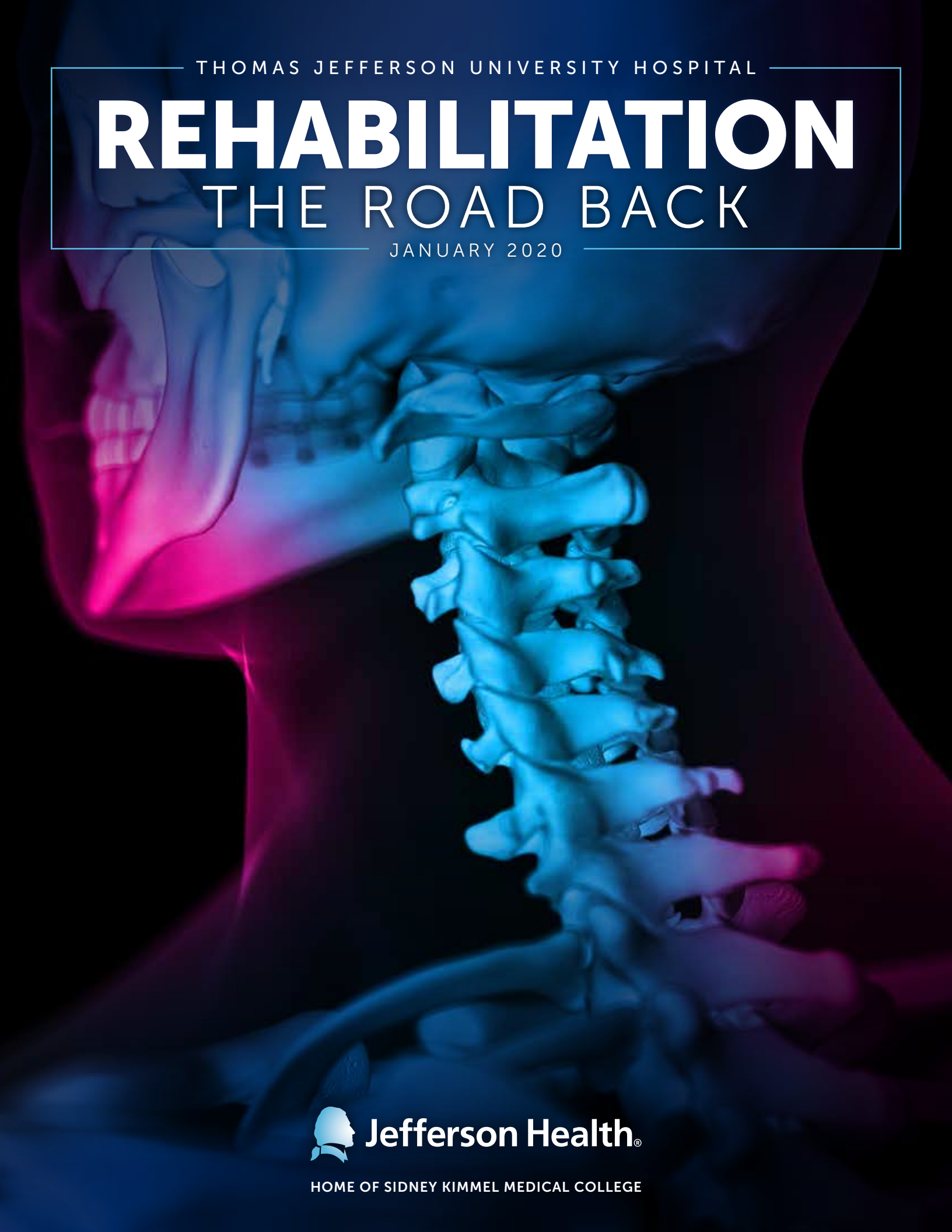
THOMAS JEFFERSON UNIVERSITY HOSPITAL

REHABILITATION

THE ROAD BACK

JANUARY 2020



Jefferson Health®

HOME OF SIDNEY KIMMEL MEDICAL COLLEGE

Welcome to Jefferson Health's Department of Rehabilitation Medicine

Every day, rehabilitation experts at Thomas Jefferson University Hospitals use leading-edge research to help patients recover from illness and injury and return to a full life. This year, we've expanded our reach globally and strengthened it locally.

This report details our relationship with the United Arab Emirates, where we're sharing our experience and expertise in musculoskeletal and pelvic floor rehabilitation. Going forward, we anticipate sending physicians and physical therapists there regularly through an ongoing collaborative with the Ministry of Health and Prevention.

Further extending international relationships, we're gearing up for the regular transfer of complex rehabilitation cases to Jefferson Health from the Panama Clinic in Panama City, which is underserved by physiatrists.

Jefferson Global Centers in Israel, India and Japan have been established, and a center in Africa is in development. These centers focus on exchange programs in clinical care, education and/or research.

On the topic of research, we're excited about our Cortimo device clinical trial and its potential. With certain neurological conditions, we may be able to use a device to retrain a patient's nervous system to restore some motor activity, when combined with intense occupational and physical therapy.

Meanwhile, we remain deeply committed to our local Philadelphia communities. For example, our physical therapy students in the Jefferson College of Rehabilitation Sciences are engaged in Project H.O.M.E., treating homeless individuals throughout the city. Uniting our global and local impact, we're providing free occupational therapy to refugees and immigrants to help them integrate more readily into their new communities.

The Thomas Jefferson University Department of Rehabilitation Medicine is proud to be "taking it global while keeping it local."

With warm regards,

Steve Williams, MD

Executive Vice President, Post-Acute and Rehabilitation Services
Jefferson Health

Jessie B. Michie Professor and Chair
Department of Rehabilitation Medicine
Sidney Kimmel Medical College at Thomas Jefferson University

Dean, Jefferson College of Rehabilitation Sciences

Jefferson therapists bring their expertise to United Arab Emirates

Jefferson Health's Department of Rehabilitation Medicine has had a very productive year establishing its global footprint. One country in which its efforts have been especially fruitful is the United Arab Emirates (UAE).

Earlier this year, the UAE's Ministry of Health and Prevention (MOHAP) contacted Philadelphia International Medicine (PIM), a collaborative among several Philadelphia healthcare institutions, to connect patients and physicians worldwide with healthcare professionals in Philadelphia. MOHAP is on a three-year mission to increase their knowledge in rehabilitation medicine. Through their Visiting Consultants Program, specialists are invited to help provide patient treatment and to consult with and instruct local providers.

PIM passed MOHAP's request along to Dr. Steve Williams, Chair of Jefferson's Department of Rehabilitation Medicine, who invited Jefferson therapists and faculty to join him and to apply to participate in the UAE program. Two Jefferson therapists were invited as visiting consultants: Brandis Johnson, a pelvic floor and lymphedema specialist and Bob Lontz, a specialist in musculoskeletal rehabilitation.

Brandis spent a week at Khorfakkan Hospital, where she worked with other physical therapists from UAE, Egypt, India and Syria, to treat and consult on patients with spinal pathology, pelvic floor dysfunction and lymphedema. She also had the opportunity to deliver two lectures on pelvic floor dysfunction and lymphedema treatment.

Bob visited Kalba Hospital, located in Sharjah, near the Arabian Sea. There, he rounded with various providers' most challenging cases, re-evaluating prior diagnoses and treatments and instructing providers in the use of evidence-based care. He also delivered a lecture on spinal treatment.

Brandis and Bob each noted significant cultural differences in the way treatment is delivered in the UAE.

"The medical culture there is one of passive treatment," notes Brandis. "Some patients are less likely to do recommended exercises or to continue their therapy at home on their own. For example, because they feel better after receiving manual treatment for lower back pain, they may assume the issue is fixed."

"Treatment is segregated based on gender," says Bob. "At Kalba Hospital, there were three female therapists and exam rooms on one side for treatment of female patients, and three male therapists and exam rooms on the other side. However, visiting consultants considered to be experts can work with providers and patients of the opposite sex, so it wasn't a roadblock to me helping people."

Dr. Williams saw 56 patients in just three days at Ras al Khaimah (RAK) Physiotherapy and Sports Medicine Center in Ras al Khaimah. He also offered bedside teaching and consultation to attending physicians. He was invited to return to the UAE in January, as was Bob Lontz.

"It was an extremely busy but tremendous experience," says Dr. Williams. "There's a great demand for neuro rehabilitation knowledge in the UAE. Going forward, Jefferson Rehabilitation Medicine looks forward to sharing our expertise further in the UAE, as well as to expanding our global footprint in other parts of the world, including Israel, India, Panama, and Japan."

How She Spent Her SUMMER VACATION

Mysterious symptoms lead to a surprise diagnosis

It wasn't exactly a dream vacation for Morgan Smith – more of a nightmare, actually!

Last June, the day before Morgan, then 27, was due to leave for Switzerland with her mother, she started feeling a "weird sensation of hypersensitivity" in her hands. That night, she was kept awake by severe pain in her right shoulder. The next day, her leg began tingling. Thinking she was well enough to get on a plane, she spent most of the overnight flight standing – because sitting was so painful.

During the next three days, Morgan's sight-seeing was disrupted by increasingly intense nerve pain and breathing difficulty. When the doctors at an emergency room in Berne couldn't offer a diagnosis and wanted to perform a lumbar puncture and MRI, Morgan opted instead to fly home to Philadelphia. Her father, who met her and her mother at the airport, immediately took her to the ER at Thomas Jefferson University Hospital.

Choosing Jefferson for accurate diagnosis and treatment was an easy decision for Morgan, who'd recently marked her two-year anniversary as a pathologist assistant in the University's Department of Pathology, Anatomy and Cell Biology laboratories. "I love working here and I trust Jefferson," she explains.

Within hours of her June 11 arrival, Jefferson doctors diagnosed Morgan with Guillain-Barré Syndrome (GBS) and admitted her to Jefferson's Medical ICU to get her stabilized. On June 24, she had to be intubated for acute respiratory failure due to GBS and was transferred to Jefferson's Neuro Intensive Care Unit. Shortly after, she underwent a tracheotomy and placement of a percutaneous endoscopic gastrostomy (PEG) tube for her nutrition, hydration and pain medications.

Moving Again

On July 22, Morgan was transferred to Jefferson's Acute Rehabilitation Unit. Morgan underwent another five weeks of care – this time, in the form of daily physical, occupational and speech therapies.

"At first, my physical therapist, Alex Moriconi [PT, DPT, NCS], had to coax me to get out of bed," recalls Morgan. "All of my muscles felt like they'd wasted away because I hadn't been using them. I wasn't strong enough to lift my arms and legs to get into a wheelchair. Fortunately, Dr. (Kristofer) Feeko checked on me and adjusted my medications each day, and my nausea and symptoms soon went away."

It took four weeks before Morgan was able to get out of bed and into a wheelchair entirely by herself, but her confidence, like her muscles, steadily grew stronger. When wheeled down to the unit's gym, Alex helped Morgan regain the ability to stand and sit by herself, raise her arms and shoulders – basic functions we take for granted. Gradually, she was able to walk with the horizontal bars, and then a walker.

"The most pivotal moment in Morgan's PT was her first uncoordinated steps in the horizontal bars with the assistance of two people," says Alex. "It was a culmination of two weeks of training by our therapy team, and made her realize that walking out of our rehab unit was a real possibility. From there, she quickly progressed from perfecting her walking pattern with our over-ground body weight supporting system to eventually walking our facility dog, Newie, without an assistive device. Her grit and continual formation of new goals made her progress so quick."

"Each day, I was able to move a little further, it felt a little easier, and I was able to do something I hadn't done the day before," says Morgan. "That totally helped me psychologically."

OT Time

"When I first met Morgan, she was so weak she was unable to do anything for herself," recalls Occupational Therapist Sara Frye, OTR/L, ATP. "We knew Morgan loved her dogs and her job at Jefferson, so we incorporated these things into our therapy. We were able to use her work instruments to complete a paper cutting project. This allowed Morgan to work on her fine motor skills while gaining confidence that she would be able to do her job again."

> "Each day, I was able to move a little further, it felt a little easier, and I was able to do something I hadn't done the day before."

"Sara was amazing," says Morgan. "We worked a lot on my arms – especially my right arm, which I could barely lift when we started. Soon, I felt strong and confident enough to lift my arms above my head so I could put my hair in a ponytail. We worked on various activities to help me regain the ability to pick up small items and also communicate more clearly with handwriting."

Eat, Drink and Feel Normal

Early on, Morgan wasn't able to eat at all, and after having been intubated for a few weeks, had great difficulty drinking and swallowing as well. Speech-language pathologist Mari Doran, MA, CCC/SLP, helped Morgan strengthen her vocal cords and tongue, gradually allowing her to regain the ability to eat normally and speak clearly.

"All of my nurses during my stay were very attentive and encouraging," added Morgan. "Every nurse was so excited and happy to hear about each milestone I was making and it was really encouraging. I felt like they were always on my side, rooting for me!"

Gaining Confidence

A week before her discharge in late August, accompanied by therapists Alex and Sara, Morgan went on a short outing to a Center City ice cream parlor for a treat.

"I don't know which I enjoyed more – the ice cream or being outside for the first time in two-and-a-half months," says Morgan.

Adds Sara, "Morgan was surprised when I suggested leaving her wheelchair behind, but she was able to walk down the block with her walker and gain confidence."

"Working with Morgan was a pleasure because of her adventurous spirit and determination. I can't wait to see what else she will accomplish in the future!"

Home Again

Morgan spent a few weeks resting and exercising at her parents' home. Just a couple of days after being discharged, she attended a close friend's wedding. "I wasn't able to dance, but it was so good to see everybody. I'm not as strong as I used to be yet, but now, I feel almost normal in terms of my ability to move."

Now back at home and at work, Morgan is grateful to her entire team for helping to restore her life and independence.

"I received great care in Jefferson's Neuro ICU and Acute Rehabilitation Unit. I can't thank the doctors, nurses and my therapists enough. They always made my care their number-one priority. I am so happy I flew home to Jefferson!"

Left to right: Morgan shortly after her admission, with physical therapist Alex on an outing; attending her friend's wedding.

A Brain-Computer Interface to Restore Arm Movement After Stroke

Thomas Jefferson University Hospital is the site of an exciting new clinical trial investigating a device to restore arm movement in a person with hemiparesis due to chronic stroke. The Cortimo device comprises a hybrid system: an implantable brain sensor and an external myoelectric powered orthotic brace. Jefferson has been granted FDA approval for this Investigational Device Exemption (IDE) trial for one participant.

According to Mijail Serruya, MD, PhD, Jefferson neurologist and principal investigator of the study, the scientific rationale for the trial is that following stroke, certain areas of the brain may continue to generate movement plans, yet these instructions cannot activate actual movement because the stroke has either disrupted the original output pathways or has caused abnormal plasticity responses.

In Dr. Serruya's clinical trial, the participant will undergo pre-operative functional neuroimaging studies to identify which areas of the brain continue to activate with imagined movement in the paretic limb. By recording neural activity directly from the areas around the stroke that retain movement planning information, it is hoped that the implantation of the brain sensor in this region, as part of the Cortimo system, can help 'retrain' the nervous system to increase residual activity in any latent pathways that could not be perceived and enhanced in any other way.

The key to making the system effective is to pair the artificial auxiliary brain-to-arm pathway with principled and personalized rehabilitation therapy. The Cortimo team has mapped out a rehabilitation strategy for therapists to deploy the unique arm movement restoration therapy. Arm and hand functional restoration therapy will capture the best outcome measures.

For the past year, the neurovascular team has been referred several hundred adults with acute stroke in the search for a possible clinical trial participant in the chronic, lifelong phase after their stroke. Until now, there has been no therapeutic options for people who have plateaued after six to 12 months of physical and occupational therapy. The Cortimo trial will investigate whether healthy parts of the brain adjacent to the stroke can be 'woken up' to restore functionally useful movement. The implanted components will be removed after several months of arm movement restoration therapy, and the team will investigate what type of functional gains may persist after the intensive brain-based rehabilitation. Information from this trial could provide future insights for better use of occupational and physical therapy for patients with chronic stroke and other neurological conditions (such as spinal cord injury, brain injury, ALS, and muscular dystrophy).

The Cortimo team is in the process of identifying a potential participant and plans are underway to begin pre-operative arm rehabilitation and for fMRI scans to be scheduled as soon as the informed consent process has been completed.

"The goal is to lay the groundwork for Jefferson Health to become an international center of excellence in neurotechnology rehabilitation," says Dr. Serruya. "Working closely with our colleagues at Magee Rehabilitation Hospital, we can make a variety of external and implanted devices for those suffering from neurological disease and injury. We can combine this technology with our world-class rehabilitation therapy strategies and evidence-based outcome tracking to one day restore our patients' use of their limbs to enhance their functional independence."

If you know a person with arm weakness due to a chronic stroke and would like to learn more about whether this person might benefit from either wearable technology or Cortimo implantable trial options, please contact Dr. Serruya at **Mijail.Serruya@jefferson.edu**.

Jefferson Launches JCRS Center for Outcomes and Measurement

Since its inception in July 2018, Jefferson College of Rehabilitation Sciences (JCRS) continues to evolve at a rapid rate. Most recently, JCRS, under the leadership of Steve Williams, MD, and Maryjane Mulcahey, PhD, OTR/L, has established a new Center for Outcomes and Measurement.

The mission of the JCRS Center for Outcomes and Measurement is to develop, validate, advocate for and utilize measurement methodologies and outcome measures that generate meaningful and precise data that advances research and practice in rehabilitation sciences. We provide consultation for and training in the selection, administration, scoring and interpretation of measures for students, faculty and sponsored clinical trials. In support of this mission, the Center has engaged faculty and clinicians from within and outside of Jefferson to conduct innovative research, offer relevant and responsive education and provide service through consultation and training.

Research Underway

JCRS already has several exciting research projects underway. Several of them address the limitations of traditional pediatric measures in relation to those for different age groups, resulting in the inability to compare scores across measures or over time.

We have also created and validated estimates to link the pediatric spinal cord injury (SCI) child- and parent-reported outcome measures to the adult spinal cord injury patient-reported outcome measure. This is the first time pediatric and adult outcome measures have been linked, allowing for assessment of outcomes across the life span using a common metric.

We are also working on a SCI clinical trial performance outcome measure. This work involves developing, standardizing and validating items to assess movement within the context of function, which is intended to result in an IRT-based SCI clinical trial outcome measure that evaluates movement unaided by compensation.

Other exciting research includes additional linking studies, studies to validate existing and new outcome measures, development and validation of fidelity-of-implementation measures, and studies that examine the outcomes of coaching persons affected by chronic conditions. We are also funded to establish normative values for the pediatric thoracolumbar spine and to bridge the measurement gap between preclinical and human research. Grants that are pending focus on outcomes of high-intensity surface cervical stimulation and intensive training for restoration of upper limb function; development and validation of a trunk motor assessment; and development and validation of neuroimaging as a biomarker for spinal cord injury.

Exciting Educational Activity

Other developments include the development of an Advanced Practice Graduate Certificate (APC) in Health Coaching in Context, which involves four, three-credit accelerated courses delivered online. The coaching APC courses are based on core coaching competencies as defined by the International Coaching Federation; principles of health coaching (behavior change); and the tenets of positive psychology. It will be open to physicians, nurses, therapists, counselors, care managers, educators and others who are interested in expanding their skill sets to work effectively with persons affected by health-related concerns.

To find out more information about our team, our current projects, educational opportunities, or to see the performance and patient reported outcome measures we have available, please visit the JCRS Center for Outcomes and Measurement website at **www.jefferson.edu/university/rehabilitation-sciences/departments/outcomes-measurement.html**.

Rehabilitation Staff and Physicians' Presentations and Publications

PRESENTATIONS

Amanda Morina, DPT, NCS, ATP, presented at the SCI Model Systems Leadership Forum in Boston, MA, Oct., 2019 on "Outcome Measures for the Trunk with Individuals with SCI."

Joe Kardine, MS, OTR/L, presented a poster at the AOTA conference in New Orleans, April, 2019, on "Vision Rehabilitation Impacting Return to Occupation After Post-Concussion Syndrome."

Brandis Johnson PT, DPT, CLT-LANA, presented at PPTA Mini CSM in March 2019. "Oncology: An Introduction to Medical Management."

David Santacroce, MS, OTR/L, and Molly Benner, MS, OTR/L, presented at the Jefferson Cerebral Vascular Update in March, 2019 on "Occupying Time: Increasing Engagement in the Acute Stroke Population"

Amanda Morina, DPT, NCS, ATP, and Katie McCoach, OTR/L, presented at the Jefferson Cerebral Vascular Update in March, 2019, on "The Role of a Facility Dog in a Comprehensive Acute Rehab Unit."

Kelly Salmon, SLPD, presented at the ASHA conference, Nov, 2019 on "Functional Swallow-Related Outcomes Following Transoral Robotic Surgery for Base of Tongue Carcinoma: A Pilot Study. (Study in conjunction with Jefferson Physician in Department of Otolaryngology-Head and Neck Surgery)

Pagnotta KD, Clines SH, Welch Bacon CE, Eason CM, Huggins RA, Van Lunen BL. "Facilitators and Influencing Factors to the Use of Athletic Trainers in Secondary Schools." Presented June 2019. National Athletic Trainers' Association Annual Meeting and Clinical Symposia. Las Vegas, NV.

Martinez JC, Pagnotta KD, Trojian T, DiStefano LJ. "ACL Injury Prevention Knowledge of Youth Sport Coaches." Presented June 2019. National Athletic Trainers' Association Annual Meeting and Clinical Symposia. Las Vegas, NV.

Clines SH, Welch Bacon CE, Eason CM, Pagnotta KD, Huggins RA, Van Lunen BL. "Athletic Directors' Perceptions Regarding the Value of Athletic Trainers Employed in the Secondary School Setting." Presented June 2019. National Athletic Trainers' Association Annual Meeting and Clinical Symposia. Las Vegas, NV.

PUBLICATIONS

Clines SH, Welch Bacon CE, Eason CM, Pagnotta KD, Huggins RA, Van Lunen BL. Athletic directors' perceptions regarding the value of employing athletic trainers in the secondary school setting. Journal of Physical Education and Sports Management. April, 2018. E-pub ahead of print

Clines SH, Welch Bacon CE, Eason CM, Pagnotta KD, Huggins RA, Van Lunen BL. Influencing factors and rationale for the use of athletic trainers in secondary school athletic programs. The Sport Journal. 2018;20. https://thesportjournal.org/article/influencing-factors-and-rationale-for-the-use-of-athletic-trainers-in-secondary-school-athletic-programs/. Accessed Dec 4, 2018.

Stearns RL, Casa DJ, DeMartini-Nolan, Huggins RA, Muñoz CX, Pagnotta KD, Volk BM, Maresh CM. Influence of cold-water immersion on recovery of elite triathletes in the ironman world championships. Journal of Science and Medicine in Sport. 2018;21(8):846-85.

Rehabilitation Staff Awards & Recognitions

Nurse Clinical Specialist, **Cathy Kennedy** maintains quintuple national nursing certifications: CRRN, ONC, CBIS, CCCTM, CRNP.

Elizabeth DiFebo achieved Multiple Sclerosis Certified Specialist (MSCS) certification through the Consortium of MS Centers.

Christine Fatale, PT achieved Board Certification for Neurologic Clinical Specialist.

Elizabeth Hearn, PT, achieved board certification for Neurological Clinical Specialist.

Kara Mahary, SLP, has achieved a five-year re-certification of her board certified specialty in Swallowing and Swallowing Disorders. She also received an ACE award from ASHA, distinguishing her commitment to lifelong learning by going above and beyond the required hours for annual education.

Amanda Morina and **Alex Moriconi** maintain Board Certification for Neurologic Clinical Specialist.

Amanda Morina recertified in LSVT and Assistive Technology Professional (ATP) .

Amanda Morina, DPT, NCS, ATP, Sara Frye, MS, OTR/L, ATP, and **Dr. Kristen Gustafson**, are members of ASIA's Rehab Standards Committee.

News

Jefferson Acute Rehab Unit received a full 3-year CARF accreditation in January, 2019 with no recommendations.

Jefferson College of Rehabilitation Sciences

SELECTED FACULTY PUBLICATIONS

Department of Occupational Therapy

DeAngelis, T., & Mollo, K, Giordano, C., Scotten, M., & Fecondo, B. (2019). Occupational therapy programming facilitates goal attainment in a community based work rehabilitation setting. Journal of Psychosocial Rehabilitation and Mental Health. DOI: https://link.springer.com/article/10.1007/s40737-018-00133-5

Grampurohit, N., Slavin, M., Ni, P., Kozin, S., Jette, A., Mulcahey, MJ. (2019) Sensitivity of the Cerebral Palsy Profile of Health and Function: Upper Extremity Domain to Change Following Musculoskeletal Surgery. Journal of Hand Surgery. 44(4), 274-87. doi: 10.1016/j.jhsa.2018.12.007

Hunter, E., & Potvin, M.-C (2019). Effectiveness of a Handwriting Curriculum in Kindergarten Classrooms. Journal of Occupational Therapy, Schools, & Early Intervention. doi: 10.1080/19411243.2019.1647813

Kern, SB, Hunter, LE, Sims, A., Alderfer, J., Andrews, M., Berzins, DR, Nelson, K. & Riekana, H. (2019). Understanding the Changing Healthcare Needs of Individuals Aging with Spinal Cord Injury. Topics in Spinal Cord Injury Rehabilitation. doi: 10.1310/sci2501-62

Marx, K.A., Scott, J.B., Piersol, C.V., & Gitlin, L.N. (2019). Tailored activities to reduce neuropsychiatric behaviors in persons with dementia: Case report. Occupational therapy interventions for people with Alzheimer's disease. American Journal of Occupational Therapy, 73, 7201390010p1-7201390010p9. http://doi:10.5014/ajot.2019.029546

Schoen, S.A., Lane, S.J, Mailloux, Z., May-Benson, T. A., Parham, L.D., Roley S.S., Schaaf, R.C. (2019). A Systematic Review of Ayers Sensory Integration Intervention for Children with Autism. Autism Research. DOI: 10.1002/aur.2046

Rehabilitation Medicine Professional Activities

PUBLICATIONS

Nethra Ankam, MD

Shah SO, Kraft J, **Ankam N**, Bu P, **Stout K, Melnyk S**, Rincon F, Athar MK. Ambulation in Patients with External Ventricular Drains: Results of a Quality Improvement Project. J Intensive Care Med. J Intensive Care Med. 2018 Jun;33(6):370-374. (This was e-published in 2016, but didn't make it to the jounal until June 2018)

Stout K, Ankam NS, Athar MK, Bu P, Dabbish NS, Leiby BE, **Melnyk S**, Shah SO, Tarkiainen A. Early Mobilization of Patients with External Ventricular Drains: Does Therapist Experience Matter?. Journal of Acute Care Physical Therapy. 2019 April; 10(2): 39-45.

Ankam NS, Bosques G, Sauter C, Stiens S, Therattil M, Williams FH, Atkins CC, Mayer RS. Competency-Based Curriculum Development to Meet the Needs of People With Disabilities: A Call to Action. Acad Med. 2019 Jun; 94(6):781-788.

Ralph J. Marino, MD, MS

Poplawski MM, Alizadeh M, Oleson CV, Fisher J, **Marino RJ**, Gorniak RJ, Leiby BE, Flanders AE. Application of Diffusion Tensor Imaging in Forecasting Neurological Injury and Recovery after Human Cervical Spinal Cord Injury. J Neurotrauma. Published Online: 17 Jun 2019 https://doi.org/10.1089/neu.2018.6092

Marino RJ, Schmidt-Read M, Chen A, Kirshblum SC, Dyson-Hudson TA, Field-Fote E, Zafonte R. Reliability of S3 pressure sensation and voluntary hip adduction/toe flexion and agreement with deep anal pressure and voluntary anal contraction in classifying persons with traumatic spinal cord injury. J Spinal Cord Med. Published online: 17 Jun 2019 https://doi.org/10.1080/10790268.2019.1628496

PRESENTATIONS

Nethra Ankam, MD

Mitchell, A., Ankam, N., Earland, T. V., Dallas, S., & Libros, S. (2018, October). Student IPE Advocacy Projects: How to Create a Curriculum. Jefferson Center for Interprofessional Practice and Education 2018 Conference: Interprofessional Care for the 21st Century. Philadelphia, PA.

Ralph J. Marino, MD, MS

Presenter: **Marino RJ**, Leff M, Cardenas D, Chen D, Kirshblum S. Trends in rates of ASIA Impairment Scale conversion in traumatic spinal cord injury. Poster Presentation at ASIA 45th Annual Scientific Meeting. Waikiki, HI; April 4, 2019.

Presenter: Solinsky R, Betancourt L, **Marino R**, Kim A, Schmidt-Read M, Schwab J, Bhandari A, Taylor J, Szlachcic Y, Sutherland L, Nash M. Stakeholder perceptions and clinical assessments of cardiometabolic disease after spinal cord injuries and disorders. Poster Presentation at ASIA 45th Annual Scientific Meeting. Waikiki, HI; April 4, 2019.

POSTERS

Nethra Ankam, MD

Ankam, N., Mitchell, A., Dallas, S., Libros, S., Earland, T.V., Collins, L.G. & Umland, E. (2018, July). Advocacy Projects in Interprofessional Education: Update on the Jefferson Health Mentors Program. Nexus Summit 2018, Minneapolis, MN.

Ankam, N., Mitchell, A., Dallas, S., Libros, S., Earland, T.V., Collins, L.G. & Umland, E. (2019, March). Advocacy Projects in Interprofessional Education. National Academies of Practice 2019 Annual Meeting & Forum, Washington, DC.

Ankam, N., Mitchell, A., Dallas, S., Libros, S., Earland, T.V., Collins, L.G. & Umland, E. (2019, April). Advocacy Projects in Interprofessional Education. Teaching Prevention 2019, Cleveland, OH.

NATIONAL POSITIONS

Nathra Ankem, MD, Medical Student Educators Council, Association of Academic Physiatrists.
Chair from 2018-2020

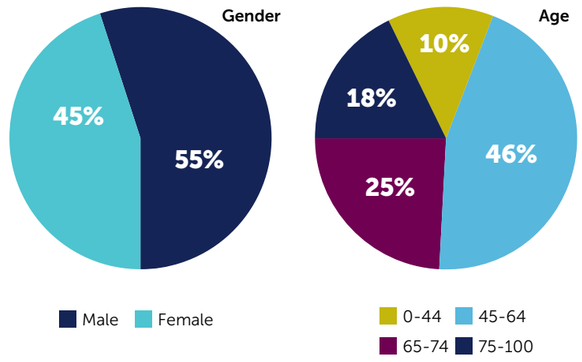
JEFFERSON ACUTE REHABILITATION UNIT

Patient Outcomes FY19

Patient Characteristics – All Diagnoses

- 447 persons served in FY19
- Average age of 62 years old
- Average length of stay 13.4 days

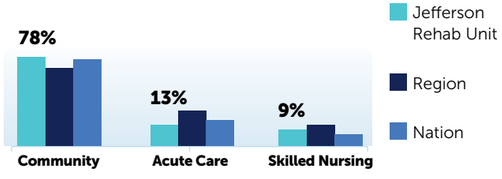
*Source: UDS Rehab Metrics Report



A major goal of our rehab program is to enable our patients to return home following rehabilitation.

*Source: UDS Rehab Metrics Report & Medtel Outcomes

Discharge Location



Patients Living in Community 80-180 Days after discharge

Patient Experience

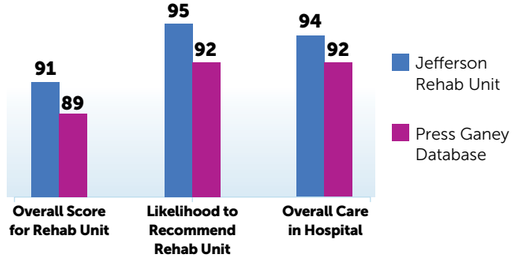
"My overall experience although challenging, was nothing less than exceptional!"

"Excellent! They kept me well informed."

"Excellent care. They made sure I knew what was expected of me and my family for my care once we were home."

*Source: Press Ganey Survey

Patient Experience Results

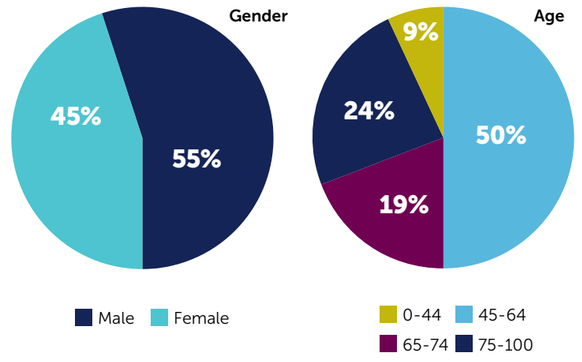


Patient Outcomes FY19-Stroke Population

Patient Characteristics – Stroke

- 124 persons served in FY19
- Average age of 64 years old
- Average length of stay 14 days

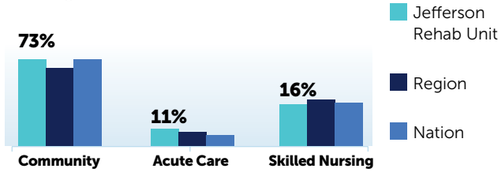
*Source: UDS Rehab Metrics Report



A major goal of our rehab program is to enable our patients to return home following rehabilitation.

*Source: UDS Rehab Metrics Report & Medtel Outcomes

Discharge Location



Patients Living in Community 80-180 Days after discharge

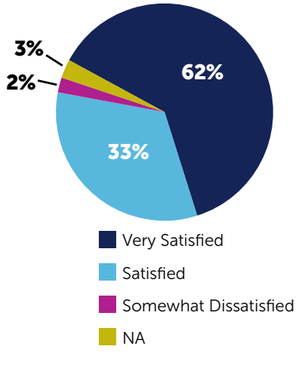
Patient Experience

- 95% of stroke patients rated their overall satisfaction with the rehab program as "very satisfied" or "satisfied."
- 84% agreed their rehab program prepared them for going home.

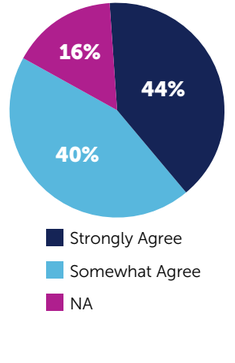
*Source: Medtel Outcomes

Patient Experience Results

Overall Satisfaction



My rehab program prepared me for going home



Jefferson Rehabilitation
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