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FALL/WINTER 2022



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BRO€KS Rehabilitation

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LETTER FROM THE PRESIDENT & CEO

Doug Baer



Doug Baer hands out medals at the finish line of the Brooks Challenge Mile, an event created to provide an option for athletes of all ages to celebrate their abilities.

Our vision is to be the leader in providing a system of world class rehabilitation solutions for those we serve. In addition to our core clinical settings, our community programs contribute greatly to our system of care and are highlighted in this issue. These programs are a differentiator for us and are life-changing for the patients and families participating. In fact, a number of families have moved to our region specifically to participate in these activities on an ongoing basis.

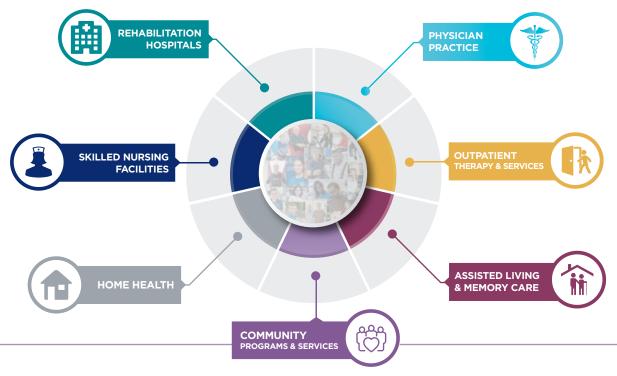
Our community programs have been developed by listening to our front line staff members who provided feedback on what services we need for patients who have suffered significant injuries and illnesses. The Brooks organization, its partners and donors invest significantly in these programs to ensure anyone can participate regardless of their ability to pay.

We will continue to enhance and grow these community programs, just as we do our clinical services, to ensure we can achieve the best outcomes for our patients and families so they can enjoy the highest quality of life possible.

Alfsh. Bay

BROOKS REHABILITATION

SYSTEM OF CARE



ADAPTIVE SPORTS & RECREATION • APHASIA CENTERS • BRAIN INJURY DAY TREATMENT PROGRAM • BRAIN INJURY CLUBHOUSE CONTRACT THERAPY SERVICES • HELEN'S HOUSE • INSTITUTE OF HIGHER LEARNING • NEURO RECOVERY CENTERS PEDIATRIC DAY TREATMENT PROGRAM FOR EARLY CHILDHOOD AND YOUTH • PEDIATRIC RECREATION • RESEARCH SCHOOL RE-ENTRY PROGRAM • SPINAL CORD INJURY DAY TREATMENT PROGRAM • SUPPORT GROUPS • WELLNESS

> "Patients are at the center of all we do at Brooks Rehabilitation. Through our coordinated system of care, not only can we provide seamless transitions for our patients between levels of care, we can also effectively treat patients in the right setting for their individual needs resulting in the best possible outcomes."

> > - Doug Baer, President & CEO



Rebecca Andrew, MD Internal Medicine



Natalya Bulaeva, MD Staff F Physiatrist

Pierre Galea, MD



Mabel Caban, MD Staff Physiatrist





Ivy Garcia, MD



Charles Dempsey, MD Medical Director, Rehabilitation Services at Bartram Crossing



Brian Higdon, MD Associate Medical Director of the Spinal Cord Injury Program, University Campus



Internal Medicine

Katelyn Jordan, OD Low Vision Optometrist and Center Manager



System Chief Medical Officer





Bianca A. Tribuzio, DO Staff Physiatrist



Jantzen Fowler, MD Internal Medicine



Cassandra List, MD Medical Director, Stroke Program and Spasticity



Management Program



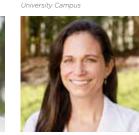
Parag Shah, MD Medical Director, Brooks Rehabilitation Hospital -Bartram Campus



Keisha Smith, MD Staff Physiatrist



Sarala Srinivasa, MD Staff Physiatrist



Kenneth Ngo, MD

Medical Director, Brooks

Rehabilitation Hospital -

Geneva Tonuzi, MD Medical Director, Spinal Cord Injury & Related Disorders Day Treatment Program. Medical Director, Cyberdyne HAL Therapy



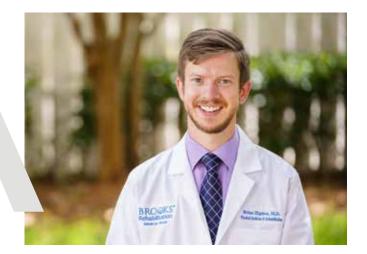
Howard Weiss, DO Medical Director, Orthopedic/Trauma Program and Amputee Program

Rehabilitation Hospitals · Skilled Nursing Facilities · Home Health · Physician Practice · Outpatient Therapy & Services · Assisted Living & Memory Care



Senior VP, Physical Medicine





Brian Higdon, MD

Brian Higdon, MD, joined Brooks in August 2021 and serves as the Associate Medical Director for Brooks' Spinal Cord Injury (SCI) program. His primary focus is the continued care of spinal cord injury outpatients, as well as developing new programs for SCI patients such as spasticity management and neurogenic bladder management. Dr. Higdon is board certified in Physical Medicine and Rehabilitation (physiatry) and Spinal Cord Injury medicine.

Dr. Higdon earned his bachelor's degree in liberal studies at Florida College and his Doctor of Medicine at the University of Illinois College of Medicine. He completed his Physical Medicine and Rehabilitation residency at the University of South Florida and a fellowship in Spinal Cord Injury Medicine at the University of Pittsburgh Medical Center.

WHAT GOT YOU INTERESTED IN MEDICINE?

When I was in high school, I really enjoyed my science coursework and also liked helping people through charity work. I was interested in going into the medical field, and I got the opportunity to shadow a rehabilitation doctor in my hometown. I saw the kind of patients who rehab doctors worked with, and the kind of relationships they develop with those patients. So, I decided to go for medicine, and then rehab medicine.

WHAT INTERESTS YOU ABOUT SCI MEDICINE SPECIFICALLY?

Spinal cord injuries affect essentially the whole body in one way or another. It affects the way people breathe, it affects their immune system, affects their skin, their bowel and bladder. It's a whole-body injury, even though it's "just" the spinal cord. So, the work of spinal cord injury medicine is a very holistic, whole-body approach. I like having the longitudinal relationship with patients, because these injuries often are permanent, and I can help them live their life more fully. Working with patients consistently helps give me a comprehensive view of how their spinal cord injury affects their whole body.

HOW DID YOU BECOME CONNECTED WITH BROOKS?

I had an attending physician who I trained under in Tampa who had worked for Brooks previously. As I researched future employers, the more I read about Brooks the more I was impressed by how many different programs and services they had available for their patients.

TELL US ABOUT YOUR OUTPATIENT WORK.

I was brought on board to grow and develop our outpatient program for people with spinal cord injuries. It's not just for the time period right after they leave the hospital, but I also want to see people years and even decades after their original injuries. I can look at problems like bone health, muscle spasticity and skin issues and see how those can be improved for the patient, because often those are things they will deal with for the rest of their lives.

ARE YOUR OUTPATIENTS ALL PREVIOUS BROOKS PATIENTS?

When I started, a lot of my patients initially had been with Brooks. But I'm seeing more patients from the community. Maybe they got their first care at Brooks, but then didn't have someone that they could see on a regular basis. With my outpatient clinical availability, I'm able to start seeing them again. Sometimes they did their rehabilitation in another city, or even in another state. When they come to Jacksonville, I start working with them.

IS THIS TYPE OF OUTPATIENT TREATMENT UNIQUE TO BROOKS?

There's really only a few places in the country that focus on their outpatient care and do regular visits. It's usually, "Come back and see me when you need to be seen." However, seeing these patients on a regular basis, you can catch problems earlier that may affect them in the future. So, good spinal cord injury longitudinal care includes a lot of preventative medicine to prevent SCI complications.

EMPLOYEE SPOTLIGHT

Celebrate the Stars and Teams 2022

ACCOUNTABILITY INNOVATION SERVICE SERVICE JANNOR TEAMWORK INTEGRITY CONTINUOUS

Each year, Brooks honors select staff members and teams of colleagues for exceptional performance above and beyond job requirements. These stars truly exemplify the Brooks Values in all they do, exceeding the expectations of coworkers, patients and families.



REHAB CHAMPION - JOSHUA SHUTTS, COTA/L

Each year, Brooks accepts nominations from employees for a former Brooks patient, participant, resident or elder who has met the challenges of physical rehabilitation and whose courage and tenacity has been a source of inspiration to others. This person was determined never to give up despite their challenges and supported others who may be facing similar trials along the way.

We are pleased to announce that this year's Rehab Champion is Joshua Shutts, COTA/L.

Josh was training to be an assistant shop foreman, and the steel cutting band saw was the last area he needed to learn. He went to line up a cut manually, hit the wrong button and his hand was pulled into the saw. Two fingers were amputated and the other two were barely hanging on. After being flown hours away for a 16-hour surgery, Josh's middle finger was amputated, his pinkie was fused and he has an artificial joint in his ring finger.

His outpatient therapy at Brooks in St. Augustine revived a desire in him to help others. With encouragement from his family and Josh Schuette, DPT, Executive Director of National Workers' Compensation at Brooks Rehabilitation, Josh made the decision to change his career and become a certified occupational therapy assistant (COTA).

When it was time to complete his field work, he was allowed to write in three options for the place he'd like to work and answered Brooks in all three. He spent two weeks working in Daytona with our Adaptive Sports and Recreation program followed by eight weeks at the Brooks Healthcare Plaza outpatient clinic. Being able to empathize with patients who were struggling with similar experiences inspired a greater passion to help others. He created a TikTok channel with tips and tricks for others with similar injuries. He also created several devices to help both his patients and others with limited hand mobility. On July 25, Josh started his dream job as a COTA for Brooks Rehabilitation Hospital – University Campus.

CELEBRATE THE TEAM WINNERS

ADVANCED CARE AT HOME

The Advanced Care at Home program is a partnership with Mayo Clinic, Medically Home and Brooks. The partnership provides hospital-level care to patients in their home allowing for earlier hospital discharges. This revolutionary way of providing care allows patients, who would otherwise be hospitalized, to be at home sooner in familiar surroundings with their loved ones. Despite the challenges of launching a new health care model into the traditional home health infrastructure, the team collaborated with its partners to better understand operational challenges and identify a better way to service patients. Today, the Brooks team continues to meet all expectations while maintaining exceptional STAR quality performance metrics - more than doubling its referrals per month since December 2021. Results are attributed to great leadership and excellent clinical staff



Members of the Advanced Care at Home Team

HELEN'S HOUSE

Our nonprofit hospitality house, Helen's House, offers affordable temporary lodging to Brooks patients and their caregivers, and has served over 1,100 individuals from all over the world since 2017. What began as a crowdsourcing idea in 2015 has now become a unique place that delivers hospitality in the same manner that Brooks founders Helen and Dr. Brooks Brown cared for others during their lives. All staff go above and beyond to personally address the needs of each guest, helping to ease their stress level, emotional endurance and ability. Customer service is at the heart of everything they do, while exercising innovation and teamwork daily to meet guests' needs. Helen's House has received exceptional satisfaction scores with an average of 9.9 satisfaction rate annually. Their patients and guests continue to rave that the Helen's House team are Brooks Stars.



Members of the Helen's House Team

DATA SOLUTIONS

This critical team supports every division and colleague across Brooks by empowering front-line clinicians and other staff members with the necessary data and analytic tools and resources to drive change. When tasked with a project, team members will research the situation to learn more about what can be done to make the project not only successful - but also phenomenal. The team strives to better understand barriers and opportunities and then, in turn, develops highly innovative solutions. Every member of the team remains professional, accommodating, courteous and supportive while embracing the philosophy of continuous learning. The accomplishments of the Data Solutions team will continue to push Brooks forward into the future of rehabilitation and will revolutionize health care. This department is the ultimate team player – and definitely Brooks Stars.



Members of the Data Solutions Team

CELEBRATE THE STARS



Cara De Lugo Inpatient and Aging Services Patient Experience Officer

Cara is definitely a Brooks Star! Previously serving as a recreation therapy coordinator, Cara has grown in her years at Brooks to now serve as a Patient Experience Officer. She can often be found working outside of normal business hours to ensure the Brooks patient, employee and guest experience is perfect. She is innovative in her role, bringing new technology and experiences to Brooks. When Cara identifies a gap in service or experience, she is quick to step in and correct it. She is also the first to give credit to fellow teammates for their work, who all look up to her as a role model. She defines what integrity means at Brooks.



Trent Harrison Institute of Higher Learning Residency and Fellowship Coordinator

As a Brooks Star, Trent is more than a scholar and a teacher. He is a lifetime mentor who deeply cares and embodies the Brooks Values throughout his work as a residency and fellowship coordinator. Trent's knowledge of the therapy profession is profound, and he is eager to share it with others. He is continuously learning and sharing ideas with the residents and fellows to stimulate high-level discussions promoting clinical reasoning and problem solving. Trent is an innovator who works exceptionally hard to better himself and those around him. His work ethic and passion have inspired and changed the lives of many patients and colleagues throughout his career.



Lisa King Aging Services Minimum Data Set (MDS) Coordinator

Lisa has been with Brooks since July 2014 and is a key member of the MDS team in our Aging Services division. She is always willing to help others - whether passing trays or answering call lights on the unit - activities outside her normal job duties. She shows compassion for everyone. Lisa recognizes how important it is to make sure the residents get the right care at the right time. She continuously goes the extra mile to review all documentation to ensure it paints an accurate picture of the patient. Lisa has spent many hours educating nursing assistant staff and her commitment to quality is seen in her assessments. She assists our skilled nursing facilities in preparing for annual surveys, and her divisionwide collaboration and guidance is commendable. She demonstrates excellence in everything, and her positive attitude, patient-centered approach and caring for her teammates makes her a Brooks Star.



Kati Sowada Outpatient • Lead Cognitive Therapist, Brain Injury Day Treatment Program

Kati is a cognitive therapist in the Brain Injury Day Treatment program who works with patients after a brain injury or stroke. Often these patients are unaware of their cognitive difficulties. Kati has a remarkable way of conveying information to patients that is relatable. She ensures patients feel heard while simultaneously making sure that the therapy and treatment team is also heard. She embodies compassion, and she is exceptional at establishing rapport. Kati is an innovative team member who strives for excellence. She is a Brooks Star for her outstanding qualities as a therapist, as a human and for her commitment to the Brooks Values.





As a member of the Corporate Projects Team, Cheyanne is instrumental in the completion of construction and development in both the Jacksonville and Orlando markets for the Outpatient division. Her compassion and accountability keeps the team on-track, and she consistently exceeds her duties, often sacrificing her own time to assist others – all with the highest level of professionalism and compassion. Colleagues are proud to work with Cheyanne saying she truly cares about her work. She's been called the glue that keeps all of our outpatient openings, moves and renovations together. She is a Brooks Star who provides topnotch service to her customers, always willing to go the extra mile to ensure their needs are met.



Roderick "Rick" Francisco Inpatient Rehabilitation, University Campus Certified Nursing Assistant

Rick joined Brooks in 2016, and from the beginning, it has been clear that Rick is the CNA you want to care for your family. He is passionate and easily builds rapport with patients and families. Where else can you find a CNA who serenades patients? He tries to ensure each patient is comfortable in his or her room or wheel chair. He provides inspiration through sketches for his patients to bring a smile to their faces. One patient took home one of his drawings, stating she will have it framed like a treasured portrait. Rick is a safe patient handling specialist, a CNA preceptor and mentor. Rick was also one of the first to volunteer to staff the COVID unit. He models the way in the delivery of excellence through integrity. Rick is a shining bright Brooks Star.



Adonioque Pennant-Doren

Home Health • Patient Care Coordinator

Adonioque has held many roles at Brooks and currently is a Home Health liaison who goes above and beyond in caring for her patients and team members. Her goal is to ensure patients have a smooth transition to Brooks Home Health. She is compassionate about her patients and always has a positive attitude. Difficult problems become learning opportunities for Adonioque, and the one-on-one service she provides makes her a Brooks Star.

LIVING ITS MISSION

Through Expanding Community Programs

The depth and breadth of Brooks Rehabilitation's community programs are unique from any other health system – rehabilitation or acute – in the country. From Adaptive Sports to the Aphasia Center to the Brain Injury Clubhouse – and much more in between – these programs provide a variety of health and wellness options that promote the physical, social and emotional well-being of those with differing abilities. Through generous partners, supporters and volunteers, Brooks removes barriers to participation by offering all our programs at little or no cost for participants of all ages and backgrounds.

Amanda Osborne, PT, MBA, is Vice President of Operations and Administrator for the Brooks Rehabilitation Hospital – University Campus. With more than 20 years at Brooks, Osborne has served as the leader for these community programs for the past 12 years.

"The really great thing about our community programs is they all started the same way, which is, they are all what I call grassroot programs," said Osborne. "They were ideas from frontline Brooks staff who saw a gap in our offerings. For example, Adaptive Sports and Recreation was the brainchild of Alice Krauss. Krauss, who at the time served as an occupational therapist at Brooks Hospital. She would help her patients as much as possible during their hospital stay, but after discharge, Alice found some patients would go home, sit on their couch, get depressed, with no exercise or social interaction. It was the start of a downward spiral. Alice went to the executive team and said, 'We, as an organization have to do better.' That's how Adaptive Sports started, and Alice has been managing the program for the past 15 years." Another example is the Brooks' Wellness Programs, which are held with local YMCAs. These were initially intended for stroke wellness. Dr. Trevor Paris, currently the Brooks system's chief medical officer, was at the time the stroke medical director for Brooks Rehabilitation Hospital – University Campus. He kept seeing patients come back with second strokes. The Wellness Programs were set up to help stroke patients continue to exercise and eat correctly. Now expanded to many neurological diseases or injuries, participants receive an assessment and a customized fitness plan, all supervised by a specialized staff.

Brooks encourages the continued brainstorming for programs with a crowdsourcing initiative. Every other year, Brooks personnel submit ideas, from which a top ten will be presented to all Brooks managers and above. They will vote on which ones they think Brooks should explore. The winners are then given seed money to research and investigate in a proofof-concept manner to see if they should go further. Brooks' highly successful Aphasia Center, one of only a few like it in the nation, and Helen's House, a hospitality house for affordable temporary lodging for Brooks patients and caregivers, both got their start through crowdsourcing.

Another unique characteristic of Brooks' community programs is that there doesn't have to be any current or prior association with Brooks to participate. And, as mentioned above, participants pay little, or usually nothing, to get involved. While this brings in large numbers of locals into the picture, it is becoming more common for families to move to the Jacksonville area so their loved ones of differing abilities can take part in the offerings.

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Whenever I'm asked, What do you like best about Brooks?' I'll say it's because of what we do in our community programs – it's where we live our Mission."

- AMANDA OSBORNE, PT, MBA

"Whenever I'm asked, 'What do you like best about Brooks?' I'll say it's because of what we do in our community programs – it's where we live our Mission," said Osborne. "Not that we don't live it in

the operations side, too. We do, every day. But it's really clear in the community program side. I think it's important for people to understand how much talent, time and money go into these programs. It's hard to know all the community programs we offer because there are so many. In my eyes, that is what truly differentiates Brooks."



BROOKS EMPLOYEES DONATE NEARLY \$150,000 ANNUALLY to provide support (DME, services, ramps, medication, etc.) to individuals with differing abilities.



BROOKS PROVIDES QUALITY OF LIFE SURVEYS to determine if a participant's quality of life is improving with involvement in Brooks-funded activities.

ADAPTIVE SPORTS AND RECREATION

- 610 participants served in Jacksonville and Daytona
- 12 unique visits per individual

Brooks Rehabilitation offers one of the most comprehensive and diverse adaptive sports and recreation programs in the country, providing fun, fitness and friendship to people of all ages living with various disabilities. Our program offers the opportunity to participate in activities that provide social connection and physical activity, the two most important elements of a healthy lifestyle. Program participants may enjoy recreational or competitive team and individual sports and recreational activities at no charge with all equipment, coaching and limited bus transportation provided by Brooks.

As a community-based health promotion program open to anyone, not just Brooks patients, it gives us an opportunity to truly serve and impact the health of our entire community. Brooks is a lifelong resource for individuals living with disability who want to maintain their physical, social and emotional health and quality of life.

"One night the Adaptive Sports and Recreation spigot opened, and has continued flooding me with more friendship, support and encouragement than I could have ever expected. Participation has helped me see things in a new way and the friends I have made helped me to return to some semblance of a social life." - Bob Kuhn

For more information, call (904) 345-7314 or visit brooksadaptivesportsandrecreation.com.

APHASIA CENTER

IN 2021:

- 60 total participants served with 36 visits per unique individual
- **11 Intensive** Comprehensive Aphasia Program (ICAP) participants

The Aphasia Center provides comprehensive support for participants affected by aphasia due to stroke, traumatic brain injury, brain tumors or other neurological disorders. One of the only aphasia centers of this kind in the U.S., it is dedicated to helping people with aphasia and their families through language and social groups, communication partner training, on-line Zoom groups and communication partner support groups. It leverages the latest research and recovery options – in both individual and group settings to provide opportunities to enrich communication skills.

The Aphasia Center offers two programs, including a community track and a six-week intensive, comprehensive aphasia program (ICAP). The Aphasia Center can help both people with aphasia and their families along their entire recovery journey - building friendships, learning and improving their communication skills and training families to help re-engage in life.

"Brooks Aphasia gave me new friends, new words and hope!" - Joy

"I love my new friends. I am talking and thinking better. So much happier. Getting better every day. The Aphasia Center really changed me." - Jose

For more information, call (904) 345-6780 or email Aphasia@BrooksRehab.org.





BRAIN INJURY CLUBHOUSE

- 50 unique individuals served
- 4 paid and 23 volunteer job placements

The Brain Injury Clubhouse provides for the long-term recovery needs of individuals who have suffered an acquired brain injury. This day program bridges the gap between medical rehabilitation, vocational training and community reintegration. It is currently the only Brain Injury Clubhouse in Florida and one of only 17 in the world.

Brooks is the only rehabilitation system of care in the U.S. that provides lifetime access to a recovery-enhancing program for individuals with a brain injury at an affordable daily rate. The Brooks Clubhouse helps individuals regain social, physical, cognitive and vocational abilities. Not only do members choose to participate in a variety of different activities, (e.g., personal fitness, yoga, aquatics, music, arts and crafts, community outings, etc.), but they also have the opportunity to manage clubhouse operations by joining one of three work units, helping them reestablish themselves in the community and, when possible, return to work.

"The Brooks Clubhouse has changed my life. Prior to coming to the Clubhouse; I was isolated, lonely, bored and depressed. The Clubhouse is the only place I feel accepted, normal and appreciated. It is my home away from home and I look forward to going there every day. It is a place I can go that provides friendship, socialization, support and meaningful productive activity. The Clubhouse has been a lifesaving blessing to me." - Dreal Holland

For more information, call (904) 674-6400.

CLINICAL RESEARCH CENTER

- 1,172 research participants in active studies
- 1,180 participant visits to the research center
- 41 active studies
- 11 new studies
- 15 completed studies
- 5 national webinars hosted
- 157 individuals involved in conducting research

The Clinical Research Center is devoted to generating new knowledge and integrating the latest research discoveries that improve patient outcomes and quality of life into clinical practice. We offer patients and other community members the opportunity to participate in innovative research studies that are focused on expanding the knowledge and science of recovery.

One of Brooks' main partnerships is with the University of Florida College of Public Health and Health Professions (UF-PHHP). Although our two organizations carried on research activities together for years, a common vision to advance clinical rehabilitation led to the creation of a formal partnership in 2013. Merging the strengths of a major academic research institution with those of a comprehensive rehabilitation system serving a large, diverse patient population is a rare, but powerful, combination; a driving force in our research today. The Collaboration to date has generated more than 100 publications and over \$11 million in grant funds.

For more information, call (904) 345-8973 or email Brooks.Research@BrooksRehab.org.

Many of our Community Programs began with an idea from frontline staff who saw an opportunity to provide an additional service to help our patients.

FEATURE ARTICLE



MOTION ANALYSIS CENTER

IN 2021:

- **210 individuals** served from 21 cities and 13 counties across Florida and Georgia
- Contributed to 9 research investigations and clinical trials, as well as two scientific papers reporting Brooks research outcomes

The Brooks Motion Analysis Center (MAC) is a specialized clinical and research assessment facility focused on walking and movement impairments in people of all ages. The expert team includes physical therapists and engineers dedicated to advancing science and recovery. Their specialized programs focus on standing and walking impairments.

The MAC combine the use of innovative technology with expert clinical examination and biomechanical analysis to quantify muscle activity, joint motions and forces during movement. The result of this process is quantitative data to guide and advance clinical care. In addition to clinical and scientific programs, the MAC also works with athletes to prevent injury and guide safe return to sport after injury.

The Brooks MAC is the only clinical and research facility of its kind in Florida, serving children and adults, dedicated to the advancement of rehabilitation.

For more information, call (904) 345-8967 or email Brooks.MAC@BrooksRehab.org.

NEURO RECOVERY CENTERS

IN 2021:

• **370 individuals served**; 263 in Jacksonville and 107 in Orange Park

The Neuro Recovery Centers (NRC) offer specialized equipment for customized rehabilitation during and after formal therapy. NRCs provide several different services including outpatient physical therapy, aquatic therapy, assistive technology and a wheelchair clinic. They also have an independent subscriber program for patients outside of insurance limitations. This allows individuals with disabilities to continue ongoing exercise and conditioning to maintain and improve functional movement and abilities.

Physical therapists work alongside exercise physiologists, personal trainers and rehab technicians to ensure quality care for outpatient therapy patients as well as community independent gym members. Incorporating advanced rehabilitation technologies into everyday treatment allows the team to have an innovative approach to every patient's care.

Beyond the innovative technologies, the culture within the NRC makes it truly unique. They are a community of patients, caregivers, family, friends and staff that support and care for one another at some of the hardest points in an ividual's life.

"I've been a patient at Brooks for eight years now. I'm a C4 quad with no movement below the shoulders. During my time at the NRC, I've gotten to know many people that I call friends, even family. The staff has taken the time to go out of their way to make sure I have everything I need. I don't know what I would've done in the past eight years without the friendship, family and service of the Brooks NRC. I am forever grateful." - Chad Smith

For more information call (904) 345-6812 or email NRC@BrooksRehab.org.



PEDIATRIC RECREATION

IN 2021:

- 274 individuals served
- Developed and implemented 2 new programs

Pediatric Recreation is a free program that provides a safe and supportive environment for youth with physical and/or developmental disabilities so they can engage in recreational activities with their peers. It offers both sport and recreation programs year round, focusing on social connection, family empowerment and community integration.

The Pediatric Recreation Program offers play, sport and recreation activities specifically designed with children/ youth in mind. Activities are available at various times of the day/week to complement a child's schedule. Families are encouraged to participate alongside their child in a variety of weekly classes, monthly activities and family friendly special events. All activities are provided free of charge to children and their families, to promote access to services and encourage participation.

The Brooks Pediatric Recreation Program serves any child, from birth to 17 years old, with any type of limitation/disability (physical, developmental, cognitive, sensory, and social).

"As a family we are so thankful that our son has the opportunity to play a sport on an even playing field. He absolutely loves ice hockey and his amazing coach. He has learned so much about the sport and always counts down the days for the new season to start." – The Alvarez Family

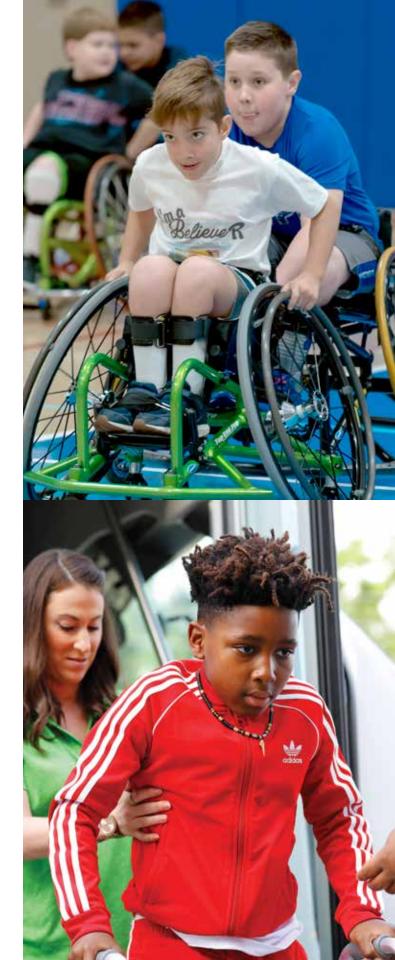
For more information, call (904) 345-7501 or email PediatricRecreation@BrooksRehab.org.

SCHOOL RE-ENTRY PROGRAM

• **124 individuals served** (66 inpatient and 58 outpatient) from **39 different** school districts

Brooks believes a child's education is an integral part of their rehabilitation. With this in mind, for more than 30 years, the Brooks School Re-entry Program (BSRP) has provided a continuum of school transition and support services to assist families throughout a child's educational journey. BSRP serves individuals from birth through college from any Brooks division or location.

The team of school re-entry specialists serve as liaisons, working closely and tirelessly with the patient, family, school and medical team to ensure the best possible educational outcome for each individual. Whether referring a toddler for early intervention services, helping a college student obtain accommodations, or anything in between, BSRP provides a customized approach to each patient.



FEATURE ARTICLE

More than 3,000 individuals participate in our Community Programs each year at little to no cost to them.

BSRP services are completely free and available to patients at any point in their educational journey. This means that weeks, months or even years down the road, families can contact BSRP if they need assistance.

"Yesterday, C. signed up for school with Hospital Homebound. After the accident, C. was unsure of what life would look like for him. After speaking with you (BSRP) and the public schools, C. now is full of hope and excitement to be a senior this year. This program is structured to his needs. This was needed and very helpful. C. and I are truly thankful. Thank you for your help." - Parent of Brooks patient

For more information, call (904) 345-7218 or email Schoolreentry@BrooksRehab.org.

WELLNESS

IN 2021:

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- **254 individuals served**; 200 Jacksonville and 54 in Daytona
- 12,800 total visits; 10,000 Jacksonville and 2,800 in Daytona

Experts from Brooks Rehabilitation have teamed up with local YMCAs of Florida to offer an individualized and

supervised exercise program for Stroke and Brain Injury survivors, as well as those battling Parkinson's disease and Multiple Sclerosis. The Adaptive Community Wellness Programs allow participants to stay active and continue to improve their health after completing formal physical therapy. The program also fosters a social support system between participants who understand the challenges faced with a neurological diagnosis.

Following an initial evaluation with a Brooks physical therapist at the closest outpatient location, an individualized and adaptive exercise program will be developed for each participant. During the initial orientation, the participant and staff will create personal goals that can be achieved through exercise. Programs are hosted at a local YMCA and supervised by specialized staff that understands the unique challenges of a life-altering disease or injury.

"The Wellness Program has been such a great help to me. When asked how I got so strong after my injury, I always attribute it to the great care Brooks has provided and the continuous support in this program. The staff here help me immensely. I also love the small group classes, especially balance and boxing." – Mike Uzunov

For more information, call: (904) 451-3580 or e-mail • AdaptiveWellness@BrooksRehab.org.

TECHNOLOGY HIGHLIGHT

Virtual Reality Driving Real World Results

The patient finds himself holding two small bats, one in each hand. One bat is blue, the other red. He's facing a small cannon – like a batting machine – and he hears it winding up for the pitch. Out comes a ball – this time it's blue, so he has to hit it with the blue bat. Pitch after pitch comes, red or blue, testing the patient's ability to react and reach, as well as his range of motion. Is this happening in some sandlot outside?

No – the patient is comfortably inside, wearing a virtual reality (VR) headset, all under the watchful eye of his therapist, who is controlling, monitoring and measuring everything from a tablet. VR is the next big thing in rehabilitation, and Brooks is at the forefront.

Leading the way for Brooks is Jeffery Porter, PTA, Coordinator of Education at Halifax Health | Brooks Rehabilitation Center for Inpatient Rehabilitation in Daytona Beach, Fla. A self-described "kind of a big nerd," Porter has a background in technology that stretches back to developing his own online video games as a kid. It was during a 2019 residency in Brooks' Home Health division that he came up with the idea for an emergency button for the home patients - and Brooks Belle, the push-button access to help, was born. Since then, Porter has been working with Bob McIver, PT, DPT, NCS, director of Brooks Clinical Technology and Wellness Programming.

"The purpose of virtual reality is that we can create things that are non-existent, and we can have tons of repetition, which is all part of neuroplasticity (*the brain's ability to modify in response to*



Progession with Visual tracking

Fully customizable treatment sessions

Areas of focus The game will provide you with data that will allow you see and select areas of deficits to focus on

> Area of musication - 52% success Area of focus - 50% success Area of focus - 50% success Area of ease - 275% success

Real-time movement tracking experience). I can have that patient focus on one thing 1,000 times," said Porter. "In virtual reality, you have thousands of reps, and you get to see where you're missing and where you're successful, and you see progress in the virtual world because it's all mapped out."

Porter develops new VR applications in conjunction with Veera Engineers, a Dayton, Ohio-based firm of engineers, artists, and programmers with the mission to "build people, create value and enrich lives through engineering consulting with modern technology." Brooks uses Oculus Quest 2 headsets from Reality Labs, a business of Meta Platforms (formerly Facebook), with the Brooks therapist controlling the Veera-developed software on Android devices.

Porter even goes into virtual reality himself to meet with Veera Engineers, where he'll explain the next new "game" he's looking for, draw it in 3D, discuss expectations and exactly what the engineers will need from him to create the product. For example, early on Porter had to explain range of motion and range of motion zones. But once all the prep work is done, Veera can create a brand-new application in a matter of weeks, depending on their capacity.

Porter said, "Eventually, we'll be catching baseballs, or we'll be blocking soccer balls, or doing something that considers all the fundamentals, such as the GH, the Glenohumeral range of motion. We can track that. So, if a patient is successful hitting this way, but not successful hitting a different way, we're tracking that, so that way we can challenge them. And we're using AI (artificial intelligence) to dynamically challenge a patient to reach in areas they may not be able to do now; or are fearful of trying or even they currently can't see. There's no limit to VR. We can help train their vision. We can work on cardiovascular and train their endurance. We can train a little bit of everything."

There are currently four Brooks sites with VR capabilities – including with Porter at Halifax Health | Brooks Rehabilitation and the Neuro Recovery Center (NRC) at Brooks Rehabilitation Hospital - University Campus. Each of the four locations has teams working to create VR applications with Veera, based off of the needs for the patients.

Even patients provide feedback and recommendations, like a driving simulator. Going forward, Brooks and Veera will look to expand the number of applications and create a more high-quality product. Porter says the ultimate goal is to have VR capabilities at all outpatient clinics, connecting them all into a Brooks mini-metaverse.

Dorian Rose, PT, PhD

A Leader in Neuro Rehabilitation Research

Dorian Rose, PT, PhD, is a physical therapist, Brooks clinical research scientist, a Research Health Scientist at the Malcom Randall VA Medical Center and an Associate Professor in the Department of Physical Therapy in the College of Public Health & Health Professions (PHHP) at the University of Florida (UF) in Gainesville. Though she holds many titles, one thing is for certain: she is a world-class expert in her field and a nationally recognized, award-winning researcher whose contributions to neuro rehabilitation are far-reaching.

Brooks Rehabilitation has the good fortune of having Dr. Rose as a member of the Brooks/UF-PHHP Research Collaboration, a formal research partnership between Brooks and UF. Her long-standing relationship with Brooks extends back to 2005, when she served as Site Principal Investigator for Brooks in the national, multi-site Locomotor Experience Applied Post-Stroke (LEAPS) clinical trial. One of the largest stroke rehabilitation studies ever conducted in the U.S., LEAPS compared whether individuals would achieve increased gains in their walking ability post-stroke through an innovative walking training program compared to a standard physical therapy approach focused on strengthening and balance, delivered in the home.

Since then, Dr. Rose continues to build an impressive portfolio resulting in multi-million-dollar research studies, receiving national recognition and awards from the American Physical Therapy Association (APTA) and several publications in peer-reviewed journals. Brooks Beyond magazine had the opportunity to talk with Dr. Rose:

WHAT ARE SOME UPDATES YOU CAN GIVE US AROUND YOUR MOST RECENT RESEARCH?

We've been studying backward walking for about eight years and learning more about the role it can play in recovery, but there are always additional questions to explore - we keep peeling the onion. In a previous study, we examined the effectiveness of a novel Backward Walking Training Program to improve walking speed and balance in acute and chronic stroke. Results from the study showed that the program sustained better improvements in walking speed and balance confidence compared to a standard balance training program. A new area of inquiry for our research team is to examine what changes are occurring in the brain as a result of our innovative walking training programs. As a physical therapist, I believe that performing challenging tasks, and learning new motor skills can indeed change pathways in our brain. In our newest study, we are using function Magnetic Resonance Imagining (fMRI) to study the brains of our post-stroke patients and asking two questions. One, prior



"Our quality of care doesn't come from something we read about in a book that was published 10 years ago. Our care is informed by research that's currently being conducted in-house."



to implementing our backward walking study intervention, what does their brain activity look like and is that predictive of how someone will respond? And the second question is, after completing the backward walking training program, will we see changes in the brain that are related to changes in walking and balance ability?

Another area we are now studying is looking not only at patients' post-stroke motion and mobility, but looking at their overall cardiovascular and respiratory health – and can we make a difference there? Having good respiratory and cardiovascular health can help prevent a second stroke and rehospitalizations. Years ago, we said stroke was a disease of the elderly. But sadly, the average age someone has a stroke is now lower.

Now we see individuals with stroke in their thirties, forties, fifties, and they hopefully will have another 30, 40, or 50 years to live. If someone with a stroke is living another 40 years, even though they might not have perfect knee or ankle motion when they walk, we want to promote healthy heart and lungs. So, a study that we are currently conducting at the Brooks Family YMCA in Jacksonville is looking at whether we can make positive changes in respiratory and cardiovascular health. The primary motivator is this line of inquiry is keeping people healthy in the presence of disability.

WHAT DOES IT MEAN TO HAVE THIS TYPE OF RESEARCH RELATIONSHIP WITH BROOKS? HOW DOES IT HELP DRIVE YOUR WORK?

I'm a physical therapist by trade. I worked in a large rehab center in Southwestern Pennsylvania in my scrubs or polo shirts and chinos for many years. When I go to Brooks, it's like coming home to me. I love that atmosphere.

Often researchers are accused of working in the "ivory tower" - you don't know what's going on in the real world. Maybe you got a \$100,000 worth of funding, but your research question doesn't have anything to do with my 10 o'clock patient. What does it mean if I use expensive equipment or do fancy tests that maybe a scientist would be interested in, but there's no clinical relationship? As researchers, having a strong relationship with Brooks really keeps us grounded. I need to make sure that the questions that I might ask, or the grants that I might write, have a clinical component to them. My goal is to always design questions that can impact the care we provide our patients at Brooks. That has to always be in the forefront of my mind.

Another huge benefit is that we have the opportunity to learn from the Brooks clinicians who are seeing and treating patients every single day. It's where the notion of backward walking post-stroke originated, for example. Hearing their concerns or the challenges their patients are struggling with motivates my ideas. I need to make sure I'm always bringing it back to the patient. That's what's critical.

WHAT DOES IT MEAN FOR A HEALTH SYSTEM LIKE BROOKS TO HAVE THIS VIBRANT RESEARCH COMPONENT, AS OPPOSED TO OTHER HEALTH SYSTEMS?

It's a win, win – a symbiotic relationship in which the one elevates the other. Healthcare itself is more and more competitive in terms of having patients come in. Brooks can say, "Our quality of care doesn't come from something we read about in a book that was published 10 years ago. Our care is informed by research that's currently being conducted in-house."

So, while this relationship elevates my research, it is even more important that patient care is elevated at Brooks. I want therapists to know they have access to me and I'm happy to consult with patients.

Brooks' value in innovation is apparent at every level of the organization. I have clinicians and people with inquisitive minds who are interested in asking me things like, "So, you wrote this article, can we talk about what it means for this patient of mine?" It's our vision at Brooks Research to transform rehabilitation through innovations in science, technology and care. We love seeing clinicians be forward thinking and elevating their practice, and each other, through ongoing discussions of current research and evidence-based practice.

INSTITUTE OF HIGHER LEARNING IHL Nurse Education Leader

New Nurses Receive Top Training with Transition to Practice Program



"My priority is to define and streamline what it means to be in nursing education and what we're providing."



Brooks continues to build on the world-class continuing education programs it provides to our clinical staff through the Brooks Institute of Higher Learning (IHL).

Now, the IHL has turned its attention to Brooks' new nurses residency program, revamped as the "Transition to Practice Nursing Program." The program is run by Pamela Lambert, MSN, MBA, RN, CHSE, IHL's nursing education and professional development leader. "My priority is to define and streamline what it means to be in nursing education and what we're providing," said Lambert. "The mission is to give nurses who are graduating, or just graduated and passing their licensure exam, a six-month transition to practice. They're transitioning from an academic setting as a student nurse to a setting where suddenly our patients depend on them. That's a lot of pressure. My goal is to deliver world-class, individualized education and holistic support. Newly licensed nurses are diverse in their needs, we want to make sure we're elevating them so that they can elevate our patients."

Lambert is structuring the residency program to follow the Brooks Interdisciplinary Practice Model. This systemwide model puts patients and families at the center of the principles of clinical knowledge; practice environment and workplace; interdisciplinary teams; and outcomes and quality; all tied together by compassion, caring, service, and teamwork. The residency will be a structured, immersive learning and mentoring experience in which high-level experts discuss clinical observations, link scenarios to current practices, present case studies, and use simulation to help the new nurses build their knowledge and skills in a dedicated, safe learning environment.

"Brooks is a 'Magnet' hospital, which is a designation and national recognition for nursing excellence from the American Nurses Credentialing Center (ANCC)," said Lambert. "We're modeling our residency program to meet the high standards of the ANCC's Practice Transition Accreditation Program (PTAP), which sets the global standard for residency or fellowship programs that transition nurses into new practice settings. When our residency becomes eligible for consideration, I'm confident we'll qualify."

Robert Rowe, PT, DPT, DMT, MHS, FAAOMPT, is the Executive Director of the Brooks Institute of Higher Learning. Dr. Rowe points out how this residency program will become another differentiator for Brooks. "This was an important evolutionary step for us within the IHL, in that we've previously focused on our therapists. We know that nursing is important and valuable, and we wanted to go into this new direction for nursing via the residency. Brooks is viewed now in the therapy world as a pinnacle – as one of the best post professional educational healthcare programs in the country. We want to do that for nursing, and expand into other disciplines with that as well. Ultimately, it's going to be what provides the best value and benefit to our patients." Learn more about the program at BrooksIHL.org, under Residency & Fellowship.



Transition to Safe, Competent, Compassionate Clinical Nursing Practice



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COMMUNITY HIGHLIGHT

Orlando Expansion



Outpatient Clinic Growth Continues in Central Florida

As part of our continued growth and community commitment to Orlando and Central Florida, Brooks Rehabilitation plans on building both new and expanded outpatient clinics in the area over the next two years. Brooks had five locations in the Orlando area in January 2022, and we anticipate growing to 11 clinics there by January 2023. Brooks is also exploring sub-markets of Orlando for future growth. With these clinics, Brooks is addressing local patients' need for immediate access to quality outpatient rehabilitation services for physical therapy (PT), occupational therapy (OT) and speech therapy (SLP).

The newest location, a 5,000-sq.-ft facility in Clermont, opened on Sept. 1. Brooks also anticipates opening locations in Winter Park, Kissimmee and Ocoee by January 2023. In addition, Brooks has outgrown its existing Oviedo location and relocated from its 2,000 sq. ft. space to a 5,000 sq. ft. facility – expanding its current PT services while adding OT and SLP.

"There is a tremendous need in the Central Florida market for quality outpatient rehabilitation services," said Tom Langer, PT, CSCS, Brooks Rehabilitation outpatient regional director, Orlando. "With our added locations and expansion, Brooks will fill that demand for physical, occupational and speech therapy services performed by the highest-level licensed



"With our added locations and expansion, Brooks will fill that demand for physical, occupational and speech therapy services performed by the highest-level licensed clinicians and therapists. We're also bringing our advanced technologies, such as Cyberdyne and Smart Glove."

- Tom Langer, PT, CSCS

clinicians and therapists. We're also bringing our advanced technologies, such as Cyberdyne and Smart Glove."

In Orlando, Brooks supports a variety of organizations and initiatives through active participation or sponsorships, including Special Olympics Florida, NEXTStep Orlando, Alzheimer's Association - Greater Orlando, American Heart Association - Greater Orlando, Johnny's House BabyDJ Foundation, McCormick Research Institute and the Winter Park Sidewalk Art Festival.

Carlos Rojas Garcia

Carlos Rojas Garcia was working in construction when he fell nine feet off a roof. He was taken immediately to Memorial Hospital for acute care then transferred to Brooks Rehabilitation Hospital – University Campus for intensive spinal cord injury rehabilitation under the supervision of Howard Weiss, DO.

Carlos broke his back at T 5-6 so his two months of inpatient care consisted of learning how to care for himself when he couldn't feel or move from the chest down. His nurses and therapists also provided training for Carlos' wife, Lilly, to help her care for him when he returned home.

Carlos had to wear a back brace for a year after his injury per guidance from his workers compensation physician. While limited in what he could do in a brace, he was still attending outpatient therapy with Brooks at their Healthcare Plaza clinic to learn how to be independent again with basic skills. He also attended the independent program at the Neuro Recovery Center to use standing frame and functional electrical stimulation (FES) bike to promote neurological recovery and cardiovascular strength/endurance.

"Carlos has always been motivated, is a hard worker, and is always open to new challenges presented to him in physical therapy. He is always seeking out ways he can be physically active and strives to reach his goals," said Riddhi Patel, PT, DPT, at Brooks Healthcare Plaza outpatient clinic.

Once his brace came off, he attended the Spinal Cord Injury and Related Disorders Day (SCI/D) Treatment program. This specialized outpatient therapy program is overseen by a medical director and the interdisciplinary team includes a physical therapist, occupational therapist, speech therapist, psychologist and a nurse case manager, all with specialized training in spinal cord injuries. Fourteen months after his accident, he now had to learn how to move without the support of his brace, as well as the more advanced skills like getting off the floor, walking with braces and a walker and learning to do personal care independently. At the end of 12 weeks in the SCI/D Day program, Carlos met most of his goals of being independent again. He was even able to transfer to the riding lawn mower to cut his own lawn.

"Being in these programs really helped me to feel like I'm not alone. There are other people in the same situation as I am, so I feel normal here," said Carlos.

Carlos was also introduced to the Brooks Adaptive Sports and Recreation Program. Brooks Rehabilitation offers one of the most comprehensive and diverse adaptive sports and recreation programs in the country, providing fun and fitness for people of all ages living with various disabilities. Our program offers the opportunity to participate in activities that provide social connection and physical "There are other people in the same situation as I am, so I feel normal here."



activity, the two most important elements of a healthy lifestyle. Program participants may enjoy recreational or competitive team and individual sports and recreational activities at no charge.

Carlos enjoys bowling because his wife and two daughters join him. He's also tried fishing and golf, which he hopes to return to once the heat of the summer has subsided. His favorite activity is handcycling though because he "can be out in nature and enjoying the outdoors."

On any weekday, you can find Carlos at Brooks, continuing his recovery in the NRC. Carlos and Lilly also recently signed on to be mentors to others in similar situations, helping them understand they aren't alone either.



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