TIRR MEMORIAL HERMANN

JOURNAL

THE INSTITUTE FOR REHABILITATION AND RESEARCH

FALL 2010

IN THIS ISSUE

Mobility for Kids: TIRR Memorial Hermann Expands Lokomat Therapy to Its Pediatric Program

When Houstonians Nancy and Raymond Risk found that pediatric Lokomat® walking therapy improved their son Noah's strength and mobility, they set a goal of raising funds to purchase the kid-size "legs" that would

allow children to use TIRR Memorial Hermann's adult Lokomat. Now, children across the state are benefiting from the Risks' determination to make the therapy available in Texas.

Fundraising is second nature to Nancy Risk, who is a longstanding member of a local organization called the Wednesday Charity Club, a group of women of Lebanese Christian heritage who have raised money since the 1950s for charitable causes. "Several of the women in the club have spouses or loved ones who have been helped by TIRR's rehabilitation programs," Risk says. "When we brought the idea of raising money for the pediatric legs to our group, they said, 'We've never taken on a project that large.' But when people learned what we were trying to accomplish, they came out of the woodwork to help."

Between November 2009 and the end of March 2010, 105 donors contributed $88,000 to the Memorial Hermann Foundation for the purchase of the pediatric Lokomat legs. "The vast majority of those who contributed were new donors to TIRR," says **Thom Sloan**, senior director of development at the Foundation. "We're grateful to each of them and especially to the Broughton Foundation, which contributed $20,000 to the cause, and TIRR Foundation for their generous gift of $7,500."

The pediatric legs arrived at TIRR Memorial Hermann Kirby Glen in June, and a training session was held on July 10 during a special luncheon honoring the Wednesday Charity Club and other donors who made the purchase of the Lokomat pediatric module possible. Noah Risk was one of three children who demonstrated the equipment at the luncheon.

The Lokomat is the world's first driven-gait orthosis. Designed to benefit patients with neurological movement disorders, the system consists of the robotic gait orthosis itself and the Levi body-weight support system used in combination with a treadmill. The patient's legs are guided on the treadmill according to a preprogrammed physiological gait

Mobility continues on page 4

TIRR MEMORIAL® HERMANN
Rehabilitation & Research

FEATURED IN THIS ISSUE

Corwin Boake, Ph.D.
Neuropsychologist

Teresa Cramer, P.T., M.S., P.C.S.
Physical Therapist

Lourdes Cuellar, R.Ph., F.A.S.H.P.
Administrative Director of Pharmacy and Clinical Support Services

Teresa Del Castillo, L.C.S.W., L.M.F.T., M.B.A.
Licensed Clinical Social Worker
Licensed Marriage and Family Therapist

Gerard E. Francisco, M.D.
Chief Medical Officer
Chair of the Department of PM&R, The University of Texas Medical School at Houston

Lex Frieden
Director, Independent Living Research Utilization
Professor of Biomedical Informatics and Rehabilitation, The University of Texas Health Science Center at Houston

Martin Grabois, M.D.
Executive Vice President for Policy
Professor and Chair of the Department of PM&R, Baylor College of Medicine
Adjunct Professor, Department of PM&R, The University of Texas Medical School at Houston

Carl Josehart
TIRR CEO

Cindy B. Ivanhoe, M.D.
Attending Physician, Brain Injury and Stroke Program
Associate Professor of PM&R, Baylor College of Medicine
Adjunct Associate Professor of PM&R, The University of Texas Medical School at Houston

Angelle Sander, Ph.D.
Director, Brain Injury Research Center
Associate Professor of PM&R, Baylor College of Medicine

Monika Shah, D.O.
Director, Brain Injury and Stroke Program
Assistant Professor of PM&R, Baylor College of Medicine

Mark Sherer, Ph.D.
Senior Scientist and Director of Research and Director of Neuropsychology
Clinical Professor of PM&R, Baylor College of Medicine

Reverend Hazel R. Thomas, M.Div., B.C.C.
Chaplain Manager

Sarah Lake Wallace, Pharm.D.
Director of Performance Improvement and Patient Safety

MESSAGE FROM THE CEO

With the signing into law in 1990 of the Americans with Disabilities Act, Americans no longer had to view living with disability as a barrier to success. In the 20 years since its passage, the ADA has fulfilled much of its promise to protect the rights of people with disabilities in employment, transportation, communications and public accommodations. But we have not fully realized the dream of those who wrote the act – equality of opportunity, full participation in society, independent living and economic self-sufficiency.


Carl E. Josehart, CEO

In this issue, Lex Frieden reviews the history of the ADA and discusses the work that remains to be done in disability law and awareness. Through TIRR Memorial Hermann's Independent Living Research Utilization program, which Lex directs, we're working on eliminating barriers one by one in the communities we serve.

Mobility and spiritual wellness, two other essentials for living an empowered life, are also addressed in this issue. Thanks to the determined efforts of Nancy and Raymond Risk – and the Wednesday Charity Club of which Nancy is a member – pediatric Lokomat® walking therapy is now available in Texas at TIRR Kirby Glen. And thanks to the work of our chaplain manager Reverend Hazel Thomas, who created an original spiritual wellness assessment to identify factors that influence spiritual and emotional wellness during rehabilitation after spinal cord injury, we're addressing the spiritual needs of our patients as a team.

We continue to strengthen our pledge to the people we serve, working daily to advance rehabilitation medicine, improve quality of life for the people who trust us to guide them in their personal recoveries and promote equal access so that all people have the opportunity to live their lives independently.

Carl E. Josehart
Chief Executive Officer
TIRR Memorial Hermann

TIRR Memorial Hermann Journal is published four times a year by TIRR Memorial Hermann. Please direct your comments or suggestions to Editor, *TIRR Memorial Hermann Journal*, TIRR Memorial Hermann, 1333 Moursund, Houston, TX 77030, 713.797.5946.

Carl E. Josehart, CEO
Gerard Francisco, M.D.,
Chief Medical Officer
Mary Ann Euliarte, R.N.,
Chief Nursing Officer/Chief Operations Officer
Mark Sherer, Ph.D.
Director of Research

Editorial Staff
Kate Eller, Editor
Susan Thomas, TIRR Marketing
Karen Kephart, Writer
Steve Stanley, Designer

Material in this publication may not be reproduced in whole or part without permission from TIRR Memorial Hermann.

Fall 2010

We have opportunities for outstanding rehabilitation professionals. If you are interested in joining our team at U.S.News & World Report's No. 5 rehabilitation hospital, contact Jude Lemaire, recruitment consultant, at 713.797.7281 or Jude.Lemaire@memorialhermann.org. All available opportunities can be viewed at memorialhermann.org.

www.tirr.org
www.ilru.org

Q&A with Lex Frieden: The Americans with Disabilities Act Turns 20

Lex Frieden is a professor of biomedical informatics and rehabilitation at The University of Texas Health Science Center at Houston and director of TIRR Memorial Hermann's Independent Living Research Utilization program (ILRU). Frieden, who uses a wheelchair following a 1967 traffic accident in which his spinal cord was severed, helped craft the Americans with Disabilities Act (ADA), which was signed into law on July 26, 1990. In July 2010, on the 20th anniversary of the enactment of the ADA, he was interviewed on National Public Radio about his role in writing the ADA. To listen to the NPR interview, visit www.npr.org and search "Lex Frieden."

Lex Frieden

Frieden also leads the Laboratory for Adaptive Technologies at The University of Texas School of Bioinformatics at Houston and is convener of the Amerigroup National Advisory Board on Improving Health Care Services for Seniors and People with Disabilities.

Q: For the first time in this country, a law mandated that public spaces accommodate people with disabilities. What evolution took place in the American ethos to lead to such a profound change for those living with disabilities?

In the 1960s and early 1970s, Americans were moving toward a society in which individualism, equality and personal responsibility took center stage. The same ideals that led to the Civil Rights Act of 1964 sparked the consumerism movement led by Ralph Nader, the women's movement and the antiwar movement. People with disabilities took notice, which spurred the disability rights and independent living movement.

In response to advocacy by the disability community, members of Congress introduced legislation that added a civil rights provision – Title 5 – to the Rehabilitation Act of 1973, which prohibits discrimination based on disability in federal programs and federally funded programs. Ten years later, in 1983, I had the opportunity to testify before Congress during a review of the rehabilitation legislation. At that time, I recommended a national assessment of legislation and policy affecting people with disabilities. Then in 1984, I was appointed by President Ronald Reagan as the first executive director of the newly created National Council on the Handicapped, now known as the National Council on Disability. The council was given the responsibility of doing the assessment I had recommended.

Q: What was your charge as executive director of the council?

We had a little less than two years to put together a comprehensive report on Americans living with disabilities. When we presented the report, entitled *Toward Independence*, in January 1986, our No. 1 recommendation was the creation of a law to protect the rights of people with disabilities in employment, transportation, communications and public accommodations. While Congress expressed interest in our proposal, they failed to act on the recommendation. As a result, we produced another report in 1988 that included draft language for the ADA.

Subsequently, the ADA bill was introduced in Congress and hearings were held in Washington, Houston and other cities. Less than two years later, Congress passed the ADA by one of the largest majorities in history. A few weeks after the bill was passed, President George H. W. Bush signed the act into law.

Q: What were the most significant immediate changes following the signing of the act into law?

In my opinion, almost all changes were immediate and significant. On July 25, 1990, an employer could interview a person with a disability and say, "I'm not going to hire you because you have a disability." The next day this was illegal. Every new building or older building being remodeled had to be made accessible. Numerous changes happened immediately. It was like night and day. Many more changes occurred in a relatively short period of time.

Twenty years ago there were two cities in the United States in which people in wheelchairs could use a bus – New York City and Denver. Today, every bus in every city with a public transportation system is wheelchair accessible. Twenty years ago you didn't see handicapped parking spaces or ramps on curbs. Schools could choose not to admit people with disabilities because of their impairments. Deaf people could not serve on juries, and blind people could not access information in libraries. Today, people with disabilities have accessible parking spaces, ramps on curbs, equal opportunity in employment and education, access to courts and libraries and many other accommodations.

Frieden *continues on page 4*

Mobility continued from page 1

pattern, which can be adjusted to accommodate individual needs and rehabilitation goals. Advantages of Lokomat-based therapy include faster progress through longer and more intensive training sessions compared to manual treadmill training, ease of monitoring and assessment of patient walking activity and improved motivation through visualized performance feedback.

"This is not a new therapy," Risk says. The Lokomat offers patients and therapists a more efficient way of doing the therapy, and it's producing good results. Noah continues to show progress. He's lifting his legs better and walking better with each session."

Noah's physical therapist **Teresa Cramer, P.T., M.S., P.C.S.**, stresses that pediatric Lokomat walking therapy is just one part of a patient's overall treatment plan. "At the initial evaluation we work closely with parents to set the child's goals, which provide a framework for a treatment plan that can incorporate various therapies," she says. "If functional walking training is a part of the treatment plan, a portion of the treatment could involve the Lokomat for pediatric patients who qualify."

Cramer says Lokomat training begins with a baseline gait assessment, measurements to fit the robotic settings to each patient and one or two trial sessions to evaluate how well the

Mobility continues on page 5

Frieden continued from page 3

Q: How did the amendments to the ADA, effective January 1, 2009, expand the definition of "disability" to cover new groups, such as cancer patients and cancer survivors?

There is a widespread misconception that the ADA "expanded" the definition of disability. In fact, the new amendments simply clarified the definition of disability. In decisions passed down over the past 20 years, the court system, including the Supreme Court, narrowed the original intent of the ADA. What Congress did with the 2009 amendments was to go back and restate the definition of disability as they originally intended it, using words they hoped the courts could better understand and interpret. Cancer survivors and people with chronic disorders have always been covered under the ADA, but it would have been difficult to prove discrimination in court because of the narrow definition used by the Supreme Court and others over the past two decades. Hopefully, courts will now find it easier to interpret the law according to the intent of Congress, and all people with disabilities will be protected from discrimination.

Q: What work remains to be done in the area of disability awareness and law?

I believe the ADA has fulfilled much of its promise, and research on the impact of the ADA, recently completed by my colleagues at UT and ILRU, supports that belief. Based on the opinions of 870 disability community leaders polled in a non-scientific survey that included people from all over the country, more than 90 percent felt that quality of life for people with disabilities has improved greatly since passage of the ADA. About 60 percent of those surveyed agreed that the ADA's greatest impact has been in improvements in access to public accommodations, retail shops and commercial establishments.

But the survey also revealed three areas where we believe the ADA should be supplemented: employment, healthcare and community living. Figures vary, but most studies indicate that half or more of working-age people with disabilities seeking employment are unable to find work. This rate is more than three times that of the non-disabled population.

Economists argue about the reasons for the high unemployment rate, but everyone seems to agree that more aggressive action should be taken to provide employment opportunities for this population. And disincentives to working must be eliminated. For years, people with disabilities have complained that by going to work, they sacrifice needed disability benefits like health insurance, home care and housing assistance. Various efforts have been made to minimize the effect of the so-called "benefit cliff" but none of them seem to have worked.

Finally, efforts need to be made to improve housing and independent living options for people with disabilities in the community.

Housing options are limited for people with disabilities and for seniors, particularly for those who are struggling to maintain their independence despite low incomes. Because housing is difficult to obtain, for a variety of reasons, people with chronic, daily health-related needs often find themselves in intermediate care facilities or nursing homes. Most of these people would prefer to be living in the community, among families and friends.

In a few communities, integrated housing and service demonstrations have proved to be quite successful.

Given the predictable, impending needs of 79 million baby boomers who will eventually face the same challenges with housing and home care that people with disabilities and seniors who wish to be independent are facing today, it is imperative that we develop creative solutions that support community-based independent living for both young and old people with disabilities and enable seniors to age in place.◆

Mobility continued from page 4

child can work with the robotic system. "During each walking session, the therapist adjusts parameters related to walking speed, range of motion at the joints and how much body weight support the robot is providing," she says. "The goal is to show progress over many sessions, with the patient supporting an increasing percentage of his or her body weight. We couple Lokomat therapy with over-ground walking, which is our ultimate goal."

Pediatric Lokomat therapy can benefit patients with neurologic conditions, including brain injury, spinal cord injury, stroke and cerebral palsy. The decision to incorporate Lokomat training into the patient's treatment plan is done on a case-by-case basis. "The smallest femur length the pediatric legs will accommodate is 21 centimeters, so most 4-year-olds will fit," Cramer says. "If the child has the potential for improved walking, can tolerate being strapped into the robot and is old enough to understand how to use the therapy, he or she could be a candidate. In Noah's case, the therapy is helping to improve his mobility."

Six-year-old Noah smiles, sings songs and plays games while he's on the treadmill. "He's good natured and rarely fusses," his mother says. "He looks forward to the sessions because his therapist makes the work fun. He's been rocking and rolling since he started." ◆

Safety First: TIRR Takes Steps to Stop Errors Before They Occur

Studies have shown that when organizations hold safety as their core value, the positive results carry over to other measurable areas of patient care, including time savings, quality, improved outcomes and patient, physician and employee satisfaction. Staff at TIRR Memorial Hermann renewed their focus on the three Cs – communication, critical thinking and compliance – and put them to use as tactics in a hospital-wide initiative to reduce the chance of adverse medical events.

Sarah Lake Wallace, Pharm.D.

"In some cases we've formalized and are working to improve our performance around tactics we've had in place for many years," says **Sarah Lake Wallace, Pharm.D.**, director of performance improvement and patient safety at TIRR. "In others we've implemented new processes to improve patient safety in ways that will have the greatest impact on the quality of care we deliver."

In examinations of the root cause of adverse medical events, many problems have been traced to poor communication, both nationally and at TIRR, particularly at shift change and on weekends. "During hand-offs, we encourage our staff members to ask questions," says Wallace. "We've improved our weekend hand-off communication by scheduling Friday meetings with the residents covering for the weekend, the attending physician on call, if possible, and the weekend and evening nurse supervisors. They discuss the baseline for each patient and issues that may arise over the weekend, and do bedside rounds to identify patients of higher-level concern."

To improve communication, wound care rounds were initiated with the spinal cord service, providing the attending physician, wound care nurse and residents a designated time each week to examine wounds and assess improvement.

To create opportunities to learn from events and improve critical thinking, residents and representatives from patient safety, quality, pharmacy, nursing, risk management and admissions attend a monthly, physician-led peer review of all unplanned transfers. "We ask ourselves five questions: Was the care appropriate? Does the documentation support the care we provided? Is there anything we could have done to prevent the transfer? Are there any general lessons we need to learn from this case? Are there issues we need other departments to evaluate?"

Wallace says TIRR also encourages staff members to examine the processes they use in caring for patients to improve their skills and reduce errors. "Critical thinking is a matter of maintaining a questioning attitude. Is the information you've received from a credible, knowledgeable source? If the information is outside the norm, have you verified the information through the source or through another party? But most importantly, if something does not make sense or seems unusual, stop and figure it out."

Wallace says, "We actively challenge ourselves to identify events that may not have had a long-term impact on a particular patient but are long-term lessons for us in improving the care we provide other patients. Patient safety is everyone's responsibility. It's a meticulous, ongoing process. If we each perform at our personal best, everyone wins." ◆

Healing the Inner and Outer Person: Identifying Factors That Influence Spiritual and Emotional Wellness During Rehabilitation After Spinal Cord Injury

Reverend Hazel R. Thomas, M.Div., B.C.C., board-certified chaplain at TIRR Memorial Hermann, recently completed a six-month pilot study evaluating specific psychosocial domains that may positively or negatively change throughout the course of inpatient rehabilitation. She was invited to present her research at two conferences: the 2010 Annual Meeting of the Academy of Spinal Cord Injury Professionals, held September 22 to 24 in Las Vegas, Nevada, and the 4th Annual National Spinal Cord Injury Conference, held October 28 to 30 in Niagra Falls, Ontario.

Hazel R. Thomas, M.Div., B.C.C.

To prepare for the study, Rev. Thomas created an original spiritual wellness assessment consisting of eight questions measured on a seven-point evaluation scale. "I reviewed many articles and surveyed chaplains via e-mail to learn about existing assessment tools," she says. Ultimately, she based her spiritual wellness assessment on two used previously at The University of Texas System M. D. Anderson Cancer Center in Houston and Providence St. Vincent Medical Center in Portland, Oregon, modifying the questions and scales to meet the objectives of her study.

Spiritual Wellness Assesment

I feel...	☹			😐			☺	
Overwhelmed	-3	-2	-1	0	1	2	3	Comfortable/Serene
Hopeless	-3	-2	-1	0	1	2	3	Hopeful
Anxious	-3	-2	-1	0	1	2	3	Peaceful
Alone/Abandoned	-3	-2	-1	0	1	2	3	Connected
Powerless	-3	-2	-1	0	1	2	3	Empowered
Rejected	-3	-2	-1	0	1	2	3	Accepted
My life seems...	☹			😐			☺	
Meaningless	-3	-2	-1	0	1	2	3	Meaningful
I have a...	☹			😐			☺	
Low Self Image	-3	-2	-1	0	1	2	3	Positive Self Image

Global change _____

Study participants included 39 spinal cord injury patients admitted within four months of onset, ranging in age from 18 to 78 years. Each was administered the assessment within seven days of admission and again within five days of discharge. Between the two assessments, Rev. Thomas spent varying amounts of time with each patient.

"The frequency and lengths of my visits were dependent on the patient's response to the initial spiritual wellness assessment," she says. "If the overall response tended toward the negative, I knew I needed to spend more time with that patient. My work with each patient varied enormously. I saw some patients one on one. Others I'd see as a participant in team rounds. Sometimes I'd go on community outings with a patient and family members, or work with patients during a group physical or occupational therapy session. A therapist might alert me that a particular patient needed attention."

Rev. Thomas recorded scores of the initial spiritual wellness assessment and comments about her visits in the medical chart. "Sometimes I'd make a note that a patient was feeling really alone and needed support – or that the patient was really anxious and needed some questions answered and concerns addressed."

Length of stay of study participants ranged from 16 to 84 days. Two-thirds of the group studied were male; 38.5 percent were paraplegic and 61.5 percent were tetraplegic. Rev. Thomas, who is the sole chaplain serving a 119-bed inpatient facility, spent from 25 to 575 minutes with each patient, for an average of 158.97 minutes per patient.

A secondary goal of the study was to assess global change in each patient's overall spiritual and emotional wellness. When she tallied results, Rev. Thomas learned that 92.31 percent demonstrated an increase in global change; 5.13 percent demonstrated a decrease in global change; and 2.56 percent demonstrated no change. "More than 90 percent of patients in the pilot study left TIRR with an overall better sense of spiritual wellness," she says. "While it's difficult to determine a specific reason for the overall positive change, I believe it relates to our team effort to address the areas where each person scored lowest on the first assessment.

"As chaplains we're making strides toward evidence-based reporting of outcomes, but it's difficult to determine the contribution a chaplain makes to spiritual wellness on a daily basis," she says. "We've long questioned how we can assess whether a patient feels better after having seen a chaplain. Having a numeric spiritual wellness assessment has allowed us to address the spiritual needs of our patients as a team. Spiritual and emotional rehabilitation are just as important as physical rehabilitation. Our goal is to help our patients heal on the inside as well as on the outside." ◆

Helping Family Members Cope with a Loved One's Disability

Roland Valdes was a successful mechanical engineer when he suffered a traumatic brain injury (TBI) in a motorcycle accident on December 6, 2006. After acute care at Ben Taub General Hospital, Valdes was transferred to TIRR for a month-long inpatient stay in early 2007. Following his discharge, he enrolled in the TIRR Challenge Program, a comprehensive community-reintegration program for survivors of TBI and stroke.

"After the Challenge Program, Roland came home and started getting back into life," said Roland's wife, Debbie Valdes. "He went to the gym and worked out. As soon as he was able, he signed up for classes in the Internet-based master's degree program he was working on before the accident, and that occupied his time."

But the Valdes' lives had changed dramatically. "Our lives before and after the accident were like night and day," she says. "Roland had an energetic, vibrant personality. If he wanted something, he went after it, and that aspect of his personality hasn't changed. But we went from a relationship in which he was very much in control to one in which he was dependent on me financially, socially and emotionally. He wanted to be the same person he'd been before the accident and had a hard time accepting his limitations. Like many brain injury patients, he could be verbally abusive until we got his medications adjusted. He lost almost all of his friends because they didn't understand what we were going through."

Valdes educated herself about the personality changes to expect after traumatic brain injury, including the physical, cognitive and psychological impairments that can cause aggression, anxiety and depression, and affect close relationships. "I learned everything I could about how to help him," she says. "For three years, I think I did pretty well, although I know I made some mistakes along the way. Then last year my patience was wearing thin and I started losing my temper, which is what made Roland tell his doctor that I needed some help."

Debbie Valdes first learned of the family counseling services provided by TIRR Memorial Hermann's **Teresa Del Castillo, L.C.S.W., L.M.F.T., M.B.A.**, when she accompanied Roland to a follow-up outpatient clinic visit with his physical medicine and rehabilitation specialist. When Valdes mentioned that it might be helpful for his wife to talk with a counselor, **Monika Shah, D.O.**, referred her to Del Castillo, a licensed clinical social worker and licensed marriage and family therapist at TIRR's Physician and Specialty Clinic.

Teresa Del Castillo, L.C.S.W., L.M.F.T.

Monika Shah, D.O.

Mrs. Valdes met with Del Castillo briefly that same day and scheduled a counseling session for the following week. The two women met over a four-month period in 2010. "Debbie worked through some of her grief, and we also spent time talking about how to improve communication with her husband, interact with him more effectively and accept his limitations," Del Castillo says. "She felt like her role as a wife disappeared after the accident and that she had become a caretaker. She was struggling with a sense of loss at many levels. Before we met she was in survival mode. When there was a tiny bit of stability in her relationship with her husband, she was ready to deal with her own needs."

"After the accident, many people asked why I stayed with Roland," Valdes says. "I couldn't leave because I love him. By nature, I'm a nurturing person, and he needed that kind of care. He didn't ask for the accident to happen. It was just one of those things. If I were disabled, I'd like to think that I wouldn't be abandoned."

She says the sessions with Del Castillo were helpful. "Things are okay now. Roland drives and runs errands during the day while I'm at work. It's just that he doesn't put as much into the marriage as he did before the accident, and Teresa helped me cope with that. She gave me a new perspective on my husband, myself and our relationship, and worked with me to set goals for myself, including making time to do the things I enjoy."

VALDES EDUCATED HERSELF ABOUT THE PERSONALITY CHANGES TO EXPECT AFTER TRAUMATIC BRAIN INJURY, INCLUDING PHYSICAL, COGNITIVE AND PSYCHOLOGICAL IMPAIRMENTS THAT CAN CAUSE AGGRESSION, ANXIETY AND DEPRESSION.

Del Castillo says she enjoyed working with Valdes. "She was insightful and ready to move ahead. She was committed to the relationship and to learning new ways to cope with it. Our sessions gave her an understanding of how she could help her husband and help herself as well. Now she can harness what he has because she understands his limitations and knows how to create closeness in the best way." ◆

ON THE MOVE

TIRR Memorial Hermann Welcomes New Recruits

Three physicians have joined the staff of TIRR Memorial Hermann.

P. Jacob Joseph, M.D., is a 2006 graduate of The University of Texas Medical School at Houston. An assistant professor in the department of Physical Medicine and Rehabilitation at the UT Medical School, he comes to TIRR after completing his residency in PM&R at the University of Washington in Seattle. He serves as an attending physician in the Brain Injury and Stroke Program.

P. Jacob Joseph, M.D.

Meilani Mapa, M.D., joins the TIRR medical staff after serving as an assistant professor of physical medicine and rehabilitation at the Ohio State University in Columbus. She was awarded her medical degree at Northeastern Ohio Universities College of Medicine in Rootstown, Ohio, in 2003, and completed her residency at the UT/Baylor Physical Medicine and Rehabilitation Alliance in Houston in 2007, followed by a fellowship in brain injury medicine at the same institution. An assistant professor of physical medicine and rehabilitation at the UT Medical School, she is medical director of the Inpatient Rehabilitation Unit at Memorial Hermann-Texas Medical Center and also sees outpatients in the Spasticity, Brain Injury and Stroke Clinic at TIRR.

Meilani Mapa, M.D.

Psychiatrist **Guy Patterson, M.D.**, earned his medical degree at The University of Texas Medical Branch at Galveston and completed his residency in psychiatry at Baylor College of Medicine, later pursuing psychoanalyst training at the Houston-Galveston Psychoanalytic Institute. An associate professor in the department of Psychiatric and Behavioral Sciences at UT Medical School, he has held positions at the M.H.M.R.A. of Harris County's Ripley Clinic, Baylor College of Medicine and the Gulf Coast M.H.M.R. Clinic in Galveston. He has also been engaged in the private practice of inpatient and outpatient adult psychiatry. He is a consulting physician at TIRR for both inpatient service and subspecialty outpatient clinic and also serves as staff psychiatrist in the department of Psychiatry Outpatient Clinic at The University of Texas Health Science Center at Houston.

Guy Patterson, M.D.

TIRR Expansion and Renovation

From humble beginnings as the Southwestern Poliomyelitis Respiratory Center, which managed 10 percent of all new polio cases in the early 1950s, TIRR Memorial Hermann has grown to a 119-bed teaching hospital for The University of Texas Medical School at Houston and Baylor College of Medicine.

Since April 2010, TIRR has completed several expansion initiatives, including a newly remodeled procedure suite for urodynamics, the opening of three procedure suites and the addition of three private rooms on Patient Care Unit (PCU) 6, which increased the hospital's licensed beds from 116 to 119. The new procedure suites allow physicians to perform procedures under moderate sedation in house, including percutaneous endoscopic gastrostomy (PEG) line placement, peripherally inserted central catheter (PICC) line placement and wound debridement.

A recent pharmacy expansion ensures that TIRR has the capability to manage the medication needs of additional patients, and the Physician and Specialty Clinic has been expanded to accommodate dental practices, primary care services and a concussion clinic, all under one roof. Four new treatment rooms have been added, increasing the clinic's available treatment rooms to 20.

A RECENT PHARMACY EXPANSION ENSURES THAT TIRR HAS THE CAPABILITY TO MANAGE THE MEDICATION NEEDS OF ADDITIONAL PATIENTS, AND THE PHYSICIAN AND SPECIALTY CLINIC HAS BEEN EXPANDED TO ACCOMMODATE DENTAL PRACTICES, PRIMARY CARE SERVICES AND A CONCUSSION CLINIC

Renovated space in the basement of Dunn Tower is now a classroom/training/conference room with the capacity for 60 people, allowing TIRR physicians and staff to conduct training and hold conferences on site. TIRR is also in the process of expanding its Radiology department to modernize the space and make room for the addition of a CT scanner.

On the Move continues on page 9

On the Move continued from page 8

"In fiscal year 2011, we will continue to invest in improvements aimed at enhancing the experience of patients, families, visitors, physicians and staff; creating a care environment that supports exceptional quality outcomes; and supporting physicians by providing greater continuity among care teams," says **Carl Josehart**, CEO. "Our recent growth allows us to build on strengths of the past and improve our services and facilities to care for the needs of our patients and their families. We pride ourselves on our collaboration with affiliated physicians and the consistent improvements in care those relationships have fostered."

Pharmacy Residency Program Launched

TIRR Memorial Hermann and three Memorial Hermann acute care hospitals have joined together to create a pharmacy residency program aimed at developing practice leaders prepared to meet current and future challenges of the pharmacy profession. Participating acute care hospitals are Memorial Hermann Memorial City Medical Center, Memorial Hermann Katy Hospital and Memorial Hermann Southwest Hospital, which will serve as the main facility for the program. In April, the new program was granted a three-year accreditation by the American Society of Health-System Pharmacists (ASHP) Commission on Credentialing.

"At least 20 percent of graduates from colleges and schools of pharmacy will do a one- or two-year postgraduate residency program to gain intensive training in their specialty," says **Lourdes Cuellar, R.Ph., F.A.S.H.P.**, administrative director of pharmacy and clinical support services at TIRR. "In creating the program we wanted to ensure that our residents would have the advantage of getting practice experience focused on the strengths of each of the participating hospitals. Most pharmacy residencies are located in a single, usually large, acute care hospital, which makes our program unique."

Lourdes Cuellar, R.Ph., F.A.S.H.P.

Participants in the residency program will get hands-on experience as key members of the healthcare team, using evidence-based medicine to independently manage patient disease states and drug therapies. Graduates will be able to successfully adapt their knowledge and skills to critically assess new problems and provide solutions for care, as well as effectively educate healthcare practitioners, caregivers and patients.

Foundation News

Joel Stein, M.D., physiatrist-in-chief at New York Presbyterian Hospital, will deliver the first **Charles C. Beall** Lecture on November 9, 2010, at the TIRR Research Luncheon in Houston. The luncheon is the first of a series of annual events focusing on research under way at TIRR Memorial Hermann.

Beall, who died in February 2010, served TIRR for 10 years as CEO and for 29 years as a board member. Dr. Stein is professor and chair of the department of Rehabilitation Medicine at the Columbia University College of Physicians and Surgeons, and professor and chief of the division of Rehabilitation Medicine at Weill Cornell Medical College in New York City.

Jim Winne, whose daughter **McKenzy Winne** is a former TIRR patient, has given $125,000 to fund TIRR's Traumatic Brain Injury Recruitment and Research Fund.

The One Step Closer Foundation (OSCF) is a nonprofit, charitable organization whose main goal is to ease, as much as possible, the lives of those with cerebral palsy. The OSCF was started by **Jacob Zalewski**, a former TIRR patient born with cerebral palsy, who has been a donor to TIRR through the OSCF for the past three years. His third annual celebrity poker tournament "All in for CP" will be held on December 11, 2010, in Las Vegas. To enter the tournament and support TIRR, visit www.onestepcloserfoundation.org/index.php.

THE ONE STEP CLOSER FOUNDATION IS A NONPROFIT, CHARITABLE ORGANIZATION WHOSE MAIN GOAL IS TO EASE, AS MUCH AS POSSIBLE, THE LIVES OF THOSE WITH CEREBRAL PALSY.

The **Staman Ogilvie** Fund for Spinal Cord Injury Recovery, Rehabilitation and Research has been created to assist individuals whose lives have been disrupted by spinal cord injury (SCI), brain trauma or neurological disorders. The fund's objective is to raise $10 million for the development of new technologies to increase movement for those with SCI through regenerative research, rehabilitation, robotics and adaptive technology. To date, more than $5 million has been contributed toward the goal, which will benefit TIRR and the Mischer Neuroscience Institute at Memorial Hermann-Texas Medical Center.

An anonymous donor has pledged $1 million and paid the first installments to TIRR for the purchase of much of the equipment to be used for rehabilitation and adaptive technology research as part of the Ogilvie Fund. ◆

ON THE PODIUM

Ivanhoe CB. Neurological Disorders and the Impact on Employment. Presented at the Houston Area Rehabilitation Association, Division of the Texas Department of Assistive and Rehabilitation Services on July 15, 2010, in Pasadena, Texas.

Ivanhoe CB. Advances in the Diagnosis and Treatment of Upper Limb Spasticity featuring ELVIRA™ Injection Simulation Schedule. Presented on August 26, 2010, in Charlotte, North Carolina.

Ivanhoe CB. FDA Approval of Botox® for Post-Stroke Spasticity and FDA Approval of Botox for Spasticity: FDA Approval versus Real-World Use. Presented at Carolinas Rehabilitation in Charlotte, North Carolina, on August 26 and August 29, 2010, respectively.

Sander AM. Traumatic Brain Injury Rehabilitation and Sexuality: Finding the Comfort Zone. Invited lecture presented at the meeting of the Brain Injury Association of Michigan, September 23, 2010, Lansing, Michigan.

Sander AM. A Videoconferencing Approach for Training Caregivers to Help Persons with TBI Compensate for Cognitive and Emotional Difficulties in the Home. Paper presented at the meeting of the American Psychological Association, August 12, 2010, San Diego, California.

Angelle Sander, Ph.D.

Sander AM, Clark AN. Translation of Evidence-Based Findings for Rehabilitation of Cognitive Impairments After Traumatic Brain Injury. Preconference workshop presented at the IDGA Military Healthcare Convention and Conference, June 22, 2010, San Antonio, Texas.

Sander AM. Integrating Sexuality into Traumatic Brain Injury Rehabilitation. Lecture presented at the Brain Injury Association of Texas Conference, June 6, 2010, Austin, Texas.

Sander AM. Compensating for Memory Problems After Traumatic Brain Injury: An Evidence-Based Approach. Lecture presented at the Brain Injury Association of Texas Conference, June 5, 2010, Austin, Texas.

Sherer M. The TBI Model Systems Program: Resources for Consumers. Workshop presented at the annual meeting of the Brain Injury Association of Texas, Austin, Texas, June 6, 2010.

Sherer M. Assessment and Treatment of Impaired Self-Awareness. Invited presentation to the clinical staff of

On the Podium continues on page 11

ACCOLADES

For the 21st consecutive year, **TIRR Memorial Hermann** has earned distinction among the top five rehabilitation hospitals in the country. The rankings were published in the July 21, 2010, issue of *U.S.News & World Report*.

The 20 hospitals ranked in rehabilitation were named among the best for challenging cases and procedures by at least 3 percent of rehabilitation specialists who responded to *U.S. News* surveys in 2008, 2009 and 2010.

"We're pleased to be recognized by *U.S.News & World Report* in its annual listing of the nation's top hospitals," says **Carl Josehart**, CEO. "We're proud of the efforts our physicians and staff members make in helping us achieve our reputation for quality outcomes and maintain our ranking."

Corwin Boake, Ph.D., was elected to the American Psychological Association (APA) Council of Representatives for Division 40 (clinical neuropsychology). The council, which is the legislative body of the APA, includes about 175 officers and representatives. Dr. Boake's term runs from 2011 through 2014.

Corwin Boake, Ph.D.

Martin Grabois, M.D., attended a board meeting of the American Academy of Pain Medicine on August 6 and 7 in his role as vice president for scientific affairs. The American Academy of Pain Medicine represents physicians who practice pain medicine nationally. Dr. Grabois was recently nominated president-elect.

Martin Grabois, M.D.

Cindy Ivanhoe, M.D.

Cindy B. Ivanhoe, M.D., was a special guest of honor at the Texas Brain and Spine Institute 4th Annual Neuroscience Symposium held September 10, 2010, in College Station.◆

On the Podium continued from page 10

the Shepherd Center, Atlanta, Georgia, August 10, 2010.

Sherer M. Agitation in Patients with Traumatic Brain Injury. Invited presentation to the meeting of the Southeast Texas Chapter of the Association of Rehabilitation Nurses, Houston, Texas, April 27, 2010.

Sherer M. Evidence-Based Practices for the Assessment and Management of Confusion Following Brain Injury. Invited presentation to the Contemporary Forums Brain Injuries Conference, San Antonio, Texas, April 29, 2010.

Mark Sherer, Ph.D.

Sherer M, Malec JF. Addressing Self-Awareness with Those Who Are Brain Injured: Establishing a Therapeutic Alliance. Invited presentation to the Contemporary Forums Brain Injuries Conference, San Antonio, Texas, April 30, 2010.

Stelk, Cheryl, R.N., C.R.R.N. Help! My Ventilator Left the ICU But My Performance Measure Didn't. Presented at the Association of Rehabilitation Nurses National Conference, October 2, 2010, in Orlando, Florida.

Cheryl Stelk, R.N., C.R.R.N.

Martin Grabois, M.D., attended the XXIV Congress of the Latin American Medical Association of Rehabilitation (AMLAR) in Cartagena, Colombia, August 25 through 28, 2010. He was invited to present the following lectures: "Neuropathic Pain Syndrome: Evaluation and Treatment"; "Muscle Pain Syndrome: Evaluation and Treatment"; and "International Physical and Rehabilitation Medicine: Through the Looking Glass with a View to the Future."

Dr. Grabois also attended the 8th Mediterranean Congress of Physical and Rehabilitation Medicine in Limassol, Cyprus, September 29 through October 3. He presented the following invited lectures: "Chronic Pain Syndrome Post Cardiovascular Accident: Evaluation and Treatment" and "Multidisciplinary Pain Program: New Concepts in Organization and Implementation." In addition, he organized, moderated and presented at a course entitled "Organizing an Educational Program for Rehabilitation Personnel." Also, during this meeting, Dr. Grabois attended the interim board meeting of the International Society for Physical and Rehabilitation Medicine (ISPRM) in his role as treasurer. ◆

IN PRINT

Bold print indicates that the person is affiliated with TIRR.

Sander AM, Pappadis MR, **Clark AN, Struchen MA.** Perceptions of community integration in an ethnically diverse sample. *Journal of Head Trauma Rehabilitation*, 2010; e-publication ahead of print.

Monique Pappadis, M.Ed.

Margaret A. Struchen, Ph.D.

Clark AN, **Sander AM**, **Pappadis MR**, **Evans GL**, **Struchen, MA**, **Chiou-Tan F.** Caregiver characteristics and their relationship to health service utilization in minority patients with first episode stroke. *NeuroRehabilitation*. 2010;27(1):95-104. ◆

TIRR IN THE NEWS

Fifty-five-year-old Robert Rehm, a quadriplegic, needs a respirator to breathe. Rehm uses his wheelchair and paintbrushes with special mouthpieces to create contemporary works of art. *See Rehm in action:* www.39online.com/news/local/kiah-quadripelgic-artist-story,0,7492294.story

Fourteen-year-old Logan Schaefer is the son of Texas A&M Women's Associate Head Basketball Coach Vic Schaefer. After suffering a severe head injury in a wakeboarding accident while attending camp in July, Logan underwent intensive rehab at TIRR Memorial Hermann and made a remarkable recovery. *See Logan's story on KBTX in College Station and KTRK in Houston:* www.kbtx.com/tamu/headlines/101198464.html http://abclocal.go.com/ktrk/video?id=7629720

Because of severe neurological issues, **Noah Risk** has struggled to walk since birth. Today, the 6-year-old can lift his knees and take a step. His mother, **Nancy Risk**, credits Noah's achievement to an innovative therapy – pediatric Lokomat® walking therapy. Nancy and her friends helped raise the money to make the therapy available at TIRR Memorial Hermann Kirby Glen. *See Noah's story:* www.myfoxhouston.com/dpp/health/100810-lokomat ◆

MEMORIAL HERMANN HEALTHCARE SYSTEM

TIRR MEMORIAL HERMANN
Rehabilitation & Research

7737 Southwest Freeway
Houston, TX 77074

memorialhermann.org

Nonprofit Org.
U.S. POSTAGE
PAID
Permit No. 3156
Houston, TX

MESSAGE FROM THE CMO

At TIRR, we're committed to providing the best inpatient care available and extending our services beyond the hospital into the community. To ensure inpatient safety, we've renewed our focus on communication and critical thinking, and put these tactics to use in a hospital-wide initiative to prevent adverse events and ensure that we meet the needs of our patients and family members.

Gerard E. Francisco, M.D., CMO

In this issue you'll learn how Reverend Hazel Thomas' spiritual wellness assessment has allowed rehabilitation team members to address the emotional and spiritual needs of inpatients, so that we can work on healing the inner as well as outer person. On the outpatient side, Teresa Del Castillo, a licensed clinical social worker and licensed marriage and family counselor, is helping patients and family members cope with the emotional and psychological issues surrounding disability.

In the community, we're strong proponents of the Americans with Disabilities Act and, through our Independent Living Research Utilization program, we work to remove barriers to independence, both in ordinary times and during disasters.

We view our former patients as more than people whose lives have been transformed by disability. They are people who live, work, socialize and participate as active, productive members of our community. Our role in their rehabilitation is to empower them to make the decisions that affect their lives and help them engage in all the activities that make life meaningful.

Gerard E. Francisco, M.D.
Chief Medical Officer
TIRR Memorial Hermann
Chair, Department of Physical Medicine and Rehabilitation
The University of Texas Medical School at Houston

About TIRR Memorial Hermann

TIRR Memorial Hermann is a 119 -bed nonprofit rehabilitation hospital located in the Texas Medical Center in Houston. Founded in 1959, TIRR has been named one of "America's Best Hospitals" by *U.S.News & World Report* for 21 consecutive years. TIRR provides rehabilitation services for individuals with spinal cord injuries, brain injuries, strokes, amputations and neuromuscular disorders.

TIRR is one of 11 hospitals in the not-for-profit Memorial Hermann system. An integrated healthcare system, Memorial Hermann is known for world-class clinical expertise, patient-centered care, leading-edge technology and innovation. The system, with its exceptional medical staff and 20,000 employees, serves southeast Texas and the greater Houston community.

4403598