ISSUE

02

SPRING 2016 QUARTERLY

NEWSLETTER
DEPARTMENT OF

PHYSICAL

MEDICINE AND REHABILITATION

**UT Southwestern** 

# PM&R CONNECTion



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Message
from the
Chair
Kathleen Bell, M.D.

My home and work life

in Dallas and at UT Southwestern has never been what you might call boring and during the spring, the weather in North Texas also steps up to provide a great deal of entertainment and a bit of suspense. The great blue sky turns dark, and vast branches of electricity are propelled through the sky with cracks and rumbles (and once, an orchestra of sirens when a tornado was in the neighborhood). It's thrilling and somewhat unsettling, changing minute to minute. An accurate reflection of the energy and change surrounding us at UT Southwestern.

This is particularly true for our graduating residents at this time of the year, who are leaving the comfortable PM&R residency nest for new

ventures (many of them toting along new babies!). Our nine senior residents are moving to Kansas, California, San Antonio, Florida, Temple, Austin and some are staying put. They will begin fellowships, enter private practice, and one will join our own faculty. All of them will bring along pieces of UT Southwestern – clinical pearls from their favorite attendings, warm memories of their class, and a permanent connection to a great medical institution. We will always remember our graduates and are excited with the prospect of seeing them at the AAPM&R Alumni Reception and hearing about their accomplishments and continuing endeavors.

In this quarter's newsletter, we are featuring our Wound Clinic – a unique, interdisciplinary program for complex wounds, led by Dr. Jean de Leon and sustained by a team of physiatrists, plastic surgeons, vascular surgeons, podiatrists, and nurse practitioners. And I'd like to give a late-breaking welcome to our newest research faculty member, Candice Osborne, Ph.D., MPH, OTR/L.

# UTSouthwestern Medical Center

# **Wound Care Clinic Leading the Way**



**Eliot Stockard, HBO Technician**, communicates with patient in Hyperbaric oxygen chamber

To schedule an appointment with our wound care specialists, call 214-645-8300.

For more information on the Wound Care Clinic, visit the Wound Care section of UTSW Medicine

UT Southwestern Medical Center's multidisciplinary <u>Wound Care Clinic</u> offers comprehensive, streamlined care for patients who suffer from chronic wounds, such as diabetic foot ulcers, traumatic, pressure ulcers, complex abdominal wounds and wounds that occur following cancer treatment. The goal of wound care is to provide a well-balanced program that adapts to patient needs, promoting cost effective healing while allowing individuals with wounds a meaningful active lifestyle.

"This Clinic offers a unique, multi-disciplinary approach that coordinates the care for patients with all types of wounds," said Jean de Leon, M.D., Professor of Physical Medicine & Rehabilitation and Medical Director of the Wound Care Clinic. "Through communication, education, and collaboration, our team can design customized and appropriate treatment strategies for our patients that will maximize the rate of wound healing and reduce the rate of complications." This multi-disciplinary approach has been shown in the literature to lead to more cost effective care and better outcomes.

The expert knowledge of cutting edge therapies, such as negative pressure, platelet rich plasma, and bioengineered skin substitutes, and their availability in the Clinic is an advantage. Many of the patients have a complex medical history whose medical regimen often inhibits healing, and even simple wounds can impact their life.

A comprehensive approach ensures that assessments for blood flow and transcutane-

ous oxygen testing are completed, treatments are individualized based on the test outcomes, and overall progress is followed in one clinic. The Wound Care Clinic can provide hyperbaric oxygen treatment if determined necessary based on vascular testing, however oxygenation can only do so much. The Clinic additionally offers the use of excisional techniques or ultrasound for debriding and cleaning wounds and total contact casting for offloading wounds.

Dr. de Leon explains, "The spinal cord injury and brain injury population have unique physiology and barriers to care. Our comprehensive Wound Care Clinic is equipped to allow patients with mobility limitations easy access to receive referrals for pressure mapping of seating systems, nutritional counseling, and customized recommendations for specialty support surfaces, assistive devices, and therapy to assist in their overall healing." The multi-disciplinary team includes ongoing support by nutritional services, physical therapy, diabetic educators, social services, and home care services.

The Clinic focuses many of its efforts on clinical outcomes research and costeffectiveness of new and advanced wound healing technologies. It provides access to clinical trials and new treatments resulting from UT Southwestern research. In this way the UTSW Wound Care Clinic furnishes optimal care for current patients and will benefit the needs of future patients as well.



**Dr. Jean de Leon** discusses treatment with the Wound Care Clinic Team

# **UT Southwestern PM&R Participates in Device RCT**

Under the direction of Jean de Leon, M.D., Professor of Physical Medicine & Rehabilitation, the PM&R Department and the Wound, Ostomy and Continence Nursing Department is participating in a clinical trial with the FDA approved Skin IQ™ Microclimate Manager. Clinical and comfort data, related to the prevention and treatment of pressure ulcers is being collected. Dr. de Leon says, "Microclimate is an important

factor in decreasing the effects of excessive moisture and temperature at the skin and surface interface". The objective of this prospective, randomized, controlled study is to capture, evaluate and compare the effects of Skin IQ™ MCM over a pressure redistribution surface versus a standard of care pressure redistribution surface clinically used alone to manage patients at risk for tissue breakdown.

# UT Southwestern Clements Hospital Wound Care Team Presents Findings

The UT Southwestern Medical Center Wound Care Team, led by Jean de Leon, M.D., Professor of Physical Medicine & Rehabilitation, presented findings from a quality improvement project addressing deep tissue injuries (DTI) at the Wound Ostomy and Continence Nurses Society Annual Conference. The poster presentation reported on real time data collection of all hospital acquired pressure ulcers resulted in identifying a particularly high risk population in the cardiovascular ICU. The largest subgroup, suspected deep tissue injuries (sDTI) in patients undergoing greater than 3 hours of cardiothoracic surgery, was then targeted for intervention.

A quality improvement workgroup, consisting of Wound Ostomy Continence nurses (WOC), PM&R, and physical therapy was created to evaluate this particular patient population. Data were collected to identify the most critical factors leading to the development of DTIs, including not only pressure ulcer risk assessment scores and length of surgical procedures, but also nutritional status, hemodynamic factors and use of preventative strategies. Additionally, cardiovascular intensive care unit (CVICU) and operating room (OR) staff were surveyed to capture their perception and understanding of these factors.

UT Southwestern University Hospital WOC Team (I - r) Karen Martin, Jean deLeon, Cyndi Bridgman, Adora Lucias, Carol Hall, Claudia Engle A decrease in the overall pressure ulcer incidence in CVICU as well as the number of sDTIs was the outcomes measured in the study. Several interventions were driving forces for these improvements including better staff education in early identification of sDTIs; limiting the use of preventative foams to strictly the OR so patients did not have their skin obscured by a dressing; the creation of a skin pathway algorithm and standing delegated medical orders that are initiated on admission; and the implementation of a microclimate manager on every CVICU patient. These early improvements in outcome were accomplished with education and process improvement. A change in support surfaces often thought to be the key to preventing and reducing the incidence of pressure ulcers, was not necessary.



# **Mobility Foundation Awards Two Grants**

The Mobility Foundation Center, directed by Drs. Kathleen Bell and Hunt Batjer, recently awarded grants to two researchers at UT Southwestern Medical Center. Susan Simpkins, Ed.D., Associate Professor of Physical Therapy, Didem Inanoglu, M.D., Associate Professor of Physical Medicine & Rehabilitation and Rami Hallac, Ph.D. were awarded a grant for their study titled Effects of selective percutaneous myofas-



Susan Simpkins, Ed.D.

<u>cial lengthening on gait, activity, and participation in children</u> <u>with spasticity.</u> The purpose of this prospective study is to quantify the impact of selective percutaneous myofascial lengthening (SPML) on upright mobility using instrumented



three-dimensional motion analysis. Study participants will be seen at Children's Health for kinematic and kinetic analysis prior to and following the SPML procedure to quantify the changes in gait. Clinical measures of muscle function, activity and participation will also be administered before and after SPML to determine the effects of the procedure on the child's daily function.

Dr. Didem Inanoglu, M.D. with Jesus Villanueva at Children's Health Gait Lab A second award went to Chun-Li Zhang, Ph.D., Meng-Lu Liu, Ph.D., and Tong Zang, Ph.D. for their study titled <u>Targeting Human Amyotrophic Lateral Sclerosis</u>. The purpose of this study is to identify bioactive small chemical compounds that can rescue the pathophysiology of human ALS motor neurons. The pilot study that ultimately led to this proposal showed that ALS human induced motor neurons (hiMNs) exhibit poor survival resembling degener-



Dr. Chun Li-Zhang, Ph.D

ating human motor neurons in ALS patients. This survival deficit provides a robust means for screening therapeutic compounds. For this project, the investigators will focus on chemical libraries consisting of a unique and diverse collection of small molecules with validated biological and pharmacological activities. Any validated positive hits from this unique chemical collection will be ideal candidates for further therapeutic development because of their known pharmacological activities. The investigators hypothesize that hiMNs from adult human patients constitute a unique preclinical model system and offer an unprecedented opportunity to identify therapeutics for adult-onset human ALS disease.

## **New Funding Award Cycle Announced**

The Mobility Foundation Center is excited to announce its second official request for proposals. We have refocused our mission to support innovative, early-stage translational and clinical research in stroke, brain injury, spinal cord injury, and other disorders that may limit mobility to improve the lives of our patients. Proposals should address the mission of the Mobility Foundation in its population or aims. All proposals

must have a UT Southwestern Medical Center faculty member as a principal investigator or co-principal investigator. For further details, please contact:

 $\underline{\textbf{JessicaR.Moreno@utsouthwestern.edu}}$ 

Applications due: June 30

Please email completed applications to mobilitycenter@utsouthwestern.edu

# Mobility Foundation Center Announces New Research Manager

Jessica Moreno, M.S.R.N. was recently named the Research Manager of the Mobility Foundation Center. Jessica, a registered nurse, accepted the position with the Mobility Foundation Center in February. She worked at Duke University in Durham, North Carolina for the past six years in the Department of Neurosurgery where she helped to build and develop the spine center research program. She comes to UTSW with extensive experience managing clinical trials as well as clinical registries. Her interests include clinical outcomes and spinal cord injury research. She will primarily be working with the Mobility Foundation to support grant awarded activities

as well as handling all fiscal, administrative, regulatory,

and communications support for investigators. She will also work with the UTSW Spine Center where she will help to lead and develop the clinical research efforts.

to al

Jessica Moore, M.S., B.S.N., R.N., Director, Mobility Foundation Center

# **Physical Medicine In The Spotlight**

**Dr. Samuel Bierner** was honored at a reception in March, 2016. Dr. Bierner served on the UT Southwestern Medical Center faculty since 2004. A professor for eight years, Dr. Bierner was named distinguished teaching professor in 2013. As residency program director since 2005, Dr. Bierner has led one of the largest PM&R programs in the country – the UTSW PM&R program ranks in the top 20 percent of PM&R programs in terms of size. Dr. Bierner will be leaving UTSW to take a position as professor and founding chair of the PM&R program at the University of Nebraska Medical Center. We wish him well in all his future endeavors.

Dr. Amy Phelan was a part of the Westminster Kennel Club dog show held in February, 2016. Along with Melanie Steele, Rose Tomlin and Rindi Gaudet, Dr. Phelan is part owner of a 4 year old Greyhound GCH Grand Cru Giaconda. Judged in the Hound Group, "Gia" has won Best of Breed the past two years and has 20 Best in Show awards. She is currently the #1 Greyhound, #1 Hound and #5 of all breeds in the country. She also has her Brazilian championship. Dr. Phelan also has a retired greyhound that is currently training in obedience and lure coursing. Dr. Phelan has been showing dogs for over 20 years and competes in conformation, obedience, water work, lure coursing and tracking.

Starting top (clockwise): Dr. Samuel Bierner and Dr. Kathleen Bell at Dr. Bierner's farewell reception.

- Dr. Amy Phelan and her award winning greyhound Gia at the Westminster Kennel Club Dog Show.

- Drs. Nicholas Elkins, Ugo Bitussi, Jason Petrasic, Nasser Ayyad, served as runners at the 2016 Parkland Health and Hospital System Jr. League Charity event.

- Drs. John Thottakara, Ankit Patel, Jason Petrasic and Stephanie Tow. Part of the PM&R Cycle for Survivor Team.







PM&R residents and faculty participated in Cycle for Survival, a national event co-hosted by Equinox and Memorial Sloan Kettering to raise funds for rare cancer research. The UTSW PM&R team included Drs. Nasser Ayyad, Nick Elkins, Ammon Hills, Austin Johnston, Jason Petrasic, Stephanie Tow, Jeremiah West, Kevin Burnett and faculty Drs. Ankit Patel and John Thottakara, biking 4 hours alongside other teams, including participants actively fighting cancer. It was a lot of fun and a huge success! Cycle for Survival has raised over \$12 million to date in 2016, and every single dollar goes toward research of rare cancers. We look forward to doing this event again next year, recruiting more members from the department to ride and battle rare cancers!

The Junior Charity League of Dallas has supported the Parkland Rehabilitation Fund for over 40 years. As the sole organization that raises money for the fund, Junior Charity League (JCL) has given more than \$1.5 million to purchase equipment that is crucial to our patients' rehabilitation. Patients with no or limited means of support are provided with equipment to assist with activities of daily living, mobility or other functional needs. The majority of the funds are raised at the JCL's Spring Benefit luncheon and silent auction which has many significant donors. Over the years the organization has richly enhanced the lives of countless individuals and has inspired innumerable success stories through their gifts of time and money.

### **UT Southwestern PM&R Faculty Publications and Presentations**

Hussain R, O'Leary S, Pacheco FM, Zacharias TE, Litvak P, Sguigna P, Marder E, Kia K, Kooner K, Stüve O. (2016). Acute relapse after initiation of Siponimod in a patient with secondary progressive MS. J Neurol. 263(3):606-10.

Vuletic S, Bell KR, Jain S, Bush N, Temkin N, et al. (2016). Telephone problem-solving treatment improves sleep quality in service members with combat-related mild traumatic brain injury: Results from a randomized clinical trial. J Head Trauma Rehabil. 31(2): 147-157.

Brockway JA, St. De Lore J, Fann JR, Hart T, Hurst S, Fey-Hinckley S, Savage J, Warren M, Bell KR. (2016). Telephone-delivered problem-solving training after mild traumatic brain injury: Qualitative analysis of service members' perceptions. Rehabilitation Psychology. doi: <a href="http://dx.doi.org/10.1037/rep0000077">http://dx.doi.org/10.1037/rep0000077</a>.

Davis K, Armstead C, Annaswamy TM. Carpal tunnel syndrome confounded by electromyography disease: A case report. Am J Phys Med Rehabil. 2016 Mar 4. [Epub ahead of print] PubMed PMID: 26945224.

Liu L, Annaswamy TM. Therapeutic Modalities. PM&R knowledge NOW. http://me.aapmr.org/kn/article.html?id=332

Matz PG, Meagher RJ, Lamer T, Tontz WL Jr, Annaswamy TM, et al. (2016). Guideline summary review: an evidence-based clinical guideline for the diagnosis and treatment of degenerative lumbar spondylolisthesis. Spine J. 16(3):439-46.

<u>Association of Academic Physiatrists, Sacramento, February 2016</u>

Yuan H, Barker K, Bierner SM, Lee WM. (2016). Analysis of Factors Contributing to Functional Improvement of Liver Transplant Recipients during Inpatient Rehabilitation. Am. J. Phys. Med. Rehabil. 95(3 Supp):a21.

**Dai Y, West J**, Carlock B. (2016). Acute Acalculous Cholecystitis in Patient with Chronic Spinal Cord Injury: A Case Report. Am. J. Phys. Med. Rehabil. 95(3 Supp):a72.

Gul F, Gordon P, Krohn P. (2016). Catheter tip inflammatory mass formation-Presentation of 4 cases. Am. J. Phys. Med. Rehabil. 95(3 Supp):a79.

#### American Academy of Neurology, Vancouver, BC, April 2016

Brashear A, Marciniak C, Edgley S, Gul F, Hedera P, et al. Extension study to assess the safety and efficacy of repeated abobotulinumtoxinA injections in adults with upper limb spasticity.

McAllister P, Walker H, Marciniak C, Edgley S, Gul F, et al. AbobotulinumtoxinA (Dysport®): doses used to treat upper limb muscles of adults with spasticity participating in a Phase III randomized, double-blind placebo-controlled study.

#### American Spinal Injury Association, Philadelphia, April 2016

Flynn B, Butler M, Quinones E, Jimenez Z, Strozewski R, **Wickremasinghe IM.** Reducing the Frequency of Admissions by Decreasing the Incidence of Urinary Tract Infections (UTIs) in Veterans with Spinal Cord Injury Using Telehealth Interventions.

#### American Burn Association, Las Vegas, May 2016

Wiechman S, Bocell FD, Amtmann D, McMullen KA, Rosenberg M, Rosenberg L, Holavanahalli R, et al. The Use of Growth Mixture Modeling to Determine Trajectories of Mental Health in Adults with Burn Injuries.

Schneider JC, Chernack B, Shie VL, Goldstein R, Levi B, Jayakumar P, Kowalske K, Gibran NS, Herndon D, Ryan CM. Development of a Heterotopic Ossification Scoring System: A Burn Model System National Database Study.

Holavanahalli RK, Sanchez A, Kowalske KJ. Disparities in Self-Reported Outcomes Among Racial and Ethnic Minority Groups Following a Major Burn Injury.

Godleski M, Goverman J, McMullen K, Esselman PC, Gibran NS, Suman OE, Herndon DN, Holavanahalli RK, Ryan CM, Schneider JC. Contracture Severity at Hospital Discharge: A Burn Model System National Database Study.

Crandall CG, Romero SA, Gagnon D, Poh PY, Adams AN, Kennedy NL, Ngo H, Kowalske KJ. Exercise in Warm Environmental Conditions Increases Cardiovascular Demand in Burn Survivors.

Sinha I, Bharadia D, Wiechman S, Gibran N, Kowalske K, Meyer III W, Herndon DN, Ryan CM, Schneider JC. Long-Term Patient Reported Outcomes in Patients with Head and Neck Burns: A Burn Model System National Database Study.

Thompson CM, Carrougher GJ, Schneider JC, Kowalske KJ, Fauerbach JA, Herndon DN, Gibran NS. Patient Reported Outcomes & Return to Work in Individuals with Pre-Burn Injury Drug or Alcohol Abuse.

Goverman J, Bittner E, Mathews K, Gibran N, Herndon D, Suman OE, **Kowalske K**, Meyer WJ, Ryan C, Schneider JC. The Presence of Scarring in the Burn Model System National Database: Risk Factors and Psychosocial Implications.

Wiechman SA, Bocell FD, Amtmann D, McMullen KA, Rosenberg L, Rosenberg M, Carrougher GJ, Kowalske K, Ryan CM, Herndon D, Schneider JC, Gibran NS. Trajectories of Physical Health-Related Quality of Life in Adults Following Burn Injuries.

#### **Invited Lectures and Workshops**

Dr. Thiru Annaswamy presented February Grand Rounds to the Department of Rehabilitation Medicine, Icahn School of Medicine at Mount Sinai in New York. He presented "Electrodiagnosis: More Than Just a Diagnostic Tool" and two resident didactic presentations Unusual Upper Extremity and Lower Extremity Entrapment Neuropathies.

Dr. Kathleen Bell lectured at the William A. Spencer Memorial lectureship at Baylor College of Medicine Houston in March. Her lecture was titled "Understanding and Treating the Post-Traumatic Headache".

Dr. Karen Kowalske gave an American Board of Physical Medicine and Rehabilitation Update at the AAP Residency & Fellowship Program Directors and Program Coordinators Workshop.

Dr. Samuel Bierner served as the Course Director at AAP for the course titled "Faculty Development: Teaching, Feedback, Supervision, and Mentorship Part II".

### Phala A. Helm, MD Distinguished Lectureship Honored



Dr. Phela Helm, Professor Emeritus The estate of Fred Snipes, M.D., has made a contribution for continuing support of the Phala A. Helm, M.D. Distinguished Lectureship. Dr. Snipes was a graduate from UT Southwestern Medical Center, class of 1956. He spent the first half of his career in Internal Medicine but returned to Baylor Medical School in Houston to study Physical Medicine and Rehabilitation (PM&R). He practiced

PM&R in Sherman, TX, refining his skills in pain management until he retired at the age of 72. The Phala A. Helm, M.D. Distinguished Lectureship is presented in honor of Dr. Phala Helm, Professor Emeritus, Department of PM&R, at the Annual Physical Medicine and Rehabilitation Scientific Day held each spring.

# Dallas Wheelchair Mavericks 2016 NATIONAL CHAMPIONS



The SCI center at the Dallas VA Medical Center is proud to claim several of the team's participating members their own including, Dallas VA PM&R physical therapist, Diamilet Collazo, specializing in spinal cord rehabilitation and adaptive sports, contributing her expertise and knowledge to help mobilize this team.

### Congratulations to our staff who are celebrating UT Southwestern Anniversaries:

- Kathy Beaudry (5 years)

- Melissa Brown (30 Years)

- Kimberly King (5 years)

### **ALUMNI**

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### Graduating Class of 2016...Where are they Going

Umu Al-Maawy General PM&R, Wichita Falls

Yuemeng Dai Spine Fellowship, University of Kansas Medical Center

Kimberly Davis General PM&R, US Physiatrists, San Diego, CA

Erika Gosai UT Southwestern PM&R SCI Fellowship

Li Liu General PM&R, combined SNF and inpatient rehabilitation, Orlando, FL

Jason Petrasic UT Southwestern PM&R Faculty

Steven Walton General inpatient rehabilitation, Private Practice, Austin, TX

Jeremiah West Private practice, San Antonio

**Hejun Yuan** Inpatient consults/clinics, Baylor Scott & White, Temple, TX

#### **Class of 2015**

Ira Boswell is currently practicing in Dallas and is a new father to twins.

If you are a UT Southwestern PM&R alum and have news you would like to share in the newsletter, please send the information to Terri Isbell at terri.isbell@utsouthwestern.edu

# **UTSouthwestern**

Medical Center

May 7, 2016 6 CME

Save the date - UT Southwestern 18<sup>th</sup> Annual PM&R Scientific Day

No Time NOT To Exercise: Exercise and the Life Span

Location: T Boone Pickens
REGISTER NOW

#### **Guest Speakers:**

Jonathan F. Bean, MD, MS, MPH (Harvard Medical School)

"Back Pain in Older Adults: How should Rehabilitative Care be Formulated?"

"Exercise is Medicine and Rehabilitation is Prevention: Caring for an Aging Nation"

Ross Querry, PT, PhD (UT Southwestern Physical Therapy)

"Integration of Exercise Physiology into Exercise Prescription"

#### **Faculty Speaker:**

Didem Inanoglu, MD (UT Southwestern, PM&R)

"The Role of Exercise in Modifying Lifestyle and Health Behaviors in Children: Prevention of Chronic Health Conditions"

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