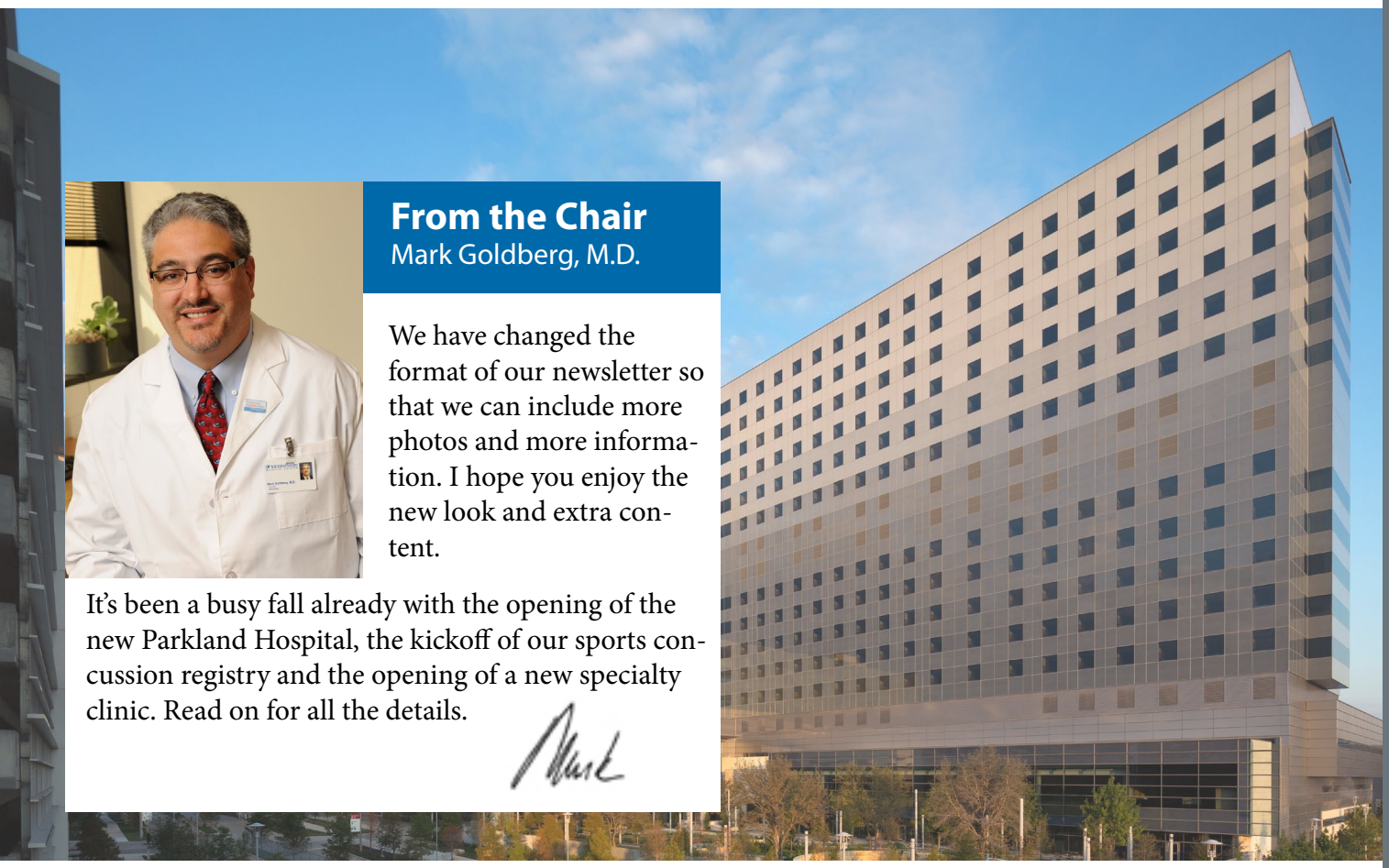
UT Southwestern Medical Center

Neurology and Neurotherapeutics



From the Chair

Mark Goldberg, M.D.

We have changed the format of our newsletter so that we can include more photos and more information. I hope you enjoy the new look and extra content.

It's been a busy fall already with the opening of the new Parkland Hospital, the kickoff of our sports concussion registry and the opening of a new specialty clinic. Read on for all the details.

First patient at new Parkland ED treated by our neurologists

The new Parkland Hospital had barely opened its doors on August 20th, 2015, when an ambulance carrying a stroke patient arrived at the Emergency Department. The patient, 70-year-old Michael Jones, was the first to arrive at the new ED.

Dr. Mark Goldberg and Dr. Kyle Blackburn, PGY-2 Resident (on right), were on service at the time. Jones, a dentist from Farmers Branch, was treated by Drs. Goldberg and Blackburn as well as Dr. John Barr, Chief of Radiology. Jones was not only the first patient in the ED but also the first to have a CT scan and an MRI in the new Parkland.

When asked where they wanted to go for treatment, Dr. Jones's wife, Becky, answered immediately, "The new Parkland Hospital."

"We knew they had a top quality stroke unit at Parkland, plus we had heard about the amazing technology at the new facility. I knew it would be the best place for my husband," she said.

"Dr. Jones received state-of-the-art care with a team that was extremely well prepared, right from the start," said Dr. Goldberg.

Dr. Jones was discharged from Parkland the following day and made a full recovery returning to work in just a few days.

What's Inside

Con-Tex Study kicks off with event featuring sports concussion experts and former NFL star, Mike Singletary

The kickoff of the CON-TEX study was held Saturday, September 19, 2015, at William P. Clements, Jr. University Hospital. Speakers included leaders in the fields of concussion, sports medicine and neurosurgery.

Munro Cullum, Ph.D., Professor of Psychiatry and Neurology and Neurotherapeutics, is principal investigator for CON-TEX. The study is designed to capture comprehensive, longitudinal data on sports-related concussion and mild TBI subjects. The data will give a "snapshot" of the current state of concussion assessment and treatment in youth athletes in the Dallas-Fort Worth area.

Information gathered through the registry will be the foundation on which the design of rigorous clinical research and valuation of treatments will be built. Individuals enrolled in the registry will have the opportunity to participate in future clinical trials testing innovative therapies and diagnostic approaches.

CON-TEX is a collaborative effort among UT Southwestern, Children's Health Children's Medical Center Dallas, Texas Scottish Rite Hospital for Children, UT Dallas, and Texas Health Resources Ben Hogan Sports Clinics.

The registry will allow for the comprehensive examination of concussion in young athletes and current management strategies and will guide best practices to improve the long-term health of student and adult athletes in Texas and beyond. CON-TEX is supported by TIBIR (Texas Institute for Brain Injury and Repair) and a generous donation by the David M. Crowley Foundation.

If you or your child is between 12 to 20 years or age and is interested in participating in this important registry, please contact:

Christopher Paliotta, B.A.
Lead Clinical Research Coordinator
214-648-7241
Email: christopher. paliotta@utsouthwestern.edu

Dr. Shane Miller, with the Sports Medicine Center at Texas Scottish Rite Hospital, talks about concussion in young athletes.

HER-Stroke clinical trial seeks to reduce stroke risk for women through gender-specific education

By Julie Kirchem, Department of Neurology and Neurotherapeutics

When Mark Goldberg, M.D., Chair of the Department of Neurology and Neurotherapeutics, sent out a request to his department for research ideas, Mandy Dirickson, RN, ANP-C, had a quick response.

"I wrote, 'If I had a pot of gold, I would study stroke prevention in women,'" she said.

Dirickson, as a clinical provider and stroke outreach coordinator for UT Southwestern, has all the stats at her fingertips and what they show is that while stroke affects both men and women, women are generally not aware of the signs of stroke.

"This is interesting considering their traditional cultural roles as caregivers," Dirickson said. "Women often direct the healthcare of others, but what about themselves?"

Her idea was to tailor stroke information for women and test whether the targeted education could make a difference.

"Interestingly, most women know stroke is an emergency and to call 911, but almost fifty percent cannot name a symptom of stroke," she said.

"Yet women have the highest rate of disability and more events of stroke in their lifespan than men. I think prevention is a great place to begin."

Dirickson and what she calls her "dream team*" developed the protocol for Helping to Educate Women about the Risk of Stroke (HER-Stroke). The study is funded by the St. Paul Foundation.

"We want to test the effectiveness of a gender-specific education intervention, not only for women with new stroke, but women with any risk factor of stroke," Dirickson said. "Our hypothesis is that women at risk for stroke, if given this targeted information, will have increased knowledge and thus higher adherence to prevention guidelines."

Clinical research coordinators will recruit up to 250 patients from within William P. Clements Jr., and Zale Lipshy University Hospitals. Phase 1 participants will receive the typical stroke education, and Phase 2 will receive either the typical education or the gender specific education. Participants will be contacted two weeks later by phone to analyze the patient's knowledge.

The educational materials include information about the signs of stroke and also risk factors that only affect women:

- **Preeclampsia with pregnancy (conveys a 30-year independent risk for stroke)**
- **Excessive alcohol consumption (greater than one beer or glass of wine per day)**
- **Smoking combined with the use of oral birth control**
- **Middle-aged and pre-menopausal women with untreated hypertension**
- **Atrial fibrillation**
- **Migraine with aura**
- **Risk factors for men and women: diabetes, obesity, hypertension, high cholesterol**

Mandy Dirickson, RN, ANP-C, is principal investigator for the HER-Stroke clinical trial.

"No one asks for a stroke. Yet we all know someone who has had one," said Dirickson. "If you, as a woman, were well informed early in your life that you had risks for future stroke, my hope is, it would drive you to take action."

*HER-Stroke committee:
Mandy Dirickson, RN, ANP-C
Mark Goldberg, M.D.
Mark Alberts, M.D.
Dai Wai Olson, RN, Ph.D.
Sonja Stutzman, Ph.D.
Maddie Stewart , RN
Ann Stowe, Ph.D.
Robin Novakovic, M.D.
Caryn Harper, M.S.
Charlene Supnet, Ph.D.
Sheila Allen
Jacob Deney, RN

MSA Clinic Team: Pravin Khemani, M.D.; Steve Hopkins, Clinical Research Coordinator; Toni Mitcham, RN; Steve Vernino, M.D., Ph.D.,; Bernadette Latson, M.S., Nutritionist; Elizabeth Kent, LCSW, Social Worker.

UT Southwestern establishes Multiple System Atrophy Clinical Center of Excellence with patient donation

By Julie Kirchem, Department of Neurology and Neurotherapeutics

Steven Vernino, M.D., Ph.D., and **Pravin Khemani, M.D.,** are co-directors of a new clinic at UT Southwestern Medical Center that will provide multidisciplinary care for patients with multiple system atrophy (MSA). MSA is similar to Parkinson's but has more widespread effects on the body and brain. The clinic will treat the varied symptoms that result from the disease as well as provide support for family and caretakers of patients.

The MSA Clinic was established with a donation from **Horace "Wade" Reed**, a patient of Dr. Khemani's, who was diagnosed with MSA.

"When I explained the overall vision of the clinic, Mr. Reed was enthusiastic about supporting it," said Dr. Khemani. "He recognizes the need for multidisciplinary care in MSA."

MSA is a diagnostic challenge for clinicians since its symptoms mimic diseases such as Parkinson disease and other conditions. In addition, patients and their families often need support to handle the accumulating burden of the disease. "

"Neurodegenerative diseases like MSA are particularly difficult for families and caregivers because patients rapidly lose independence and require help with mobility, blood pressure management as well as bowel and bladder function," said Dr. Vernino. "It can be challenging for them to find the resources they need."

Mr. and Mrs. Horace Reed MSA Clinic Donors

The new clinic will provide those resources with a multidisciplinary team of specialists that can improve patients' overall quality of life.

The clinic will also provide opportunities to integrate clinical care with teaching and research.

"I am collaborating with Dr. Vernino, other faculty members and scientists to explore translational research in MSA involving patients from our clinic," said Dr. Khemani.

Dr. Khemani says the larger goal is to grow the clinic through philanthropic support to take care of the needs of local and national MSA patients and their families, to perform scientific research towards better therapies, and train the next generation of specialists to diagnose and treat MSA effectively.

Dr. Elliot Frohman receives Barancik Prize for innovative multiple sclerosis research

By Gregg Shields, Sr. Communications Specialist, UT Southwestern News and Publications

Elliot Frohman, M.D., Ph.D., was one of three researchers on a team to win the 2015 Barancik Prize for Innovation in MS Research from the National Multiple Sclerosis Society.

The winning team of physician-scientists worked together for almost 10 years to produce novel, groundbreaking, and impactful research about the anatomy and biology of the retina and other structures of the eye in people with multiple sclerosis (MS). In their more than 50 publications, the team has literally "written the book" when it comes to applying optical coherence tomography (OCT), a common and easy-to-use eye scanning technique, to study MS.

"Fundamentally, science has been principally driven by competition," said Dr. Frohman, who directs the Multiple Sclerosis and Neuroimmunology Program at UT Southwestern. "I believe the collaborative work our group has done across our three centers, now expanding into 35 centers around the world, recognizes an iconic moment in science. The winning of the Barancik Prize, I believe, is a validation of the importance of the collaborative work our group is doing in the field of MS and a recognition of a different approach to scientific research."

Dr. Frohman, Professor of Neurology and Neurotherapeutics, and Ophthalmology, holds the Irene Wadel and Robert I. Atha, Jr. Distinguished Chair in Neurology, and the Kenney Marie Dixon-Pickens Distinguished Professorship in Multiple Sclerosis Research. Dr. Frohman is also adjunct Professor of Behavioral and Brain Sciences as well as Professor of BioEngineering and Computer Science at UT Dallas.

Dr. Laura Balcer of New York University Langone Medical Center and Dr. Peter Calabresi of Johns Hopkins School of Medicine are the other members of the prize-winning team.

Thanks in large part to the team's efforts, OCT has transitioned from a tool for ophthalmologists who treat glaucoma patients to a mainstream method used to study disease mechanisms underlying MS. Research from the group has shown that OCT can identify unsuspected damage in nerve fibers at the back of the eye, and that this damage echoes more global injury in the brain during the course of MS, making it an invaluable tool for measuring the success of treatments and during clinical trials of new therapies. The team has also related different types of nerve fiber damage in the eye to the loss of visual acuity and vision-related quality-of-life scores.

This trio of researchers leading the International MS Visual Consortium has established OCT as an accessible and critical tool in patient care and clinical trials, thereby developing a new assay of disease pathogenesis. Numerous trials of potential disease-modifying therapies now incorporate

OCT measurement into outcomes, and ongoing and new studies of novel neuroprotection agents have highlighted the use of OCT as a robust "surrogate" or indirect measure of nerve fiber health and damage.

"We're thrilled to present the 2015 Barancik Prize to Drs. Frohman, Balcer, and Calabresi," said Dr. Timothy Coetzee, Chief Advocacy, Services, and Research Officer at the National MS Society. "This team has used innovative research on the eye to open up a window to brain health and damage, making it possible to apply widely available tools to track clinical care and clinical trial outcomes in people with MS, while offering novel insights into pathology of the disease."

Dr. Frohman has published more than 250 peer-reviewed articles, book chapters, and monographs, and serves as a principal investigator on a number of MS clinical trials. He also serves as a reviewer for numerous journals in the field of neurology.

Dr. Elliot Frohman

Dr. Frohman's wife, Teresa C. Frohman, is a physician assistant in Neurology and Neurotherapeutics at UT Southwestern who has been his principal collaborator for nearly 30 years. Together, they have co-authored over 60 peer-reviewed manuscripts.

About the Barancik Prize for Innovation in MS Research

The Prize seeks to recognize and encourage exceptional innovation and originality in scientific research relevant to multiple sclerosis, with emphasis on impact and potential of the research to lead to pathways for the treatment and cure for MS, and scientific accomplishments that merit recognition as a future leader in MS research. The international prize is made possible by the generosity of the Charles and Margery Barancik SO Foundation, and is administered through the National Multiple Sclerosis Society.

Benjamin Greenberg, M.D., wins UT Regents' Outstanding Teaching Award

Dr. Benjamin Greenberg

Dr. Benjamin Greenberg, Associate Professor of Neurology and Neurotherapeutics and Pediatrics, received the 2015 Regents' Outstanding Teaching Award. The Regents' Award recognizes educators in the University of Texas System for mentoring and personal commitment to students and the learning process.

Teaching philosophy: "Teaching provides physicians with the ability to impact patients that they will never meet. A successful teacher connects with students in many ways, makes complex material accessible, inspires students to pursue knowledge and understand the importance of that knowledge, leads students to ask difficult questions, doesn't have all the answers, and is passionate about the most mundane topic. I am still striving to be a successful teacher."

Research: Dr. Greenberg's research focuses on neuroimmunology, specifically transverse myelitis, neuromyelitis optica, and multiple sclerosis. He works to identify biomarkers that will be diagnostic, prognostic, and advance the understanding of these rare disorders. He also specializes in the design and implementation of Phase I translational clinical studies for these conditions.

Other honors: Since 2010, Dr. Greenberg has been recognized with 10 UT Southwestern Medical School teaching awards. He has won the First-Year Medical School Teaching Award in each of the past six years.

Did you know? Before moving to Texas, he was a firefighter in Baltimore County, Maryland.

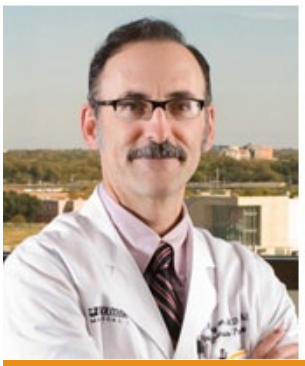
Med Students vote Neuroscience "best course"

For the 8th year in a row, first-year UT Southwestern medical students voted Neuroscience the best course in medical school. Course Directors for 2014-2015 were Dennis Burns, M.D., and Benjamin Greenberg, M.D.. In addition, Dr. Burns, Dr. Greenberg and Steven Vernino, M.D., Ph.D., won individual teaching awards.

Dennis Burns, M.D.

Benjamin Greenberg, M.D.

Steve Vernino, M.D., Ph.D.



Elliot Frohman, M.D., Ph.D.

Laura Lacritz, Ph.D.

Steve Vernino, M.D., Ph.D.

Three Neurology faculty members elected to Southwestern Academy of Teachers (SWAT)

Elliott Frohman, M.D., Ph.D., Laura Lacritz, Ph.D., and Steve Vernino, M.D., Ph.D., are now members of SWAT, a group of elite educators at UT Southwestern. SWAT's goals are to foster excellence in teaching at all levels, reward superb teachers, stimulate innovation in education, and promote scholarship in education.

Nancy Monson, Ph.D., selected for National MS Society Honor

By Julie Kirchem, Department of Neurology and Neurotherapeutics

The National Multiple Sclerosis Society has selected Nancy Monson, Ph.D., for its 2015 Volunteer Hall of Fame for Researchers.

Dr. Monson, Associate Professor of Neurology and Neurotherapeutics and Immunology, leads a translational research lab at UT Southwestern where she and her team have investigated the impact of B cells on multiple sclerosis and the mouse model of MS (Experimental Autoimmune Encephalomyelitis.)

Dr. Nancy Monson

"People connected to the work of the Society know her, admire her, and recognize her as a thought leader within MS research," said Shannon Nelson, National MS Society Regional Director for Individual Giving. Nelson nominated Dr. Monson for the Hall of Fame.

"I see this honor primarily as a shout-out to UT Southwestern's focus on patient care, both at the bedside and the bench," said Dr. Monson. " Our job is to take what we discover at the bench and no matter how challenging, apply that knowledge to patient care."

Since 1999, Dr. Monson has been recognized as a pioneer in the pursuit of innovative ways to diagnose and treat multiple sclerosis.

"When Elliot Frohman and Mike Racke first recruited me, we would get samples in the lab of MS patients who were mostly women and in my age bracket. It was profoundly moving to me that these patients were in battle every day with MS," said Dr. Monson. "Knowing that solidified my resolve to join with patients in their battle."

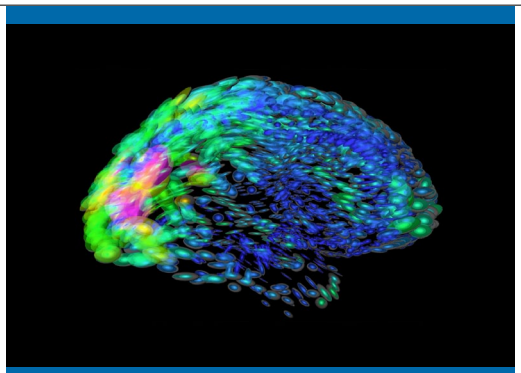
Dr. Monson and her team developed a DNA "signature" for MS based on patterns of variations in certain immune B cell genes that might be used to identify people with relapsing-remitting MS early in their disease course. Dr. Monson's research led to MSPrecise, a next-generation sequencing assay that can identify MS at first clinical presentation and reduce misdiagnosis rates.

"Along with being an incredible researcher, her commitment to making connections and creating MS awareness set her apart," said Nelson. "She is able to share the landscape of the research community in a digestible way and moves people to do more and give more."

Dr. Monson participates often as a volunteer for the society. Some of her volunteer activities include multiple speaking engagements and participation in many fundraising efforts.

And she and her team will continue to look for answers in the lab.

"So during those late nights when my team and I are burning the midnight oil and wondering if the next breakthrough will ever come, I remember the patients I have met and talked to over the years, and it energizes me knowing we are all fighting this disease in every way we know how," said Dr. Monson. "I am a part of that community and I will not give up because these patients, their families, their health care team don't give up. We are in this together to stop MS and we are going to do it."



Upcoming Events

Neurotherapeutics Update
Review and update in key clinical areas of neurology
Saturday, November 14, 2015
T. Boone Pickens Biomedical Building

Neuroscience Seminar Series
Theo Palmer, Ph.D., Stanford University
"Do Mice Get Autism? Modeling the Synergies Between Genes and Environment in Neurodevelopmental Disorders"
Tuesday, November 17, 2015
Simmons Building 4.122

Headache Medicine Fellow, **Cristina Wohlgehagen**, won a Frontiers in Headache Research Scholarship for her poster, "Prevalence of Headaches in Patients with Epileptic versus Non-Epileptic Seizure Disorders." The scholarship covers her attendance at the American Headache Society's 2015 Scottsdale Headache Symposium where she will present her research poster.

Alzheimer's Disease Center holds first Brain Smart University

Dr. Mary Quiceno, Barb Davis, M.A., LPC, Clinical Research Manager, and Pat Knowles, Community Outreach Coordinator, gave talks at the Alzheimer Disease Center's first ever Brain Smart University. It was held on Saturday, October 3, 2015 at Hamilton Park United Methodist Church in northeast Dallas.

The class is a way to reach out to the community with information about dementia, Alzheimer's and recommendations for improving cognitive function. The next Brain Smart University is scheduled for January 2016.

Hamilton Park United Methodist Church in northeast Dallas

Movement Disorders team offers Parkinsons Symposium on campus and at home

The Movement Disorders section hosted a symposium on Parkinsons disease for patients, families and caregivers on Saturday, September 12, 2015. Movement Disorders faculty gave lectures on the latest in Parkinsons research and therapies.

The symposium, organized by Dr. Neepa Patel, drew a large crowd on campus and was also available by livestream for those who could not be there in person. Patients like the couple pictured above right were able to watch the entire symposium live at home and email questions to the faculty who answered them live during the event.

The Movement Disorders group has also made videos of the symposium available online. Click here to view them.