Team Approach to Patient Care

The way our patients feel about communication during their hospital stay is moving in the right direction. And it’s not just our patients who feel it. A new initiative, called “Round Together,” is increasing both patient and staff satisfaction.

“Our patients were telling us they feel like we didn’t know each other,” said Sarah Richards, MD, assistant professor, internal medicine, and medical director of patient experience at Nebraska Medicine. “And that makes it more difficult for them to trust us.”

The patient experience team added a question to inpatient surveys in May 2017. The new question asks “How well staff worked together to care for you?”

The group decided on a simple idea to increase the frequency the nurse and the providers are at the bedside at the same time.

“The nurse is there for 12 hours,” Dr. Richards said. “The nurse always knows what’s going on with the patient.”

It’s not a new idea, but barriers have existed that prevented it from being a consistent practice. In August 2018, a “Round Together” pilot was launched on 6 Neuro, led by Scott Diesing, MD, assistant professor of neurological sciences and medical director of 6 Neuro. It involved posting a card on the patient’s door with instructions on how to reach the patient’s nurse.

“We wanted to show our patients that we know each other and we communicate with one another,” Dr. Diesing said.

Dr. Diesing met with the nurses, surgeons and other providers who round on 6 Neuro to explain the pilot.

“When we began the pilot, we alerted the unit the stroke team was here and ready to round,” Dr. Diesing said.

The unit soon saw their patient satisfaction scores rise, especially for questions regarding how well the doctor and nurse listened.

“We also saw a 10% reduction in pages and Perfect Serve messages,” Dr. Diesing said. “This is something that physicians want, nurses want and the patients want. We just needed a way to execute it.”

“When the physicians and the nurse round in the room with the patient and family, they have a better understanding of the care being provided and the expectations for their stay,” said Mindi Arno, nurse on 6 Neuro. “The open discussion and goal setting puts the patient and family at ease, as they know what is happening for the day. The patient also feels like they have some
Message from the Chair

The Department of Neurology has progressed strongly during the past six months, with notable achievements on many fronts. We remain clear in our vision and steadfast in our commitment to our missions of clinical care, research, education, and community outreach. The collaborative efforts of faculty, researchers and staff continues to advance biomedical discovery and neurological health across our institution and region. It is a rare privilege to work alongside the dedicated, caring medical professionals and staff in our department. I invite you to read our newsletter and learn more about our accomplishments.

New Faculty

Afasneh Shirani MD, MSCI, and Lakshman Arcot Jayagopal, MD, joined our ranks in July. Dr. Shirani is an Assistant Professor in the Division of Multiple Sclerosis (MS) and has received several awards, including the Clinician Scientist Development Award from the US National MS Society. Dr. Jayagopal is an Assistant Professor in the Epilepsy Division and the Multiple Sclerosis Division, having completed fellowships in Neuroimmunology and Epilepsy.

Faculty News

Dr. Scott Diesing, Medical Director for the 6 Neuro Inpatient Care Team, has implemented a team approach to patient care with joint rounding of physicians and nurses, which has increased both patient and staff satisfaction. To best accommodate this new approach, the Neuropsychology Team has moved into a newly renovated clinical suite and office space to support the growing team and neuropsychological patient service. Dr. Taraschenko and the Epilepsy team have again been recognized for attaining the Level 4 Epilepsy Center designation by the National Association of Epilepsy Centers. The Huntington’s disease Clinic, under the leadership of Dr. Amy Hellman, has been designated for the fifth year as a Huntington’s Disease Society of America (HDSA) Center of Excellence. We continue to provide and plan for outreach activities and symposia to educate the medical community and patients about neurological disease and treatment. Dr. Rana Zabad recently conducted a highly successful MS disease symposium, for physicians and other health care providers.

Our faculty members continue to receive recognition outside of UNMC/Nebraska Medicine:

- Danish Bhatti, MD, received the innovative Practices in Education Award.
- David E. Warren, PhD, was the 2019 Recipient of the Kinman Oldfield Alzheimer’s Research Award.
- David E. Warren, PhD, was also awarded the Nancy and Ronald Eagan Alzheimer’s Scholarship Fund Award.
- Diego Torres-Russotto, MD, FAAN, was elected to participate in the 2019-2020 Transforming Leaders Program.
- Harris Frankel, MD, was recognized for his leadership in Becker’s Hospital Review’s “100 hospital and health system chief medical officers to know.” This is Dr. Frankel’s fourth consecutive year receiving this honor. Dr. Frankel is a Senior Vice President and Chief Medical Officer for Nebraska Medicine, and an associate professor for UNMC.
- John Bertoni, MD, PhD; Peter Fayad, MD; Harris Frankel, MD; Sachin Kedar, MD, FAAN; and Daniel Murman, MD, MS, FAAN, were recognized in the Omaha Magazine’s annual list of Best Doctors in America 2019.
- Matthew Rizzo, MD, FAAN, FANA, was elected to be the Chair of the Board of the American Brain Coalition (ABC), a nonprofit organization comprising the leading United States’ professional neurological, psychological, and psychiatric associations and patient organizations. The ABC seeks to advance the understanding of brain functions, and to reduce the burden of brain disorders through public education and advocacy.
• Sachin Kedar, MD, FAAN, was elected a Fellow of the American Academy of Neurology (FAAN). Dr. Kedar also received the Merit Award by the North American Neuro-ophthalmology Society.
• Tony Wilson, PhD, received The Distinguished Scientist Award sponsored by the Chancellor, which recognizes the top research scientists at UNMC during the past 5 years.

Graduation
The Department held the 2019 graduation ceremony with family and friends on May 30. We celebrated resident graduates Erin Smith, MD; Krishna Mourya Galla, MBBS; Hae Young Baang, MD; Fuad-al Ali, MD; Movement Disorders fellow David Whitney, MD; and Neuropsychology fellow, Erica Schmidt, PhD. Resident graduate Erin Smith, MD, received the Gold Humanism Honor Society by UNMC medical students.

New Residents and Fellows
In late June, we welcomed five new first-year residents: Kiley Cameron, MD; Erin Dennis, MD; Ismail Fahad, MBBS; Jennifer Shaw, MD; Daniel Zhou, MD; and one second-year resident: Saleem Khawaja. We also welcome new fellows Sarah Doss, MD; Erin Smith, MD; and Deepmala Nandanwar, MBBS; and Movement Disorders fellow, Debra O’Connell, PhD, has joined us in Neuropsychology.

New Developmental and Regenerative Neuroscience (DRN) Division
The new DRN Division, is advancing efforts to translate basic research to clinical benefits. The Department is recognized as first among its regents’ designated peer departments in terms of extramural research funding. The DRN faculty include: Anna Dunaevsky, PhD; Padmashri Ragunathan, PhD; Sung-Ho Huh, PhD; Shelley Smith, PhD; and Xiaowei Li, PhD.

New Research Grants
Since the beginning of 2019, the department research faculty has been active and involved in new research grants. The awardees include: Anna Dunaevsky, PhD; Bethany Lowndes, PhD/MPH; Daniel Murman, MD/MS/FAAN; David Warren, PhD; Jennifer Merickel, PhD; Matthew Rizzo, MD, FAAN; Olga Taraschenko, MD/PhD; Padmashri Ragunathan, PhD; Shelley Smith, PhD/FACMG; Sung-Ho Huh, PhD; Tony Wilson, PhD; and Xiaowei Li, PhD. We also have current clinical trials in the areas of MS, ALS, PD, HD, AD, Stroke, and Epilepsy.

Sincerely,

Matthew Rizzo, MD, FAAN, FANA
Francis and Edgar Reynolds Professor
Chair, Department of Neurological Sciences
Clinical Program Leader, Neurological Sciences
Director, Great Plains IDeA CTR Network
Director, Mind and Brain Health Laboratories
Co-Director, Center for Integrative and Translational Neuroscience
Chair, American Brain Coalition
Neuropsychology Clinic Expanding

Neuropsychology is a specialty of Psychology that focuses on brain function and behavior. Neuropsychological evaluations involve a clinical interview and standardized tests of cognition. Neuropsychologists assist with differential diagnosis and treatment planning for patients with neurological and psychiatric disorders, and they often work in multidisciplinary teams.

Because the neuropsychologists at UNMC work closely with neurology providers, in 2017, the neuropsychologists moved from the Nebraska Medicine Psychology Department to the Department of Neurological Sciences (DONS).

Since that time, the Neuropsychology division has continued to grow and evolve. Three new Neuropsychology faculty members will join DONS in 2019. Kate Higgins, PsyD was hired part-time, in May 2019, to see pediatric and adult patients with concussion/TBI in support of the developing DONS TBI Program. In October 2019, two full-time faculty members, Lindy Fields, PhD and Erica Schmidt, PhD, will join the division and primarily see patients with memory and movement disorders.

By the end of 2019, Neuropsychology will have doubled in size since its move to DONS in 2017. The division will include nine faculty members, which will make it one of the largest academic Neuropsychology divisions in the country.

To support the rapid growth of the division, in March 2019, Neuropsychology moved to a newly renovated suite on the fourth floor of Doctors Building North that is more than twice the size as the previous clinic suite. The new space includes seven faculty offices, two fellow offices, a large workstation room for eight psychometrics, a fully-equipped conference room, and seven testing/exam rooms.

“It’s an exciting time for Neuropsychology at UNMC,” says Amelia Nelson, PhD, Neuropsychology division chief. “The addition of new faculty will provide more opportunities for interdisciplinary clinical and research collaborations – and will help to reduce our clinic waiting list.”

Clinical Skills Days

As the Neurology co-director of the M1-M2 Neurosciences Core course, Dr. Diego Torres-Russotto is leading the Department of Neurological Sciences faculty in developing new approaches to medical student education.

Part of the course is the Neurology Clinical Skills Days, in which first-year medical students are divided into small groups and guided through a series of practical, experiential learning sessions taught by the DONS faculty, fellows, and residents. Students perform a lumbar puncture in the UNMC Clinical Simulation Lab, learn the techniques for an unconscious patient exam, and learn to recognize common neurologic signs and symptoms. In perhaps the most popular activity, each student performs a complete neurologic screening exam on a neurology inpatient with the guidance of a faculty member.

Dr. Torres said, “Our faculty have devoted hundreds of hours to developing and teaching these sessions. It’s a tremendous investment of time and effort, but the student response makes it all worthwhile. The students love the opportunity to learn hands-on skills, and they especially love interacting with actual patients. Our patient exam session is often the students’ first exposure to real patients. It truly inspires them to learn – and hopefully to consider careers in neurology!”

The M1-M2 Neurosciences Core course is one of the highest-rated courses in the M1-M2 curriculum.
The National Association of Epilepsy Centers (NAEC) has again recognized Nebraska Medicine as a Level 4 epilepsy center. This distinction is awarded to hospitals that provide complex forms of intensive neurodiagnostic monitoring and psychosocial treatment, along with a complete evaluation for epilepsy surgery. Level four is the highest level of care awarded by NAEC.

“The reaccreditation as a Level 4 epilepsy center clearly highlights the excellence of our expert team, facilities and specialized services in providing the best care for epilepsy in the region,” says Olga Taraschenko, MD, PhD, neurologist and program director. “The evaluation of competencies is extensive and includes every aspect of care from the nursing protocols to surgical approaches. Our experienced providers, including board-specialized epileptologists, neurosurgeons, neuropsychologists and epilepsy dieticians, lead the region in the treatment of epilepsy. They work continuously to bring the latest seizure treatment technologies to Nebraska Medicine and deliver hope to patients who live in the shadow of drug-resistant epilepsy.”

“We are extremely proud of this reaccreditation,” says Ryan Kenney, director, Orthopaedics and Neurological Sciences. “It speaks to the collaboration amongst our amazing multidisciplinary team, as well as the treatments and services we are able to offer to patients throughout the region. Our epilepsy program is an excellent representation of our values of innovation, teamwork, excellence and healing.”

The epilepsy team is working to offer services to rural parts of Nebraska and is opening its first telehealth clinic in Hastings, Neb., in July.

This latest accreditation certifies our program as a Level 4 epilepsy center for 2019 and 2020.
Multi-Disciplinary Approach Focuses on Tackling CAR-T Therapy Toxicity

By Matthew Lunning, MD, and David Anderson, PhD

Where does the next great idea come from? How do we take it to the next level? We often find ourselves asking these questions. Many times this leads to niche experiments or derivations of recent results.

Expanding these questions to researchers in other disciplines recruits novel insights from a broader perspective, and promises to create a collection of ideas that may be more intuitive than previously considered. At the Fred & Pamela Buffett Cancer Center at the University of Nebraska Medical Center (UNMC) and Nebraska Medicine, we promote a cross-disciplinary research model.

Recently, our patients have been able to receive an emerging technology called chimeric antigen receptor (CAR) T-cell therapy. In one exciting example, patients with relapsed or refractory diffuse large B-cell lymphoma have shown outcomes following CAR T-cell therapy which led to Food and Drug Administration approval.

As exciting as the results have been for this underserved population, the toxicities encountered during and following CAR T-cell therapy can be sobering. In particular, patients may be devastated by symptoms associated with cytokine release syndrome and neurotoxicity. In order to take CAR T-cell therapy to the next level, it is critical to learn how to predict CAR T-related toxicities and subsequently pave the way for emerging CAR technologies in other cancer populations.

Actionable biological predictors of CAR T-related toxicities are currently lacking, and it remains unknown whether these toxicities lead to subsequent impairments in quality of life and instrumental activities of daily living. To address this major barrier to the success of CAR T-cell therapy, the Fred & Pamela Buffett Cancer Center is teaming up with Matthew Rizzo, MD, the director of the UNMC Mind & Brain Health labs and chair of the UNMC Department of Neurological Sciences.

Our multidisciplinary team of clinicians and scientists (pictured) will attempt to link biological predictors of CAR T-related toxicities to the occurrence of cognitive dysfunction, reduced mobility, and impaired driving performance and safety. Through these efforts, the team hopes to develop biomarkers of CAR T-related toxicity, identify behavioral intervention strategies to improve mobility and activity levels, and establish criteria for determining when it is safe to continue driving following treatment.

The research may help pave the way for informing post-CAR T-cell therapy guidelines in areas where it may be difficult in a multi-institutional fashion. Engaging clinician and scientist colleagues from both within and outside our respective specialties will continue to expand on bodies of knowledge that would otherwise not be possible. Our cross-disciplinary research model has fostered an explosion of questions that may lead to multi-institution collaborations to continue on this avenue of collaboration and growth. We are proud to be part of the BigTen Cancer Research Consortium, which provides the resources and opportunities for this growth.
The Distinguished Scientist Award

The Distinguished Scientist Award — which is sponsored by the chancellor — recognizes researchers who have been among the most productive scientists at UNMC during the past five years. Dr. Tony Wilson was presented with this prestigious award on March 5, 2019, during a campus-wide ceremony.

Name: Tony Wilson, PhD
Title: Associate professor, UNMC Department of Neurological Sciences
Joined UNMC: 2009
Hometown: Borger, Tex.
Research focus: Cognitive neuroscience

The goal of my research is: To understand how human brain systems serve cognition, and how specific lifestyle and health factors affect these brain systems across the lifespan.

My research will make a difference because: Our understanding of human brain function is in its infancy and unlocking these secrets is critical to developing new and improved treatments for the myriad of brain disorders that currently have no reasonable treatment or cure.

The best advice I’ve ever been given is: Be persistent

Three things you may not know about me are:
• My evenings are filled with toddler fun.
• I know every Metallica and Ozzy song, up until about 1995.
• I have had more MEG scans than anyone else in Nebraska and possibly the United States.

Mini-Fellowship in Movement Disorders

Online Movement Disorders Course
Training the Neurologists of Tomorrow

Introduction
The course will be delivered using a small group format, which will create a community of learning. Once a year, during the application period, enthusiastic and motivated cohorts will be selected to participate in this guided course. Every other week, participants will complete one of the 12 modules in movement disorders.

Program Difficulty
You are expected to perform at a minimum level to stay in the course. To graduate, you must have performance within one Stand Deviation of the group average.

Target Audience
The course will provide tools and training intended for General Neurologists with prior training in Neurology including practicing Neurologists and academicians.

Goals
• To impart knowledge and skills that will be helpful in diagnosing and treating patients with movement disorders.
• To fill in the gap in sub-specialty education where it exists internationally.
• As an optional part of your professional development as a neurologist, this course promises to be useful and effective in allowing you to develop special skills. These skills will be helpful in diagnosing and treating movement disorders.
The Division of Developmental and Regenerative Neuroscience (DRN) was formed in July 2018 with the mission to identify causes and mechanisms for neurological disorders across the lifespan that will lead to improved diagnosis and novel treatments. To facilitate this, we are bringing together the expertise of basic and clinical faculty members to link DRN research to translational outcomes. There are currently four researchers in the division, and we are actively recruiting new faculty members. DRN members also teach graduate courses and mentor PhD students and post-doctoral fellows.

**Dr. Anna Dunaevsky, PhD**  
Professor  
Dr. Dunaevsky’s research is focused on the genetic and environmental causes of neurodevelopmental disorders including cognitive and motor disabilities. Her current studies involve synaptic development and plasticity in learning in models of autism and Fragile X syndrome. Her research is funded by two R01 grants from the National Institutes of Health (NIH), one of which was just renewed for another five years.

**Dr. Shelley Smith, PhD**  
Professor  
Dr. Smith’s research is in the identification of genes influencing neurodevelopmental disorders, particularly hearing loss and cognitive disorders. She directs the NIH CoBRE, the Molecular Bases of Neurosensory Systems, and also directs the UNMC MD-PhD Scholars program.

**Dr. Sung-Ho Huh, PhD**  
Assistant Professor  
The goal of Dr. Huh’s research is to identify ways to regenerate damaged cells in the inner ear and in the kidney by harnessing the molecular factors in normal development to cure deafness and renal disease. His research is supported by an NIH K99/R00 grant, and he is a member of the Holland Regenerative Medicine Program. His work was recently cited in a blog by the director of the NIH: https://directorsblog.nih.gov/2019/05/23/a-nose-for-science/.

**Dr. Xiaowei Li, PhD**  
Assistant Professor  
Dr. Li is the newest faculty member, joining UNMC in August, 2018. Xiaowei’s innovative research focuses on the treatment of injury to the brain by combining bioengineering and cell biology strategies to construct biomaterial platforms supporting the introduction and growth of regenerative cells. He is also a member of the Holland Regenerative Medicine Program.

**Dr. Padnashri Ragunathan, PhD**  
Instructor  
Dr. Ragunathan’s research investigates the development of neurons and astrocytes, their role in neurodevelopmental disorders, and their contribution to the effects of teratogens such as alcohol. She has expertise in a variety of techniques including electrophysiology, in vivo imaging, and behavioral analyses. Her current NIH funding is focused on the alcohol-induced alterations in basal and motor learning induced astrocyte signaling and synaptic plasticity in a mouse model of Fetal Alcohol Spectrum Disorders (FASD). Understanding the effects of alcohol exposure on astrocytes could lead to new treatments for children with FASD.

**Ms. Jerrie Dayton, MFA**  
Grants Administration Coordinator  
Ms. Dayton handles all facets of grant application including budget development, submission, tracking, and preparation of progress reports as well as ordering for the laboratories in DRN. She is also the administrator for the CoBRE program.
Danish Bhatti Wins Innovative Practices in Education Award

This award recognizes an individual who demonstrates ingenuity, courage and creativity in teaching including innovations in use of educational technology, experiential learning, adoption of simulation and creative use of the classroom, as well as an engaging presentation style. Dr. Danish Bhatti was awarded this recognition on February 7, 2019.

Name: Danish Bhatti, MD
Title: Assistant professor, UNMC
Department of Neurological Sciences; director of International Neurology Program; co-director of Comprehensive Parkinson’s Disease Clinic; associate program director, Movement Disorders Fellowship

Joined UNMC: 2009 (as resident) and stayed on as faculty after fellowship.

Hometown: Islamabad, Pakistan

You are the recipient of the Innovative Practices in Education Award. How has innovation played a part in your teaching career?

Innovation has allowed me to reach out long distances without being limited by physical classrooms. I found the online education tools allow me to offer material at self-pace for various learners and at self-selected times. This is very valuable for adult learners, especially residents, who need flexibility of timing. This also proves highly valuable when teaching across the world internationally, given differences in time zone, and allows the formation of a community of learning with students from various places. This allowed me to run a successful online movement disorders mini-fellowship in Pakistan, with participants even from Afghanistan, Saudi Arabia and United Arab Emirates.

Another strength of online education is the ability to assess and monitor the progress and engagement of the learners and provide formative feedback to enhance, correct and guide learning. Online tools allow us to offer curated content to learners and follow their engagement and progress. This feedback is useful with local learners but imperative to teach at long distances and internationally. UNMC provided me with indispensable tools and education to be able to deliver these programs within our neurology residency and internationally.

Describe your proudest moment as an educator.
My proudest moment was receiving the International Best Teacher Award for my work in Pakistan from the Pakistan Society of Neurology within three years of my work with them. That made me happy, knowing that I have made an impact on neurologists in the country and would impact thousands of patients’ lives. This makes medical education so satisfying.

What advice would you give other faculty members who want to have an impact in education?
Everyone is already doing great teaching. I have personally thoroughly enjoyed and benefited from faculty at UNMC as a resident. What may enhance outcomes for the learners is more feedback, more from faculty to the learners and more from learners to the faculty. This ongoing formative feedback is very useful in guiding the learner and the teacher and is much better than a summative assessment. Online tools don’t replace the learning experience, only enhance it.

Do you have a favorite quote or philosophy on teaching?
“If we teach today’s students as we taught yesterday’s, we rob them of tomorrow.”
— John Dewey
Welcome New Faculty

Afsaneh Shirani, MD, MSCI

Hometown:
Tehran, Iran

New title:
Assistant Professor of Neurology, Division of Multiple Sclerosis, Department of Neurological Sciences

Research/Professional Interests:
Multiple sclerosis and other demyelinating autoimmune diseases; drug effectiveness and precision medicine in multiple sclerosis; biomarkers particularly neuroimaging biomarkers in multiple sclerosis; disease progression and outcome research; neurorepair and neuroprotection strategies in the central nervous system.

How I fell in love with neurology/neuro-ophthalmology:
The brief answer is that it was hard for me not to fall in love with neurology! As a teenager, I was drawn to problem solving, which led me to learn a number of computer programming languages. I enjoyed simplifying problems and developing algorithms to approach them. Later, I found that this is a common approach in medicine. Specifically, my enthusiasm in pursuing a career in neurology developed in medical school as I started to learn how our brain makes us who we are. I was also fascinated by the rationale behind neuroanatomical localization and how the intricate clinical findings help to narrow down the diagnosis. Understanding the incredibly complex human brain, and consequently understanding neurological disorders, became my long-term interest and academic goal. I have been very fortunate to have had wonderful mentors throughout this ongoing journey! I was also touched personally when my much-loved grandmother developed and died from Alzheimer’s disease after a long struggle, and when another relative was diagnosed with multiple sclerosis just a few months after her wedding. These personal experiences further shaped my desire to become a clinician-scientist in academic neurology so I could help effect change in the lives of others similarly impacted.

Education:
• M.D., Tehran University of Medical Sciences, Iran
• Postdoctoral Research Fellowship, Pharmacoepidemiology of Multiple Sclerosis, University of British Columbia, Vancouver, Canada
• Internship, University of Texas Southwestern Medical Center, Dallas
• Residency, Neurology, University of Texas Southwestern Medical Center, Dallas, Texas
• M.S., in Clinical Investigation, Washington University, St. Louis, Missouri
• Fellowship, Multiple Sclerosis and Neuroimmunology, Washington University, St. Louis, Missouri

Memberships:
• American Academy of Neurology
• American Neurological Association
• American Society of Neuroimaging
• Transverse Myelitis Association
• International Society of Neuroimmunology

Three things people may not know about me:
1. Hiking is my peaceful way of relaxing!
2. I am a huge fan of TED talks!
3. I am a great believer in the quote, “Money can’t buy happiness, but it can buy chocolate, which is kinda the same thing!”
Lakshman Arcot Jayagopal

Hometown:
Chennai, India

New title:
Assistant Professor of Neurology

Research/Professional Interests:
• Autoimmune epilepsy/encephalitis
• ICU EEG
• Therapies in MS and autoimmune conditions

How I fell in love with neurology/neuro-ophthalmology:
I was drawn to neurology given the complexities of the brain and the challenging unknowns associated with the field. My dual interests in neuroimmunology and epilepsy is driven by a passion towards helping patients with autoimmune neurological diseases which are often manifested by intersection of varied neurological subspecialities.

Education:
• M.B.B.S., PSG Institute of Medical Sciences & Research, Coimbatore, India
• Internship, Internal Medicine, University of Nebraska Medical Center, Omaha, Nebraska
• Residency, Neurology, University of Nebraska Medical Center, Omaha, Nebraska.
• Fellowship, Multiple Sclerosis/Neuroimmunology, University of Washington Medical Center, Seattle, Washington
• Fellowship, Epilepsy, University of Texas at Houston, Houston, Texas

Memberships:
• American Academy of Neurology
• American Epilepsy Society
• National Multiple Sclerosis Society

A few things people may not know about me:
1. I religiously follow every major movie/TV award show.
2. I enjoy travelling, hiking and antique shopping.
Cadaver Training

As the director of the Department of Neurological Sciences’ Movement Disorders fellowship, Dr. Diego Torres-Russotto is piloting a new method of teaching the art and science of botulinum toxin injection for patients with migraines, dystonia, and spasticity.

Dr. Torres explained, “When a patient has a chronically spasming muscle, we can force it to relax by injecting it with botulinum toxin. But this isn’t as easy as it sounds! Many of the muscles we need to target are small or hard to locate, and everyone’s anatomy is a little different. We have to find the right muscle and inject the part with the highest concentration of nerve end plates. At the same time, we also have to avoid hitting blood vessels, nerves, and unrelated muscles. Injecting the wrong area can be dangerous.”

To provide the Movement Disorders fellows with the most comprehensive training in botulinum toxin injection, Dr. Torres is partnering with gross anatomy professor Dr. Kimberly Latacha to hold a series of anatomy training sessions using the cadavers in UNMC’s state-of-the-art Gross Anatomy/Neurosciences Laboratory. This approach allows the fellows to both review surface anatomy and directly view the underlying structures. Separate training sessions are held to cover the muscles of the face, neck, upper limbs, lower limbs, and trunk.

Movement Disorders fellow Dr. Nabeel Syed commented, “The cadaveric sessions are amazing. They’re really individualized, and I get simultaneous teaching from an anatomy expert and a botulinum toxin expert who are both incredible teachers. These sessions are really helping me to improve my localization skills and find the best approaches for safe injection.”

Dr. Latacha is the recipient of the UNMC’s Basic Science Outstanding Teaching Award, while Dr. Torres is the recipient of UNMC’s Outstanding Teaching Award.
Huntington’s Disease Clinic Designated as a Center of Excellence

In February 2019, Nebraska Medicine’s multidisciplinary Huntington’s Disease (HD) clinic was designated a Huntington’s Disease Society of America (HDSA) Center of Excellence for the fifth consecutive year. The HDSA’s Centers of Excellence program recognizes and supports institutions that excel in knowledge and experience in HD, education of HD, and involvement in HD clinical research. The HDSA Center of Excellence at Nebraska Medicine provides multidisciplinary care to patients with HD which includes evaluation at treatment by a movement disorder neurologist, a psychiatrist, a social worker, a genetic counselor, a dietician and a speech therapist, physical therapy, occupational therapy and cognitive evaluation by neuropsychology are also available on the same day. The clinic is held once a week on Monday afternoons. Along with the designation, the HDSA was awarded a grant to help offset the costs of the services provided by the clinic.

Huntington’s Disease Symposium

The UNMC Department of Neurological Sciences hosted the 5th Annual Huntington’s Disease Patient and Caregiver Symposium on May 17, 2019. This educational symposium is designed to provide education and support to families affected by Huntington’s disease. Attendees learn about the complex symptoms of the disease, the genetic inheritance, helpful therapies, and updates on research. Financial support was provided by the Huntington’s disease Society of America, and 27 people were able to attend. The symposium is held every May, which is Huntington’s Disease Awareness Month.
Symposium Provides Update on Diagnosis of Multiple Sclerosis

Multiple sclerosis (MS) is a complex autoimmune neurological disease that has numerous mimickers. A misdiagnosis and inaccurate treatment can be harmful to the patient.

That was one of the many important messages shared with 61 Nebraska physicians, nurses, physical and occupational therapists, pharmacists, students and patients at UNMC’s first annual Multiple Sclerosis Symposium on June 8, 2019.

Rana Zabad, MD, associate professor in the Department of Neurological Sciences, and director of UNMC’s Multiple Sclerosis Clinic, said the symposium content demonstrated the diagnostic complexities of the disease and included an overview of the many medications available for treatment.

"Therapy options have grown in the past 25 years and diagnostic criteria has evolved four times in the past 16 years. There’s a lot of new information and MS is easy to misdiagnose. New specific antibody tests associated with newly defined demyelinating diseases can distinguish some mimicking disease from multiple sclerosis," she said. "The problem is, if you treat a disease that’s not MS with MS medications, you can harm the patient. A blood test makes the difference. I want physicians to think about these different diseases first – then order the extra test."

The complexity of the disease, its symptoms, and treatment demands a multi-disciplinary team approach that involves neurology, immunology, imaging, nurse navigators, rehabilitation and social services amongst others.

The Multiple Sclerosis Clinic began 20 years ago with about 300 patients. Since Dr. Zabad arrived in 2008, the clinic has grown to serve more than 3,000 patients, primarily from Nebraska and Iowa, but also from Missouri, Kansas, North Dakota and South Dakota. It is designated as Center for Comprehensive MS Care by the National Multiple Sclerosis Society and Consortium of MS Centers, the only one in the state of Nebraska.

"We use telemedicine and tele-education services to serve patients in rural Nebraska with plans for ongoing expansion," Dr. Zabad said.

Services and resident positions are expanding as two new faculty members join the team this month. In addition, a donor has provided support for a fellowship training program in the department. "We’re looking for a physician or an advanced practice provider we can train and keep in Nebraska," Dr. Zabad said.

About MS

Women between the ages of 20 – 50 are most commonly diagnosed with MS. While no specific cause has been identified, the disease occurs when the immune system attacks a fatty material called myelin, which wraps around nerve fibers to protect them. Without this outer shell, nerves become damaged and scar tissue may form. The damage prevents the brain from sending signals through the body correctly.

Because nerves don’t work as they should, people who have MS can experience such varied symptoms as trouble walking, feeling tired, muscle weakness or spasms, blurred or double vision and numbness and tingling. At its worst, MS can lead to severe disability. MS affects approximately 900,000 people in the U.S. and an estimated 7,000 people in Nebraska.

“It seems the farther north you go, MS occurs in higher frequencies,” Dr. Zabad said. “The incidence of MS is increasing in the world – especially among women. Risk factors are smoking, hygiene, hormones, later age of conception – these are all theories.”
Engaging the Next Generation of Researchers in Science

The Mind & Brain Health Labs (MBHL) is committed to community-based science outreach and engagement.

To meet this goal, MBHL has partnered with several organizations to foster educational programs aimed at exposing elementary to high school aged students to scientific career opportunities outside of the classroom. Collaborations have included the National Cancer Institute’s Youth Enjoy Science Research Program, the Nebraska Commission of Indian Affairs/the Mid-America Transportation Center’s Sovereign Native Youth STEM Leadership Academy, the University of Nebraska Medical Center’s Science Education Partnership Award, and the University of Nebraska at Kearney’s Summer Student Research Program. Outreach programs have focused on encouraging interest in scientific career paths from children of communities that are often underrepresented in the scientific field, like Native Americans.

Educational programs have exposed youth to the study of disease in real-world tasks, like driving, and how research results can inform interventions aimed at preserving health and quality of life across the lifespan. In collaboration with the community, MBHL is working to encourage scientific interest in the next generation of researchers.
Great Plains IDeA-CTR Third Annual Scientific Meeting

October 23-24, 2019
Dr. Stanley M. and Dorothy Truhlsen Campus Events Center, Room 1001
University of Nebraska Medical Center, Omaha, Nebraska

This one-and-a-half day meeting will feature various presentations centered around the theme of innovation in clinical and translational research. The meeting will include poster presentations, formal presentations, time for networking and a spirited competition that will result in a pilot grant award presented to an innovative CTR project idea. The meeting is open to anyone interested in the field of Clinical and Translational Research (CTR), including researchers, educators, administrators, healthcare professionals, government officials, and community members. Registration for this event is free.

For more information, visit https://gpctr.unmc.edu/training-education/2019-annual-scientific-meeting/.

For questions, contact Amanda Fletcher at amanda.fletcher@unmc.edu.

A Desire to Give Back

UNMC is in a key position to leverage clinical and research expertise by creating synergies between clinicians, teachers and scientists to transform neurological care now and for future generations.

Investing in the UNMC Department of Neurological Sciences will advance research for effective treatment and prevention of neurologic diseases that threaten life, independence, productivity and happiness. Your generous gift can impact big discoveries and revolutionize care for those living with these devastating diseases. No gift is too small, and all gifts have the power to transform lives.

To learn more about how you can help, please contact Edwin V. Lyons, director of development, at 402-504-3339 or edwin.lyons@nufoundation.org