The neuromuscular division at the Department of Neurological Sciences, University of Nebraska Medical Center (UNMC), has been a tertiary center providing comprehensive and state-of-the-art evaluation and care to patients with neuromuscular disorders in Omaha, the State of Nebraska and surrounding states since 2003. The clinics, electrophysiology (EMG) and autonomic laboratory are staffed by three board certified neuromuscular specialists. The neuromuscular division cares for patient with a broad range of disorders affecting the muscles, neuromuscular junction, peripheral nerves, and motor neurons.

Neuromuscular patients are seen at the general neuromuscular, ALS, or muscular dystrophy clinics. The Amyotrophic Lateral Sclerosis multidisciplinary clinic has been an ALS Association Certified Treatment Center of excellence since 2014. The muscular dystrophy clinic is associated with the MDA. The neuromuscular division conducts research in peripheral neuropathy, myopathy, neuromuscular junction disorders and motor neuron disease/ALS.

We have been contributing with publications to the neuromuscular literature and presented at many national and international meetings. The division also provides didactic sessions to physicians in-training, medical students and lay persons in the community.
Message from the Chair

We are grateful for the Department’s remarkable growth and success over the past six months. We now number 112, including 47 faculty members. We welcome three new epilepsy experts, Aditya Vuppala, MD; Arun Swaminathan, MD; and Proleta Datta, MD/PhD. Amrita Vuppala, MD, adds expertise in neuro-ophthalmology, neuro-otolaryngology, and headache. Lucas Stenzel, MD, joins our division of general neurology, and Renee Stewart, APRN, DNP, joins our multiple sclerosis team. We welcome several translational research scientists: Bethany Lovendes, PhD, an expert in medical human factors; Diane Ehlers, PhD, an expert in human movement and brain function; Elizabeth Heinrichs-Graham, PhD, an expert in cognitive science and brain imaging; and Jennifer Merickel, PhD, expert in cognitive science, human factors, ergonomics, and statistics. Shelley Smith, PhD, Anna Dunaevsky, PhD, Padmashri Raganathan, PhD, Sung-Ho Huh, PhD, and Xiaowei Li, PhD, position us for fruitful discoveries in developmental neuroscience and regenerative medicine.

Patient care teams and programs continue to grow. We have launched a new satellite clinic at Twin Creek (3802 Raynor Parkway), providing outpatient ambulatory care for General Neurology and Epilepsy patients. We now have seven active Tele-stroke Hubs with the addition of Unity Point Health-St Luke’s Regional Medical Center in Sioux City, Iowa and Mercy Medical Center in Sioux City, Iowa. In addition to three new faculty, our epilepsy program growth includes an Epilepsy Monitoring Unit (EMU) bed expansion and the addition of stereotactic EEG and laser ablation. We continue to build our Neuro-ophthalmology, Neurovascular/Stroke, Movement Disorders, and General Neurology programs.

We have seen tremendous expansion of our research programs. In the past few months, the Department of Neurological Sciences (DONS) faculty members have received more than ten new large research grants from various funding agencies including the NIH, foundations, and industry sponsors. Many of our faculty members received funding for research (including clinical trials) this year. Awarded researchers include Tony Wilson, PhD, Olga Taraschenko, MD/PhD, Sung Ho Huh, PhD, Padmashri Raganathan, PhD, Elizabeth Heinrichs-Graham, PhD, Daniel Murman, MD, David Warren, PhD, Pierre Fayad, MD, Americo Fernandes, MD, Xiaowei Li, PhD, and myself.

Our research efforts involve new, multidisciplinary, multisite, scientific collaborations that strategically position UNMC DONS on the cutting edge of research. The Great Plains IDeA-CTR, headquartered in the department, provided funds to leverage the purchase of a cutting-edge Siemens 3T research-dedicated MRI. The research-dedicated MRI was operational as of December 3, 2018. This facility allows investigators to examine the precise structure, function and chemical composition of all parts of the body, especially the brain, and has drastically increased the capacity for research at UNMC.

Educational success includes resident graduates, Lucas Stenzel, MD; Sandeep Devarapalli, MD; Sanath Kasi-Reddy, MD; and Aashrayata Pandit, MD; Movement Disorders fellow, James Shou, MD; and Neuropsychology fellow, Allison Logemann, PhD. We welcome four new first-year residents: Daniel Crespo, MD; Navnika Gupta, MD; Matthew Purbaugh, MD; Brian Villafuerte-Trisolini, MD; and new fellows, David Whitney, MD; Nabeel Syed, MD; and Sarah Szymkowicz, PhD.

We won approval of new fellowship programs in Multiple Sclerosis, Epilepsy, and Neuromuscular. Our new M1-M2 curriculum was successfully implemented and highly rated. Faculty have continued to mentor dozens of PhD and MS candidates, postdoctoral scholars, undergraduate students, and foreign scholars.

Outreach activity has been vigorous, with faculty engagement in our local communities, across Nebraska and surrounding states, nationally and abroad. Marco Gonzalez, MD, Kathy Healey, ARNP/PhD, and Danish Bhatti, MD, continue to develop local, regional, and international outreach activities with online learning and the Visiting Scholars Program. Community engagement activity remains very strong. Proleta Datta, MD/PhD, is collaboratively studying SMS (short messaging service) to evaluate guidelines for improvement of seizure control in patients with epilepsy in resource poor regions of India. Julie Pavelka, APRN/FNP, has initiated a well-recieved Parkinson’s Disease Support Group and newsletter.

Our clinicians, scientists and educators continue to advance neurological health through our missions of clinical care, education, research and outreach. I am grateful for their tremendous creative energy and hard work, making the difficult look easy, with good humor and unwavering commitment to our patients, students, research and communities. I, and all our colleagues at UNMC and Nebraska Medicine, deeply appreciate it.

Happy 2019!

Sincerely,

Matthew Rizzo, MD, FAAN, FANA
Francis and Edgar Reynolds Professor | Chair, Department of Neurological Sciences
Clinical Program Leader, Neurological Sciences | Director, Mind and Brain Health Laboratories
Director, Great Plains IDeA CTR Network

Neurological Sciences
Nebraska NeuroNews
January 2019
This newsletter is produced by the College of Medicine, Department of Neurological Sciences at the University of Nebraska Medical Center.
unmc.edu/neurologicalsciences

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Sachin Kedar, MD, sees patients with abnormal pupils, the dark apertures in the iris of the eye, which allows light to strike the retina. This includes physiologic anisocoria, a benign condition, and Horner’s syndrome – an uncommon, but potentially life-threatening condition. Now, student trainees and residents can practice eye exams and become familiar with the common and uncommon conditions of the pupil, using a new virtual reality application – the EyeSim Advanced Pupil Simulator (APS).

In the past, trainees would rely on textbook images, videos or happenstance to master testing and identifying such ophthalmologic dysfunctions. “Now, they can do testing on the computer simulator as many times as they want, as long as they want, and the patient won’t complain,” Dr. Kedar said. Pupil examination is a basic skill that is practiced by all health care providers- physicians, nurse practitioners, nursing and allied health professionals such as optometry and EMT. The results of pupil examination depend on the use of correct technique.

An associate professor in the Department of Neurological Sciences and director of the neurology residency program, Dr. Kedar developed the EyeSim APS – now licensed with EON Reality Inc. and on the market – with Deepta Ghate, MD, assistant professor, UNMC Department of Ophthalmology and Visual Sciences; A Nu Reality; and UNeMed, the technology transfer and commercialization office for UNMC and University of Nebraska at Omaha (UNO). EyeSim APS simulates how medication and lighting levels affect dysfunctions involving the pupil of the eye. Trainees can add eye drops to the pupil simulation and improve the specificity of their diagnosis and identify serious conditions.

Dr. Kedar has seen the benefits of virtual reality amongst trainees: enhanced understanding of the concepts, increased retention of knowledge, improved confidence prior to seeing actual patients. “I never had access to such technology in training,” he said. “The first time I encountered a patient was a frightful experience. Now, students and residents come to clinic and are comfortable doing the examination and know all the steps without being afraid.”
The Movement Disorders division has created the Dystonia and Spasticity clinic, which is supported by Diego Torres-Russotto, MD, Danish Bhatti, MD, Mara Seier, MD, and Amy Hellman, MD. We have had continuous accreditation as a Huntington Disease Society of America’s (HDSA) Center of Excellence under the leadership of Amy Hellman, MD. John Bertoni, MD, PhD, and Danish Bhatti, MD, have also organized a Comprehensive, Multidisciplinary Parkinson Disease Clinic, which has served many patients in the region. Additionally, we have an intrathecal baclofen pump evaluation program, and a general Movement Disorders Clinic caring for patients with tremor, ataxia, myoclonus, gait disorders, dyskinesias, paroxysmal disorders, among others. We continue to be leaders in deep brain stimulation surgery and continuous levodopa gel infusion pump utilization for movement disorders.

The educational mission is taken seriously within our division. The Movement Disorders Fellowship program has been fully matching since 2013. This year again, two more fellows will be joining the Department of Neurological Sciences family for their training. We continue to have extremely successful Patient and Caregivers educational program. The Parkinson Disease CME professional program is held annually in October.

More than 35 research projects are underway, and more than ten papers have been published this year. Participation on clinical trials is at an all-time high. Our group has members on the Parkinson Study Group, the Huntington Study Group, and the Tremor Study Group, some of the top research consortia in the movement disorders world.

Finally, we are very proud of our people. With five physicians, one nurse practitioner, two fellows, three case managers and one medical assistant, we continue our path toward excellence and toward national and international recognition. Our most recent addition is Mara Seier, MD. Dr. Seier completed her medical school at the University of South Dakota, residency at the Oregon Health and Science University, and Movement Disorders fellowship at the Oregon Health and Science University. She is planning on organizing a Comprehensive Parkinson-Plus syndromes clinic.
Twin Creek Clinic: Additional Location for Neurological Sciences

Nebraska Medicine recently opened a new neurology clinic in the Bellevue community. The new clinic will provide improved patient access and offer more convenient appointments for patients in the Bellevue area in need of epilepsy care or general neurology services.

The new neurology clinic, which is located in Twin Creek at 3802 Raynor Parkway, began seeing patients July 23, 2018. The clinic is open 8 a.m. to 4 p.m., Monday through Thursday.

The clinic is staffed by three doctors with advanced fellowship training in epilepsy care. They include Proleta Datta, MD, Aditya Vuppala, MD, and Arun Swaminathan, MD. Lucas Stenzel, MD, a general neurology specialist, will also see patients at this location.

“This improves our ability to see patients sooner and provide more access points for our patients,” says Deepak Madhavan, MD, epilepsy specialist and medical director of the Epilepsy Program.

It is estimated that more than 20,000 people in Nebraska have epilepsy and approximately 6,000 of these people have intractable epilepsy, which means they need specialized care beyond medications to control their seizures.

The Epilepsy Program at Nebraska Medicine, the largest and most comprehensive epilepsy program in the state and region, follows more than 3,000 patients. Nebraska Medical Center has been designated as a Level 4 Epilepsy Center by the National Association of Epilepsy Centers for providing the highest level of care to patients with seizures and epilepsy. Level 4 centers use a multidisciplinary approach and offer intense neurodiagnostic monitoring and treatment methods including medications and surgical options.

Nebraska Medicine is proud to offer general neurology care at several locations, including a dedicated full time general neurology specialist at the Twin Creek location. General neurology specialists offer the broadest and most extensive neurologic expertise of all neurologists. They specialize in the diagnosis of all types of neurologic conditions, and have the expertise needed to treat all but the most complex cases.

To make an appointment with one of our epilepsy or general neurology specialists, call 800-922-0000. Visit us online to learn more at nebraskamed.com/neurological-care/epilepsy.
MS Forward Program (EASE)
by Kathleen Healey

MS team launches innovative new wellness program.

The Department of Neurological Science’s Kathleen Healey, NP, PhD, was part of a small group individuals from UNMC/Nebraska Medicine and MS Forward (Daryl Kucera) with passion and commitment to empowering those with significant disability who developed a new initiative with shared goals – the “EASE Program” (Exercise, Advocacy, Socialization, and Education).

This community-based program officially launched in March 2018. EASE involves exercise and physical activity, advocacy, socialization with other individuals in the community (both with and without MS), and education on health and complication prevention with MS. The EASE program meets twice per week and currently has six participants who receive transportation and program fees to attend. Funding for the first six participants for six months was provided by the MS Foundation.

Preliminary three-month evaluations show numerous measured benefits to participation, including strong attendance, increased strength and endurance, and fewer complications (i.e., falls, infections). Importantly, the first six have reported decreased feelings of social isolation and a very real sense of empowerment.

The advocacy aspect of the program has been impressive and has exceeded all expectations. The “First Six” participants have not only increased awareness of the struggles those with disability in our community, but have been staunch advocates for others experiencing the “challenges” of living with disability through appearances on our local news channel. They have also met with city transportation director and are meeting with the Omaha Housing and Planning director.

At this time, MS Forward (EASE) is meeting with additional community foundations including the University of Nebraska Foundation to find further support to continue and expand the program. If you are interested in learning more
The Department of Neurological Sciences (DONS) has a growing number of researchers focusing on Alzheimer’s disease (AD). Over the past five years, six different investigator-initiated projects have been started. Invaluable startup funding has been received from the Fremont Area Alzheimer’s Fund. This startup funding has helped support successful pilot research projects focused on AD and facilitated additional extramural funding.

Dr. David Warren has helped initiate a patient registry that includes older adults with and without Alzheimer’s disease (AD) (i.e. Mind and Brain Health Registry) that can be used to recruit subjects for research studies focused on aging and AD. Several DONS faculty members, graduate students and collaborators at the University of Nebraska-Lincoln (UNL) are investigating unique biomarkers to diagnosis AD and to monitor AD-related changes. These biomarker studies include: studies of retinal imaging using Optical Coherence Tomography (OCT) by Dr. Sachin Kadar; studies of changes in brain structure and function using MRI measurements (e.g., cortical thickness and resting state connectivity) by Dr. David Warren and magnetoencephalography (MEG) measurements by Dr. Tony Wilson and Alex Wiesman; and studies of changes in cerebrovascular reactivity using transcranial doppler (TCD) by Dr. Greg Bashford (UNL Department of Biological Systems Engineering) and Mohammed Alwatban.

Treatment studies include Dr. David Warren’s studies of the effectiveness of transcranial magnetic stimulation (TMS) to enhance memory function in subjects with Mild Cognitive Impairment and Dr. Dan Murman efforts in leading UNMC’s participation in three national, multicenter, clinical trials of investigational medications for Alzheimer’s disease, including participation in a National Institute on Aging (NIA) supported prevention trial entitled “Anti-Amyloid Treatment in Asymptomatic Alzheimer’s Disease” (the A4 study).

UNMC has just received three NIH supplements to existing NIH grants for research on AD and related disorders. These include a supplement to Dr. Tony Wilson’s funded research using MEG to focus on oscillatory neural activity in patients with AD, a supplement to the Great Plains IDeA Clinical and Translational Research (GP IDeA-CTR) grant lead by Dr. Matt Rizzo, and a supplement to the Big Data to Knowledge (BD2K) grant lead by Dr. Scott Campbell. These supplements will continue to build the research infrastructure to develop an AD research center.
The Mind & Brain Health Labs (MBHL) are continuing to foster research collaborations across the University of Nebraska and the U.S. We have expanded our research to investigate mind and brain health, safety, quality of life, and mobility in at-risk drivers across laboratory and real-world settings, including Parkinson’s disease, rheumatoid arthritis, type 2 diabetes, and glaucoma. In turn, these collaborative research efforts aim to improve real-world outcomes in patients and support clinical translational research in the department and across institutions. We have also partnered with the Department of Defense to examine how military individuals respond to warning signals in their driving environment using our high-fidelity driving simulator, SENSEI.

We continue to promote community engagement in UNMC research with the growing Mind & Brain Health Registry that now has nearly 500 individuals currently enrolled, with and without diseases. We are continuing to expand this registry to not only support research recruitment, but also to develop a database of information on mind and brain health across diverse individuals for analysis.

We are excited to continue our research this year to aid in the development of safety interventions, patient and caregiver education, policy, fair and accurate guidelines for clinicians, and the development of supportive in-vehicle technologies for at-risk drivers.

To read more about our research, please visit us at http://www.unmc.edu/mbhl/.

If you are interested in working with our lab, please contact us at 402-559-6870.
GP IDeA-CTR the Second Year

We recently completed our second year of the GP IDeA-CTR, a five-year $20M award granted by the National Institute of General Medicine Sciences aimed at building infrastructure and capacity for clinical and translational research (CTR) across eight institutions that span Nebraska and the Dakotas.

We had a busy and fruitful year working hard to build capacity for CTR across the entire region. We obtained funding to support the purchase of equipment at all partner institutions such as an Anechoic Chamber at BTNRH and a new research-dedicated 3T MRI at UNMC. The 3T MRI will be up and running by the beginning of December and will be dedicated to research. The magnet will increase UNMC’s ability to perform cutting-edge imaging research.

We also procured support for establishing much-needed infrastructure to enhance Alzheimer’s Disease research, discovery and care across diverse communities in our partner states, scholar awardees graduated, initiation of new scholar awards and new funding mechanisms for bio statistical, biomedical informatics, community engagement and matching pilot programs.

We continue to engage our Community Advisory Board to identify health priorities across our region. A key effort has been a large-scale needs assessment, serving to focus our strategic efforts in the coming years.

We recently held our 2nd Annual Scientific Meeting which featured Dr. L. Michelle Bennett as our Keynote speaker this year. She is the Director at the Center for Research Strategy at the National Cancer Institute and an expert in Team Science. Multidisciplinary teams are a strong catalyst for translating research and we were excited to gain her insight. This year’s meeting also featured presentations about progress and resources of all cores, recruitment in rural settings, moving research across the translational spectrum, pilot and scholar awardee, research and resources for researchers across the network. We also utilized the meeting to hone in on gaps identified in the needs assessment and developed action plans to further develop capacity for CTR.

Finally, we hosted our second CTR Superstar Competition. Three finalists presented innovative research ideas to a panel of esteemed judges and the winner was awarded a $20,000 pilot grant. We were lucky to have Robert Hinson (Ret. Lieutenant General, U.S. Air Force; Founding Executive Director, National Strategic Research Institute, University of Nebraska), Rod Markin, MD, PhD (Chief Operating Officer, University of Nebraska Central Administration; Associate Vice Chancellor for Business Development; Raymond and Beverly Sackler Director of UNeTeCH; Professor and David T. Purtilo Distinguished Chair, Pathology and Microbiology, UNMC; Courtesy Professor of Surgery and Psychiatry, UNMC), and Michael Yanney (Founder and Chairman Emeritus of Burlington Capital, formerly America First Companies, LLC) as judges this year as they helped us identify the most promising CTR Superstar Research Pitch!

We look forward to our third year as we aim to build even more sustainable infrastructure for CTR and, ultimately, improve the health and lives of residents across our region.
From the Chief Resident

What Life is Like at UNMC

I walk into the resident room, greeted by the scent of coffee and the sound of keyboard strokes. As the sun rises, another day at UNMC is about to begin. Whether I am supervising the inpatient team, ending a 14-hour shift on night float, or coming in for clinic, UNMC is the place where Nebraska’s most revered patient care happens and, on a more personal level, is also my second home.

This institution encapsulates the warmth and core values of the humble state it represents. Through my years as a medical student to now as a chief resident, I have had the pleasure of working alongside so many passionate, diverse, and well-rounded educators. As the family member of a mother who fought breast cancer and a grandfather who had Parkinson’s disease, I can also say that our patients and families are treated with compassion and respect, and that everyone here tirelessly strives for the excellence to exceed the reputation that precedes this institution’s name.

So much has changed over the years as I’ve watched departments grow and new buildings sprout up around me, and I look forward to see what life at UNMC will be like in the years to come.

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Neuroimaging Research Continues to Grow

Dr. Tony Wilson, Associate Professor in the Department of Neurological Sciences and Director of the DiCON laboratory, is leading many new, innovative research projects in the area of neuroimaging, many of them funded by the National Institutes of Health.

In April 2018, Dr. Wilson began the Progressive Elevation of Spontaneous Cortical Activity in HAND (PESCAH) Project. In this five-year project, Dr. Wilson and his team will use an advanced functional brain mapping approach to evaluate the role of two novel neurophysiological parameters in cognitive aging. Additionally, Drs. Wilson and Murman received a supplemental grant to extend the analysis to patients with amnestic mild cognitive impairment and mild-to-moderate Alzheimer’s disease.

A five-year collaborative project with the University of Pittsburgh Medical Center (UPMC), Multimodal Imaging of NeuroHIV Dynamics (MIND): An Omaha-Pittsburgh Consortium, began in August 2018. This project uses UNMC’s advanced magnetoencephalography (MEG) system, along with state-of-the-art structural, functional, and spectroscopic MRI-based brain imaging to evaluate the brain circuitry that underlies the higher prevalence of cognitive dysfunction in adults with HIV. UNMC is the lead on this project.

In September 2018, Dr. Wilson began a four-year project titled “The impact of spontaneous cortical activity on neural oscillations and behavioral performance: Evidence from high-definition tDCS and MEG.” In this study, his team will examine how an emerging type of brain stimulation affects brain function in healthy young and older adults. This new type of brain stimulation (tDCS) holds promise in treating neurologic and psychiatric disorders, but currently little is known about how it affects the brain. Dr. Wilson’s team hopes to address that through this study.

Continuing his collaboration with the University of Pittsburgh, Drs. Wilson and Fox (UNMC), and Dr. Becker (UPMC) launched “Signatures of Cannabis Abuse in NeuroHIV (SCAN): An Integrated Molecular and Imaging Approach” study in late September. This five-year project will use advanced cellular and molecular analyses of blood and plasma, and the latest brain mapping methods to identify predictive markers of HIV-related brain dysfunction, and determine the impact of comorbid cannabis use disorder in these patients and a matched control group comprised of uninfected cannabis users and nonusers. The ultimate goal is to identify specific markers of brain dysfunction in these patients and determine the additive effects of cannabis.

With these new studies, the DiCON laboratory now includes many new faces, including new team members from Colorado, Missouri, Iowa, and Nebraska, stretching from postdoctoral fellows to local undergraduate research assistants.

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Graduating and Incoming Residents

June 2018 Residency Graduates

Dr. Lucas Stenzel  
(UNMC Faculty starting 7/1/18)  
2017-18 Chief Resident for Operations  
Residency: University of Nebraska Medical Center  
Medical School: University of Texas Medical School at Houston  
After Graduation: University of Nebraska Medical Center, Instructor

Dr. Sandeep Devarapalli  
2017-18 Chief Resident for Academics  
Residency: University of Nebraska Medical Center  
Medical School: Siddhartha Medical College, India  
After graduation: University of Alabama at Birmingham, Neuromuscular Medicine Fellowship

Dr. Aashrayata Aryal Pandit  
Residency Years 2-4: University of Nebraska Medical Center  
Residency Year 1: University of Maryland Medical Center  
Medical School: Universal College of Medical Sciences, Nepal  
After graduation: Wellspan Hospital, Pennsylvania, General Neurologist

Dr. Sanath Bhargav Kasi-Reddy  
Residency Years 2-4: University of Nebraska Medical Center  
Residency Year 1: University of Maryland Medical Center  
Medical School: Sri Venkateswara Medical College, India  
After graduation: University of Louisville, Kentucky, Sleep Disorders Medicine Fellowship

New Residents – started 7/1/18

PGY-I Residents

Dr. Matthew Purbaugh  
University of Nebraska Medical Center

Dr. Daniel Crespo  
Instituto Tecnologica de Santo Domingo (INTEC) (Bolivia)

Dr. Navnika Gupta  
Jawaharlal Nehru Medical College (India)

Dr. Brian Villafuerte Trisolini  
Universidad Peruana Cayetano Heredia (Peru)
Welcome New Faculty and Staff

Lucas Stenzel

Hometown: Denton, Texas
New title & department at UNMC: Instructor, Department of Neurological Sciences
Research/Professional Interests: Teaching – resident/student education, epilepsy and stroke care, general neurology
How I fell in love with neurology: I knew neurology was what I wanted to do by the second day of my required neurology clerkship in medical school. Prior to that experience I had no idea that I would even be interested in neurology. It’s full of puzzles, and I’m really drawn to the way neurologists think.
Degrees: MD, BS in biology
Memberships: American Academy of Neurology
Three things people may not know about me:
1. I love skydiving and long road trips
2. I wanted to be a railroad locomotive engineer when I grew up
3. Someday I will leave medicine behind for a new career in gold mining – seriously

Proleta Datta

Hometown: Bangalore, India
New title & department at UNMC: Assistant Professor, Department of Neurology
Research/Professional Interests: Medically refractory epilepsy, neurostimulation devices, telemedicine and global health
How I fell in love with Neurology/Epilepsy: I was an avid reader growing up and was inspired in equal parts by scientific advancement and imaginative science fiction. The challenge of working at the leading edge of our understanding of the brain, to better diagnose and treat diseases led me to neurology/epilepsy. It is so exciting that today we are able to improve our patient’s lives with techniques that would have been considered in the realm of science fiction mere decades ago.
Degrees: MD, PhD
Memberships: AES, ACNS, ABPN
Three things people may not know about me:
1. I’m a karate Black Belt
2. I’ve jumped off a plane
3. I’m the reigning Harry Potter quiz champion at my medical school

Arun Swaminathan

Hometown: Mumbai, India... now Omaha
New title & department at UNMC: Assistant Professor, Department of Neurology / Epilepsy
Research/Professional Interests: Epilepsy surgery, ICU EEG, neuropsychological aspects of epilepsy
How I fell in love with Epilepsy: I spent a great deal of time learning and trying to understand the intricate aspects of epilepsy and treatments that were available for it. There is such a large variety of treatments including surgery, experimental medications and computer based devices that I was really intrigued by them. All this of course was in addition to the complicated and challenging patients who definitely needed medical care and close supervision. All of these things combined to give me an undying love for the field of epilepsy.
Degrees: MBBS
Memberships: AES, ACNS, ABPN
Three things people may not know about me:
1. I attended school in three different continents before the age of seven
2. Played the triangle in my school band!
3. I wanted to be a theater playwright before my biology teacher convinced me to apply to medical school
Amrita Vuppala, MD

Hometown: Orlando, Florida

New title & department at UNMC: Assistant Professor, Department of Neurological Sciences

Research/Professional Interests: Optic nerve pathologies, visual complaints following head injury, vestibular neurology, abnormal eye movements

How I fell in love with neurology/neuro-ophthalmology: I fell in love with neurology in medical school. I enjoyed localization and neuroanatomy but also the ability to impact the life of a patient, even at times when there is no medical/surgical intervention. I also have family members with neurologic illnesses and learning about this specialty allowed me to better understand and care for them. During residency, I struggled with the fundus exam and ventured into neuro-ophthalmology primarily to learn this skill. I was pleasantly surprised to find my new passion! As a neuro-ophthalmologist, I get to take care of numerous medical conditions affecting the optic nerves, visual pathways and eye movements. Every case is fun, unique and interesting in its own way.

Degrees:
MD – University of Health and Medical Sciences, Basseterre, St. Kitts
Residency – Internal medicine/neurology, Medical College of Wisconsin, Milwaukee
Post-doctoral research – Yale University, New Haven, Conn.
Fellowship – Neuro-ophthalmology, Wilmer Eye Institute, Johns Hopkins University, Baltimore

Memberships:
American Academy of Neurology
North American Neuro-Ophthalmology Society

Three things people may not know about me:
1. I have a graduate degree in Indian classical dancing (Bharatanatyam)
2. I love to travel
3. I can speak Spanish

Aditya Vuppala

Home Country: India

New title & department at UNMC: Assistant Professor, Department of Neurology (Epilepsy).

Research/Professional Interests: Epilepsy, new onset seizures, surgical evaluation of drug resistant epilepsy, electroencephalography, magnetoencephalography.

How I fell in love with Epilepsy:
Ever since I was a kid, I was always amazed by medicine and physics. The field of epilepsy is a good blend of these two fascinating sciences. The application of latest advancements enabling treatment of previously untreatable patients appealed to me.

Degrees:
MBBS
MBA

Memberships:
American Academy of Neurology
American Epilepsy Society

Three things people may not know about me:
1. I love the ocean and wild life. African safari is on top of my bucket list
2. My favorite TV show is South Park
3. I can wiggle my ears. Apparently, only ten percent of us can
International Outreach: Establishing a New Subspecialty in a Developing Country – Breaking New Grounds

Like many developing nations, Pakistan has focused on general neurology programs with a nearly complete lack of subspecialty training. In a country of 200 million, there are hardly 160-170 neurologists. There are few subspecialties trained foreign qualified neurologists, but not a single movement disorders neurologist.

The solution had been for individual physicians to come to the U.S. or Europe receive training. But that happens one person at a time. Dr. Danish Bhatti, MD, assistant professor of neurological sciences, realized “that only way to make a significant impact is to bring training to the country?”

He realized he could help fill this gap, and went to work designing an online six months “mini fellowship” in movement disorders. He was creating continuing medical education in a neurological subspecialty. And, physicians in Pakistan jumped at the chance to receive U.S. level CME. Eighteen practicing neurologists enrolled in the inaugural class, including university faculty.

Online lectures were available in weekly modules. Enrollees and teachers discussed cases through messaging forming a virtual community of learning. Dr. Bhatti and other faculty – including movement disorders experts from across the U.S. – consulted, and prepared quizzes and graded submitted assignments. “Last year, 1,200 messages were exchanged,” Dr. Bhatti said. The project led to educational scholarship and a multi-center epidemiological research in Parkinson’s disease, findings from both of these were presented at the annual meeting of American Academy of Neurology as abstracts in 2018.

The momentum picked up and Dr. Bhatti has participated in the first National Movement Disorders Conference and invited speaker in every single national neurology meeting in last three years, initiated the National Movement Disorders Residents Training Camp and organized various botulinum toxin skills training workshops.

Dr. Bhatti’s efforts were recognized by PSN by an International Best Teacher Award. Word-of-mouth resulted in enthusiastic inquiries from within Pakistan, and from Oman, Dubai and Saudi Arabia. Dr. Bhatti is now engaged with Association of Pakistani Physicians of North America (APPNA) as co-chair of their education committee to advise on developing online educational programs and collaborations.

Are you doing something similar?
If you are working on a similar project, creating online distance-learning courses for other nations, or are interested in learning more, Dr. Bhatti would like to hear from you. Please contact him at 402-559-9953 or dbhatti@unmc.edu.
UNMC/Nebraska Medicine Monthly Parkinson’s Support Group

by Julie Pavelka MS, APRN-FNP, BC

UNMC/Nebraska Medicine’s Movement Disorder Team facilitated our inaugural monthly Parkinson’s Support Group on April 20, 2018 at the Fred & Pamela Buffett Cancer Center. The support group meetings are designed to educate, inspire, and empower individuals affected by Parkinson’s and occur the third Friday of every month. Featured speakers have included UNMC/Nebraska Medicine providers including Movement Disorder Neurologists whom specialize in the treatment of Parkinson’s disease; physical, occupational, and speech therapy; nutrition therapy; and psychiatry.

Topics have included a constellation of information including an overview of Parkinson’s, research and advanced therapy updates, exercise/balance/gait/safety recommendations, and speech/swallowing/nutrition education. The support groups are interactive and a combination of speaker presentations utilizing power points/videos, educational printed information, and participant questions/answers throughout the presentation. The initial attendance in April was six patients/caregivers and our group has steadily grown to a record 43 attendees in September. We are also trying to reach individuals unable to physically attend our meetings by providing live stream video link [http://www.unmc.edu/livevideo/unmc_live2.html] that allows viewing in the comfort of one’s own home, office, or organized group setting.

For details regarding our Parkinson’s Support Group, please contact Julie Pavelka at jupavelka@nebraskamed.com.
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.

Save the Date

Tues., May 7 | 6 – 8 p.m.

UNMC Department of Neurological Sciences Faculty and Alumni Reception

During the American Academy of Neurology Annual Meeting

You are invited to attend our annual reception especially prepared for our department alumni, faculty, and friends. Hors d’oeuvres and beverages will be served.

Embassy Suites Philadelphia Center City
1776 Benjamin Franklin Pkwy,
Philadelphia, PA 19103

RSVP to Fallon Watts,
fallon.watts@unmc.edu
Please provide any dietary restrictions when sending RSVP communication.