University of Nebraska Medical Center

WINTER 2026

NeuroNExT

from the Departments of Neurological Sciences and Neurosurgery

As 2025 ended, it's time to Move Forward...

We begin 2026 with deep gratitude to our patients, families, community partners, and collaborators whose trust and partnership make our work possible. We are especially thankful for the steadfast support of the University of Nebraska Medical Center (UNMC) and Nebraska Medicine, whose shared commitment to excellence in care, research, and education enables our departments of Neurological Sciences and Neurosurgery, and our broader neuroscience programs to serve our communities with integrity and impact.

As we reflect on the year just completed, we also look ahead to the opportunities before us. The Departments of Neurological Sciences and Neurosurgery extends sincere thanks to our readers for their continued engagement with this quarterly newsletter and for the many fruitful partnerships that strengthen our clinical, research, educational, and community missions.

The past year was a highly successful one for the Department of Neurological Sciences and Neurosurgery. Pierre Fayad, MD, was invited to serve on the Accreditation Council for Graduate Medical Education (ACGME) Neurology Appeals Review Panel, reflecting national recognition of his leadership in graduate medical education. Meghan Ramirez, a graduate research assistant in the Warren Lab, received the National Institutes of Health Outstanding Scholars in Neuroscience Award. In collaboration with Neurosurgery, Nicholas Borg, MD, demonstrated the use of venous sinus stenting as a treatment for medically refractory idiopathic intracranial hypertension, highlighting advances in clinical innovation and patient care.

Research accomplishments were also notable. Peng Zhong, PhD, received a New Investigator Award from the University of Nebraska Medical Center and was recognized alongside 17 other researchers at the Distinguished Scientist Award Ceremony held on November 6, 2025. Bethany Lowndes, PhD, MPH, was selected as an ambassador for the UNeMed Innovation Ambassador program, which was created to provide mentorship and guidance to faculty, staff, and students with new inventions, discoveries, or translational ideas who may be unfamiliar with the commercialization process.

The fall of 2025 featured several impactful educational and community events. The Parkinson's Disease Conference drew more than 600 attendees and provided updates on the latest research and emerging therapies. Additional highlights included the annual Lewy Body Disease Conference at the Scott Conference Center and the Michael S. Heller Memorial Young-Onset Alzheimer's Conference at the Thompson Alumni Center on the University of Nebraska at Omaha campus, where more than 100 participants were inspired by a moving address from Michael's wife, Cassy Heller. Rana Zabad, MD, also hosted the 2025 Multiple Sclerosis Symposium in November, which attracted a strong turnout of physicians, nurses, and allied health professionals.

In October, Matthew Rizzo attended the Artificial Intelligence for Accelerated Science Conference in San Francisco, which brought together leaders in computer science, medicine, and policy to examine how artificial intelligence is reshaping the research landscape, from basic discovery to real-world application.

Every day, our healthcare professionals make a meaningful difference in the lives of patients and families. This dedication was recognized when the Neurosciences Intensive Care Unit received the Diseases Attacking the Immune System (DAISY)

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Team Award following a nomination from the family of a patient whose life was saved. This was an extraordinary honor reflecting compassion, teamwork, and excellence in care.

The year wrapped up with the Department of Neurological Sciences' annual holiday gathering, held in December at Champions Run Golf Course. Bringing together more than 230 faculty, staff, trainees, and colleagues, the event celebrated the shared commitment and community that sustain our work. The evening concluded with a grateful message from the department's Chair, Matthew Rizzo, reflecting on the year's accomplishments and the people behind them.

As we move forward in 2026, we do so together with gratitude for our community partners and in close collaboration with UNMC and Nebraska Medicine, committed to advancing neurological care, discovery, education, and service for the communities we are privileged to serve.

Here's to a happy New Year!

Matthew Rizzo, MD, FAAN
Frances and Edgar Reynolds Professor and Chair
Department of Neurological Sciences

William Thorell, MD
Professor of Neurosurgery at UNMC
Chair of the Department of Neurosurgery

Howard Fox, MD, PhD
Senior Associate Dean, Research and Development, College of Medicine
Professor, Department of Neurological Sciences

Pierre Fayad, MD New Appointment

Pierre Fayad, MD

Dr. Pierre Fayad, Professor of Neurological Sciences and Chief Section Vascular Neurology and Stroke, was nominated by The Accreditation Council for Graduate Medical Education (ACGME) Review Committee for Neurology to serve as a member of the ACGME Board of Appeals, Neurology Appeals three-member Panel. His appointment was approved by the ACGME Board of Directors for the next six years, 2026-2031. Nomination to the standing panel reflects the esteem in which nominees are held by their professional peers. The Neurology Appeals Panel is charged with reviewing requests for appeals from neurology programs subject to an adverse accreditation action (withdrawal or probation of accreditation) by the ACGME Neurology Review Committee, hold hearings, deliberate and provide final recommendations to ACGME.

The ACGME is an independent, not-for-profit organization that was established in 1981 with a mission to improve health care and population health by assessing and enhancing the quality of resident and fellow physicians' education through advancements in accreditation and education. Graduate medical education (GME) refers to the period of education in a particular specialty (residency) or subspecialty (fellowship) following medical school. The ACGME oversees the accreditation of residency and fellowship programs in the US through setting standards for effective educational and training programs, and monitoring compliance with those standards. This is achieved through Specialty Review Committees, and Institutional Review Committees that set accreditation standards, provide peer evaluation of programs, assess the degree to which these comply with the published educational requirements, and confers an accreditation status on each program regarding meeting those standards. The Specialty Review Committee regularly reviews and provides decisions on initial accreditation, re-accreditation with or without citations, recommendations for improvement, probation or withdrawal of accreditation.

Dr. Fayad has long-standing and extensive engagement in medical education. He became director of the Vascular Neurology Fellowship at Yale University. When he moved to the University of Nebraska Medical Center (UNMC) in 2001, as founding chairman of the Department of Neurological Sciences, he assumed directorship of the Neurology Residency Program which he successfully re-accredited, revamped and expanded over the following 14 years. He served as member of the ACGME Neurology Subspecialty Review Committee for six years from 2016 to 2022. During his term on the Neurology Review Committee, he additionally served on the Vascular Neurology Milestones 2.0 Committee and the ACGME Neurocritical Care Milestones 2.0 Committee. He is currently serving as Program Director for the Vascular Neurology Fellowship Program and on the Graduate Medical Education Committee (GMEC) at UNMC. He additionally serves on the UNMC Neurology Residency Program Clinical Competency Committee (CCC).

Zhong Receives Distinguished Scientist Award

Peng Zhong, PhD

UNMC honored its Scientist Laureate, along with 17 other researchers named Distinguished Scientists, Research Leaders, and New Investigators, during an awards ceremony on Thursday, November 6, in the Durham Research Center Auditorium.

Our very own Peng Zhong, PhD, was recognized as a UNMC New Investigator for his first NIH R01 funding entitled "Mechanistic Studies of Opiate Withdrawal-Induced Sleep Disturbances".

Opioid Use Order (OUD) impacts over two million Americans, and there are over 130 deaths due to opioid overdose every day in the US, more than those caused by car accidents. Disrupted sleep is one of such contributing opioid withdrawal symptoms and has been considered an important reason for relapse back to opioid use. Improving sleep quality during opioid withdrawal is necessary to help reduce the burden of opioids on society. Dr. Zhong's studies aim to determine how noradrenaline neurons respond to chronic opioid use and how their dysfunction induces sleep disruption during the withdrawal phase. He will test a novel strategy for treating opioid withdrawal-induced sleep disturbances, thereby breaking the vicious cycle of opiate dependence.

The event also presented the Career Achievement Award and the Community Service to Research Award. A reception and poster session followed in the Durham Research Center commons area. See more on this year's award recipients at www.unmc.edu/research/distinguished-scientists.html.

Ramirez Selected Outstanding Scholar in Neuroscience by National Institutes of Health

by David E. Warren, PhD, and Meghan Ramirez

Meghan Ramirez

Ms. Meghan Ramirez was selected as an Outstanding Scholar in Neuroscience by the NIH, an award recognizing exceptional graduate students and early postdoctoral fellows conducting cutting-edge neuroscience research. She was nominated for the Outstanding Scholars in Neuroscience Award Program (OSNAP) by her mentor and advisor, Dr. David E. Warren, Associate Professor in DONS, in recognition of her outstanding research accomplishments, critical thinking, and dedication to advancing the field of cognitive neuroscience. "We're thrilled that the OSNAP selection committee recognized Meghan's scientific excellence and selected her as a recipient for this prestigious award. It's a wonderful testament to her hard work and commitment to asking important questions through her innovative cognitive neuroscience research," said Dr. Warren.

As a doctoral candidate, Meghan's research focuses on understanding how early-life social and environmental determinants of health influence brain development and late-life risk for Alzheimer's disease. Her work challenges traditional perspectives by emphasizing the importance of early interventions and health disparities. Meghan's contributions have been recognized through funding from the NINDS (F99NS1395) and the National Institute on Aging, as well as campus awards including the UNMC CoNDA Mini Grant and the Nancy and Ronald Reagan Alzheimer's Scholarship Fund Award.

Through the OSNAP program, Meghan has been invited to engage with NIH leadership, program officers, and intramural researchers at the NIH campus in Bethesda, Maryland. Sometime in the Spring of 2026, she will have an opportunity to present her research, participate in discussions about extramural funding opportunities, and further develop her network of peers and mentors to support her development as an independent investigator.

"I am truly honored to be selected for the Outstanding Scholars in Neuroscience Award Program. Being recognized as one of this year's awardees is deeply meaningful to me, not only as a validation of the work I have done so far, but also as an inspiration to continue pushing forward in my research. This award highlights the importance of mentorship, collaboration, and curiosity in neuroscience, and I am grateful to the NIH and the participating institutes for their commitment to supporting early-career scientists. I look forward to connecting with fellow awardees and NIH investigators at the symposium, and I am excited about the opportunity to share my research and explore new directions for growth in neuroscience" says Ramirez.

Selection for this award highlights Meghan's scientific excellence, innovative research vision, and commitment to translating neuroscience discoveries into meaningful societal impact. The OSNAP recognition represents a pivotal milestone in her career, empowering her to advance multidisciplinary research aimed at reducing disparities in Alzheimer's disease risk and promoting evidence-based strategies for neurodegenerative disease prevention.

Chang Wins Young Investigator Research Award

Jun Ha Chang, PhD

Jun Ha Chang, PhD, Instructor in the Department of Neurological Sciences, was selected to participate in the American Academy of Sleep Medicine (AASM) Foundation Young Investigators Research Forum, a competitive national program supporting early-career investigator in sleep and circadian research.

This award recognized Dr. Chang's research focused on real-world sleep health in aging, particularly how medications and daily behaviors influence sleep and circadian rhythms. Her work uses wearable actigraphy and digital phenotypic approaches to identify medication-related sleep disruption and to develop personalized, data-driven strategies to improve sleep quality and functional outcomes in older adults.

Participants in the Young Investigator Research Forum provides mentorship from senior sleep researchers, career development support, and opportunities to build collaborations in sleep and circadian science. This experience will support my ongoing and future NIH-funded research integrating sleep, medication use, and real-world behavioral data in aging and neurodegenerative populations.

Strengthening Global Collaboration: Ukrainian Delegation Visits the Department of Neurological Sciences

by Valentina Gymenyuk, PhD

Last November, DONS welcomed five Ukrainian combat medics—frontline physicians and combat surgeons to UNMC and Nebraska Medicine, and their visit was both inspiring and deeply humbling. Through the Senator Ben Nelson Fellows program, they brought firsthand experience from battlefield medicine and shared hard-earned lessons in combat care, while also building relationships grounded in mutual respect, shared learning, and hope for Ukraine's victory in the full-scale invasion Russia began in February 2022.

During their time in Nebraska, the delegation met with UNMC leadership and clinical teams, participated in tours and training discussions including trauma-focused programming and simulation innovation and contributed to a powerful symposium on polytrauma care and rehabilitation. Dr. Matthew Rizzo, together with clinicians and researchers across DONS, shared our approaches to care at Nebraska Medicine and listened closely as our guests described the realities of treating patients at the front line. What stood out most was the spirit of true partnership: they came to learn, but they also taught us a great deal about war-related medicine and the extraordinary resilience required to provide care under constant threat. Beyond the clinical exchange, their presence reflected genuine friendship and solidarity—and a renewed commitment to

One combat medic described going into the frontline "kill zone" carrying amulets from his daughter. She had given him her hair clip to keep him protected.

saving lives, not only of soldiers but also of civilians across cities and towns under direct attack from Russia.

Our thoughts and prayers are with the Ukrainian people as they continue their courageous fight for freedom and democracy. We are deeply grateful to all those in the United States who support Ukraine and help sustain hope during this war.

Slava Ukraini!

UNeMed celebrates discovery with annual Innovation Awards

by UNMC Today October 2025

Bethany Lowndes, PhD, MPH

UNeMed presented its annual Innovation Awards, celebrating innovation and discovery at the University of Nebraska.

As part of the banquet held October 22, inventors received the Emerging Inventor, Faculty Entrepreneur, Innovation Champion, Most Promising New Invention and Startup of the Year Awards.

UNeMed President and CEO Michael Dixon, PhD, also unveiled 13 Innovation Ambassadors. The new program will offer a group of university leaders and experienced faculty inventors to act as mentors to colleagues unfamiliar with the technology transfer and commercialization process.

Congratulations to Bethany Lowndes, PhD, MPH, Associate Professor, Human Factors for the Department of Neurological Sciences and Justin Weeks, PhD, clinical Psychologist, Department of Psychiatry for being recognized as an UNeMed's Innovation Ambassador.

This is an elite group of university leaders and experienced faculty inventors empowered to act as mentors to colleagues unfamiliar or skeptical of the technology transfer and commercialization process. UNeMed also created the Innovation Ambassador program to advocate for the services, benefits, usefulness, necessity and professionalism of the University's technology transfer and commercialization office.

Brain Cancer Survivor Embraces Hope and Positivity Amid 13-year Journey

Hope & Healing Magazine from Nebraska Medicine

Nicole Shonka, MD

Wendy Wessling began her cancer journey over a decade ago. The youngest of 11 children, she made a courageous decision early in her diagnosis to fight with every tool available to her. With her husband Tom and four children by her side. Wessling embarked on a journey she never thought she'd have to face.

Her symptoms began in the fall of 2012 while she was teaching fifth and sixth grade at Omaha's Hartman Elementary School.

"I remember giving out Halloween candy, and I suddenly fell off the chair, "recalls Wessling. "I was forgetting words, making strange decisions, and felt aggravated by the confusion I was experiencing. I wasn't acting like myself and didn't even realize it. My husband noticed the changes and, without me even asking, made a doctor's appointment."

Wessling underwent a brain MRI immediately. The scan revealed an aggressive, malignant form of brain cancer called glioblastoma multiforme.

Glioblastoma, the most common adult brain cancer, invades healthy brain tissue. It grows quickly and spreads, which increases the chances of the tumor growing back. Although the prognosis was not good, Wessling chose to proceed with treatment.

Four days later, George Greene, MD, removed the tumor. Radiation and chemotherapy were used to slow the cancer's progression.

Wesling knew medical treatment alone would not have given her time to experience a quality of life, seeing her children grow to adulthood and have families. Wessling promised herself and God to fight with hope.

After seeking several medical opinions, Wessling met medical neuro-oncologist Nicole Shonka, MD, adjunct professor, department of neurological sciences in September 2013 and decided to transfer her care to the Fred & Pamela Buffett Cancer Center – Nebraska Medical Center.

"I'm so grateful for Dr. Shonka," says Wessling. "She is the most caring doctor I've ever met. She gives me the information I need, tenderly and lovingly. I appreciate how involved she is with her patients, wanting them not only to survive, but to thrive."

In the years that followed, Wessling underwent additional surgery, radiation and several types of chemotherapy when the tumor returned. Each time, she met the challenge.

"Wendy remains upbeat regardless of her circumstances," says Dr. Shonka. "If we can keep brain tumors from growing like a millimeter or two, we can make a substantial difference for a patient's independence and communication. Thankfully, Wendy's MRI scans haven't shown active growth since 2019. Wendy's journey is really a miracle – and she's an inspiration." Wessling has beaten the odds.

"I used to be a triathlete, now I'm in a wheelchair," she says. "But I exercise every day, go to the gym to ride a bike and do weight training. The luckiest of us know that we all have a number on our backs. I've lived over 4,000 days since my diagnosis, and I've decided that all the little things matter."

Wessling recalls the emotional struggle and ultimately praying, "God, use me as you see fit." She relies on what she calls the seven Fs: Faith, family, friends, food, fight, fun and fitness. Her daily prayer and appreciation for these values help strengthen her hope and determination

Wessling finds purpose in being a mentor with Imerman Angels, helping others navigate and find hope in their cancer journey.

"Whether she's doing well, discussing progression, surgery or needing more chemotherapy, she always looks at me and says, 'I'm not going to die of this,"' says Dr. Shonka. "She is such an inspiration that, with permission, I've given her name to other patients so she could offer them hope too."

Believing there's always something to look forward to, Wessling stays determined, focusing on the positive.

"I appreciate every little thing as a blessing – sunsets, eating lunch, laughing with a friend, going to church and going outside," she says. "When I wake up in the morning, I get up and focus on naming 100 things that I'm grateful for. I don't think I could've gotten through this without this practice and the help of my friends and family."

Looking back, Wessling says she would not change her cancer journey. Having faith in something bigger than herself has helped her rise to the occasion, and she believes she's a better person because of it.

"If you're facing a cancer diagnosis, hold on to hope," she adds. "You never know what the future holds. Fight, don't give up! Cherish every day, and you'll be happier for it. Life isn't always easy; sometimes it's difficult. I've certainly had my moments! But if you look for the positive, even in the darkest of times, you'll find it.

Venous sinus stenting replaces Cerebrospinal Fluid Shunting as the neurosurgical treatment of choice for medically refractory Idiopathic Intracranial Hypertension

by Nicholas Borg, MD

Nicholas Borg, MD

Idiopathic intracranial hypertension is a common cause for severe headaches, pulsatile tinnitus and visual disturbance that typically - but not always - affects young, overweight women. Initial treatment is medical, aimed at lowering intracranial pressure and controlling symptoms. Weight loss is arguably the most effective treatment and can be curative. Whilst bariatric surgery has been used in the past, GLP-1s are emerging as a powerful new tool to combat the disease.

For patients whose disease is resistant to initial conservative measures, there are various surgical options that aim to protect vision, including optic nerve sheath fenestrations and CSF shunting. More recently, venous sinus stenosis (narrowing of the veins at the back of the brain) has been recognized as a key component of the pathogenesis and the good news is that it can be treated very effectively with a stent. This avoids several of the issues that previously plagued patients treated with shunts and for most patients is a 'one and done' solution, with one night in the hospital for observation.

Over the past couple of years, the practice of venous sinus stenting at UNMC has consistently grown, predominantly through word of mouth among patients and referring providers. With increasing case volumes, the Department of Neurosurgery has developed an active research interest in understanding how the procedure affects global brain function. To test the hypothesis that improving cerebral venous drainage results in diffuse changes to networks in the brain involved in cognition and mood, Dr. Nicholas Borg collaborates with Dr. Vaishali Phatak, a neuropsychologist in the DONS, to perform cognitive function testing before and after venous sinus stenting.

Patients with suspected idiopathic intracranial hypertension should first have brain imaging (MRI with MRV) and a referral to neuro-ophthalmology. If the diagnosis is confirmed and conservative measures fail, they may be eligible for both stenting and participation in research.

GREAT PLAINS IDEA-CTR NEBRASKA RURAL ENGAGEMENT AND WELLNESS SUMMIT

Great Plains IDeA-CTR Community Engagement and Outreach Core and Nebraska Extension co-hosted the Nebraska Rural Engagement and Wellness Summit in Kearney to focus on strengthening rural health and well-being across our state.

The day featured engaging keynotes, flash talks, and lively discussions that sparked ideas and collaboration among community leaders, researchers, and health professionals.

Attendees left energized and inspired, as reported on the Great Plains IDeA-CTR website (gpctr.unmc.edu/community/index.html). Now it's time to turn ideas into action and build stronger partnerships and innovative solutions to support the well-being of Nebraska's rural communities. To help move things forward, we invite you to explore the compilation of resources from the Summit to help you with the next steps towards a healthier Nebraska. Click here, https://go.unmc.edu/qc49

GREAT PLAINS
IDeA | Clinical and Translational Research

Parkinson's Disease Conference – Making strides

by Mara Seier, MD

The 2025 University of Nebraska Medical Center Parkinson's Disease Patient & Caregiver Symposium, held on October 1, 2025, at the Embassy Suites La Vista Conference Center, brought together patients, caregivers, clinicians, researchers, and community advocates for a full day of education and connection. This annual event has become one of Nebraska's most anticipated gatherings for individuals and families navigating Parkinson's disease, and this year's symposium continued that tradition.

The program featured an interdisciplinary lineup of experts from UNMC's Department of Neurological Sciences from backgrounds including Movement Disorder neurology, neurosurgery, neuropsychology, nutrition therapy, social work , and neurorehabilitation. Presentations covered a wide range of timely topics, including updates in diagnostic approaches, advances in medication and surgical treatments, and practical strategies for addressing motor and non-motor symptoms. Attendees also had the opportunity to learn more about the role of exercise, nutrition, and mental-health support in daily management, as well as community-based resources designed to improve quality of life.

With nearly 600 participants registered for the event, the symposium highlighted the strong and growing Parkinson's community in Nebraska. One of the major goals of the symposium is to help both patients and caregivers feel more confident and supported in their journey. Many participants expressed appreciation for the chance to speak directly with specialists, connect with others facing similar challenges, and access trustworthy information rooted in current research.

Overall, the 2025 symposium served not only as an educational conference but also as a celebration of resilience, collaboration, and hope. UNMC's continued commitment to outreach and patient-centered care ensures that individuals living with Parkinson's disease—and those who support them—are equipped with the tools and knowledge needed to thrive.

Parkinson's Conference attendees.

Anita Sharp Brain Aneurysm Awareness Fundraiser

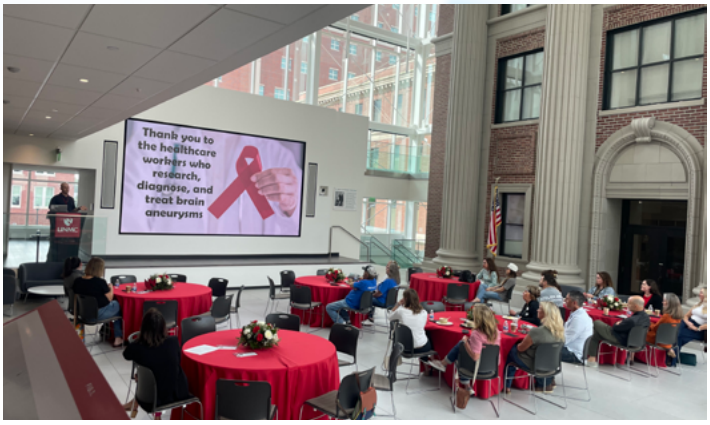
by Emily Tiensvold & Jordan Grieser, University of Nebraska Foundation

The Anita Sharp Brain Aneurysm Awareness Fundraiser took place on September 21, 2025, at the Wigton Heritage Center on the UNMC campus. The event focused on education, connection, and support for those affected by brain aneurysms. Guests heard from Dr. Bill Thorell and Dr. Dan Surdell, from the Department of Neurosurgery, who shared updates on the latest treatment options and highlighted how previous donations have helped improve patient care, support nursing education, and fund vital equipment.

A powerful video sharing a survivor's story was shown, and attendees had the chance to see and learn about some of the devices used in treatment, offering a hands-on look at the tools that save lives.

About thirty survivors, family members, and healthcare professionals attended. The event was sponsored by Medtronic, Upton Construction, the Neppl family, and Terumo. Platte River Concrete and Consolidated Concrete contributed Husker football tickets and Champions passes, which were raffled off to raise additional funds.

In total, $13,000 was raised for the Brain Aneurysm Patient and Research Fund. More importantly, the occasion gave survivors and their families a meaningful opportunity to connect, share experiences, and support one another.



Anita Sharp Brain Aneurysm Awareness Fundraiser attendees

Lewy Body Dementia Care Partner Conference

by Julie Pavelka, APRN-AP

On Monday, October 13, 2025, caregivers, family members, and friends of people living with Lewy body dementia (LBD) gathered at the Scott Conference Center in Omaha, Nebraska, for a comprehensive Lewy Body Dementia Care Partner Conference, sponsored by Philanthropy and the Department of Neurological Sciences at the University of Nebraska Medical Center (UNMC). Lewy body dementia is a complex neurological condition that affects cognition, movement, behavior, and autonomic functions. It can pose significant challenges not only for those diagnosed but also for the people who care for them. The conference provided a dedicated space for education, support, and practical tools for navigating the caregiving journey with LBD, and emphasized the unique challenges faced by those who care for people living with Lewy body dementia. A key focus of the conference was equipping care partners with practical insights and strategies to manage both the expected and unexpected aspects of caregiving.

The Lewy Body Dementia Care Partner Conference underscored the growing recognition of Lewy body dementia (LBD) as a complex and under-recognized neurological condition requiring coordinated clinical care, caregiver education, and ongoing research. Through expert-led sessions, the conference emphasized practical caregiving strategies, resilience building, and proactive planning, reflecting the evolving understanding that effective LBD care extends beyond symptom management to include emotional, financial, and social support for care partners. These sessions were aimed at helping participants build confidence, anticipate common challenges, and find resilience and community in the process of caregiving.

We are in the planning phase of the 2026 Conference, October 14th at the Scott Conference Center.

LewyBody Dementia Care Partner Conference

Advancing MS Care: Highlights from the 2025 Nebraska Annual MS Symposium

by Rana Zabad, MD

In collaboration with the Nebraska Neurological Society, the University of Nebraska Multiple Sclerosis Neuroimmunology Program hosted its 2025 Annual MS Symposium on November 21 at the Embassy Suites La Vista, with strong engagement both in person and online. Attendees included physicians, APPs (PA and APRN), trainees, pharmacists, and PhD-trained professionals from Nebraska and the surrounding region. The event was chaired by Rana Zabad, MD, FAAN, Chief of the MS Neuroimmunology Division, and featured presentations by four fellowship-trained MS neurologists from UNMC and Nebraska Medicine, two current MS Neuroimmunology Fellows, and regional experts in the field.

The symposium opened with Elizabeth Hartman, MD, who addressed management of relapsing–remitting MS in women of childbearing age, focusing on pregnancy planning and breastfeeding. Dr. Zabad followed with "From Phenotypes to Endotypes: Re-Thinking MS Through Mechanistic Lenses," outlining how mechanistic disease frameworks may refine diagnosis, therapeutic selection, and long-term treatment strategy.

Daniel Crespo Artunduaga, MD, fellowship-trained and now practicing at Bryan LGH in Lincoln, discussed long-term considerations surrounding B-cell modulators, emphasizing the need to balance efficacy with cumulative immunosuppression and infection risk. Evanthia Bernitsas, MD, Chair of Neurology, at Creighton University Medical Center, examined aging, immunosenescence, and complexities in disease-modifying therapy decisions.

Case-based presentations from the UNMC MS Neuroimmunology Fellowship highlighted real-world diagnostic challenges. Ayush Gupta, MBBS, reviewed a challenging white matter disease case, and Sulafa Saffarini, MD, presented "Brain on Fire," illustrating the expanding spectrum of autoimmune encephalitides. Lakshman Arcot Jayagopal, MBBS, addressed MOG-associated disease, focusing on its diagnostic variability and evolving management.

The program concluded with an interactive session on symptom management and caregiver burden, led by Aubrey Lindner, BS, Neil Jouvenat, PA-C, and Renee Stewart, APRN, DNP, underscoring the centrality of supportive care in MS practice.

Four presenters—Arcot, Crespo, Gupta, and Saffarini—were former or current UNMC trainees, reflecting the enduring strength of the institution's training pipeline and its growing impact on MS care across the region.

2nd Annual Michael Heller Memorial Young-Onset Alzheimer's Conference

by Daniel Murman, MD

Michael Heller Memorial attendees

The Department of Neurological Sciences held its second Michael S. Heller Memorial Young-Onset Alzheimer's Conference on Saturday, November 15, 2025, at the UNO Thompson Alumni Center. The goal of the conference was to provide focused education for patients who have young-onset Alzheimer's disease (AD) and their families.

Early-onset (also called young onset) AD refers to AD diagnosed before age 65, much earlier than the more common late-onset form. It accounts for about 5–10% of all AD cases, roughly 350,000 people in the US and 2,200 in Nebraska and western Iowa. Early-onset AD often presents with more atypical symptoms, which can lead to delayed diagnosis and confusion with stress, depression or other conditions. Patients with young onset AD are typically working, as are their spouses, and many still have children at home. Many community and social programs for patients with AD are focused on patients older than age 65. Thus, there are many challenges that patients and their families face, including navigating work, disability, health insurance, driving, providing care for children still at home, and finding care services for young onset patients, including finding and paying for long-term care, if needed.

Michael "Mike" Heller died at the age of 56 in April of 2022 after a courageous battle with early onset AD. Mike was married to his wife Cassy for 31 years, and they had four children. Mike was described as always being young at heart, and he had a successful career in advertising and business, including being the executive director of "Because People Matter," an organization that connected people in need to donated goods and services. It was in this spirit that

Cassy Heller decided to make a charitable contribution to the University of Nebraska Foundation to establish the Michael S. Heller Young Onset Alzheimer's Conference fund. The goal was to connect young-onset AD patients, their families, and caregivers to important individuals, information, and services.

This year's conference featured talks by: Dan Murman, MD, about new developments in the diagnosis and treatment of early onset AD; Cassy Heller about her journey as a caregiver; Julie Pavelka, APRN, about navigating the health care system; Colleen Hoarty, LCSW, about finding community resources, and Christina Usher, Esq., about legal and financial planning. The final hour consisted of two breakout sessions, one being a question-and-answer session with the speakers and the families, and the other was a wellness activity focused on persons living with AD facilitated by staff from the Heartland Neurological Therapy and Wellness Center. There were also vendor tables of organizations and individuals with important information and services for the attendees that were available before and during the conference. We plan to have our next conference in the fall of 2027.

The Movement Disorders Team

UNeMed kicks off Innovation Ambassador program

by Charlie Litton UNeMed

Justin Weeks, PhD

UNeMed completed the first round of training for its new Innovation Ambassadors program, wrapping up a workshop in November that gave the 13-person cohort a deep dive into intellectual property, technology transfer and commercialization.

Launched during the Innovation Awards ceremony in October, the Innovation Ambassadors program was created to help innovative faculty, staff and students who might have new inventions, discoveries or other ideas and don't know where to turn or what to expect.

The 13 ambassadors are an expert group of experienced faculty inventors empowered to act as mentors, advisers and advocates for colleagues who are unfamiliar or even skeptical of the innovation or technology transfer process.

"UNeMed started the Innovation Ambassador program to expand the visibility of technology commercialization and deepen the connections between researchers and UNeMed," said President and CEO Michael Dixon, PhD.

"Our first cohort of ambassadors brings remarkable experience translating discoveries into real-world solutions," Dr. Dixon said. "By activating this network of knowledgeable and engaged researchers, we aim to make the commercialization process more approachable, more connected and ultimately more impactful for the entire research community."

As a group, the Innovation Ambassadors have disclosed 249 inventions, applied for 199 patents — 44 of which have issued — built five startup companies and have had 20 technologies licensed. They have amassed more than $4 million in additional grants, sponsored research and funding.

Nathan Hatch, PhD, the program director and a licensing specialist at UNeMed, said the program already has yielded positive results.

"We had some great discussions that directed us toward some potential changes we can make to improve our operations," he said. "This is just getting started, and they've already demonstrated just how impactful we expect this program to be over the next few years."

UNeMed's Innovation Ambassadors from the Department of Neurological Sciences are:

Bethany Lowndes, PhD, associate professor, human factors, in the Department of Neurological Sciences, UNMC College of Medicine.

Justin Weeks, PhD, clinical psychologist with the Nebraska Medicine Department of Psychology and psychotherapy director for the Anxiety Subspecialty Treatment Program.

Sounds of the Holidays 2025

by Matthew Brooks, DMA

The Nebraska Medical Orchestra & Choir's Annual Winter Concert on December 3 was a joyful celebration of music, community, and generosity, bringing together healthcare professionals, students, and community members for an uplifting holiday spirit. The event was led by Dr. Matthew Brooks, Director of Orchestral Activities in Music & Medicine, who conducted the Nebraska Medical Orchestra, alongside Dr. Katrina Cox, conductor of the Nebraska Medical Choir.

This year's concert proudly partnered with the Brain Injury Association of Nebraska, raising over $2,500 to support education, advocacy, and resources for individuals and families impacted by brain injury across the state. A preconcert reception featured their multimedia arts exhibit, A Peace of My Mind — a collection of photographic stories sharing about individuals impacted by brain injury.

A highlight of the evening was the festive holiday singalong that closed the program, inviting the audience to join musicians and singers in a moment of collective joy and holiday cheer. The visible support of Interim Chancellor H. Dele Davies and other UNMC administrators underscored the institution's commitment to wellness and community partnership through the arts.

The Nebraska Medical Orchestra & Choir welcome new members who might be interested in joining. For more information, visit www.unmc.edu/music or email NebMedicalOrchestra@unmc.edu.

MAKE KIDS OF UKRAINE SMILE AGAIN – A THANK YOU

It has been an honor to be part of our joint effort — "Make Kids of Ukraine Smile Again."

Together, we have turned donated so many toys from our community into moments of hope for children living through unimaginable hardship in Ukraine.

I have just returned from Odesa, where families are surviving through days of routine blackouts, limited heat, and water shortages. Despite these difficult conditions, I saw firsthand how the toys we sent are helping children feel seen, supported, and less afraid during this tragic period of war.

I want to express my deepest gratitude to all of you at UNMC and to our extraordinary volunteer hero -Valentina Shults, who has tirelessly received, organized, and delivered toys to Ukrainian children over the past two years. Your compassion and commitment are making a real impact.

The children have sincere appreciation for your amazing gifts, and to share their strength, hope, and determination to build bright, joyful futures in a free and peaceful Ukraine.

Thanks to all of you for participating in this project and for bringing smiles to children who need them most. I look forward to continuing our collaboration on future efforts supporting Ukraine.

With my grateful regards to each of you,

Valentina Gumenyuk, PhD and the SAGH Team

Ukrainian children waiting to receive gifts

AI, Discovery, and Translation: AIAS 2025

by Matthew Rizzo, MD, FAAN, FANA

The Artificial Intelligence for Accelerated Science (AIAS) Conference, held October 27–28 in San Francisco, brought together leaders in computer science, medicine, and policy to examine how artificial intelligence is reshaping the research landscape, from basic discovery to real-world application. A central theme of the meeting was that AI is no longer simply a powerful analytic tool; it is rapidly becoming part of the scientific infrastructure itself, changing how research is conducted and how discoveries move from the laboratory into practice.

Dr. Rizzo and colleagues attended AIAS 2025, hosted by the Chen Institute and University of California, Berkeley, where this shift was illustrated through presentations by Nobel laureates Jennifer Doudna (2020), David Baker (2024), and Omar Yaghi (2025). Together, they described how AI is driving advances in biological design, protein engineering, and materials discovery, with clear implications for medicine and public health.

During the conference, the group also met with Theresa Maldonado, Systemwide Vice President for Research and Innovation at the University of California and current President of the American Association for the Advancement of Science, and Angela Pisco, Chief Data Officer at the Chan Zuckerberg Initiative. These conversations focused on emerging opportunities for collaboration that link AI, health, and data-intensive science across institutions.

The meeting highlighted translational research closely aligned with clinical neuroscience and population health. In this context, Dr. Rizzo and collaborators shared ongoing work on voice biomarkers for cognitive impairment using naturalistic in-vehicle audio, conducted with Aparna Josh and Anuj Sharma from Iowa State University. This project reflects a growing emphasis on real-world data and AI-enabled sensing to support scalable, ecologically valid approaches to cognitive assessment and long-term monitoring.

Across sessions, a consistent message emerged: AI is becoming a genuine partner in scientific discovery. Topics ranged from foundation models and physics-informed learning to digital twins, synthetic data, and clinician–AI collaboration. Speakers also addressed governance, human-centered design, and public trust, underscoring that AI's impact depends as much on people, institutions, and values as on algorithms.

Insights from AIAS 2025 are helping inform a broader vision for AI-enabled translational neuroscience across the University of Nebraska system, UNMC, Nebraska Medicine, and the NIH/NIGMS IDeA-Clinical and Translational Research Network. They are also shaping plans for a new course in AI and Translational Medicine, designed to connect advanced AI methods with clinical relevance, ethical responsibility, and measurable impact.

Matthew Rizzo, MD and Jennifer Doudna, PhD

Matthew Rizzo, MD and Omar Yaghi, PhD

Celebrating Each Sunrise – Congratulations to the Neurosciences ICU that received this year's DAISY Team Award for its life-saving work.

By Kara Haworth

Neurosciences Intensive Care Unit wins DAISY Team Award.

The work our health care professionals do each day can have a profound impact on the lives of our patients. While it may be simple to say, 'this is just what we do,' the reality is our teams' expertise can mean the difference between life or death.

The Neurosciences Intensive Care Unit, located on level eight of Clarkson Tower, received the annual DAISY Team Award this fall for efforts like this. They were nominated by the family of a patient whose life was saved. In fact, in their letter, the nominator wrote the patient "is alive today because of the phenomenal care received at Nebraska Medical Center."

This letter went into detail highlighting how quickly the patient's condition worsened and celebrated the nurses, residents, and physicians whose extraordinary efforts saved the patient's life.

"I cannot accurately put into words how much this hospital now means to us," the family member wrote. "Every morning, I get emotional watching the sunrise from this ICU room because it is one more sunrise (my loved one) in this world."

"Our Neurosciences ICU team consistently goes above and beyond to deliver exceptional care," says Kelly Goetschkes, manager, Neurosciences ICU. "Achieving this level of excellence takes every member working together, and I couldn't be prouder of what we accomplish! This success was truly a multidisciplinary collaboration across several departments with Nebraska Medicine - proof that when we unite, remarkable things happen."

This is the fourth time a team has received the DAISY Team Award. The annual award was created to celebrate an entire team whose works achieve better patient and family outcomes. The team award honors collaboration by two or more people, led by a nurse, who go above and beyond addressing the patient/family needs.

The Department of Neurological Sciences holiday party.

A NIGHT OF HOLIDAY CHEER!

The Department of Neurological Sciences celebrated its annual holiday party on December 18 at the Champions Run Pavilion in Omaha. Faculty and staff enjoyed delicious food and drinks, followed by an inspiring message from Matthew Rizzo, MD. The evening wrapped up with lively music by DJ "Jazzy" Jeff Laird and plenty of festive karaoke, as attendees took the stage to perform their holiday favorites. Happy Holidays from the DONS team to you and your family.

Publications & Grants

NEUROSURGERY

Afshin Salehi, MD, MS, Spencer D. Lau, MD, Peter H. Yang, MD, Myron L. Rolle, MD, Jarod L. Roland, MD, and Matthew D. Smyth, MD: Hemispherotomy and posterior quadrant disconnection in infants: outcomes in patients ≤ 12 months of age.

Subramaniam VR, Chan AHW, Marcuse L, Fields M, La Vega-Talbott M, Cummins DD, Barcia JA, Ghonim HT, Jayagopal LA, Im Y, Ghatan S, Panov F, Avecillas-Chasin JM. Connectivity between the seizure onset zone and the thalamus correlates with seizure outcomes in thalamic responsive neurostimulation. Epilepsia. 2025. Epub 20251219. doi: 10.1002/epi.70052. PubMed PMID: 41417458.

DEPARTMENT OF NEUROLOGICAL SCIENCES

Anding, A., Ren, B., Padmashri, A., Burkovetskaya, M. and Dunaevsky A. (2025) Activity of human-specific interlaminar astrocytes in a chimeric mouse model of Fragile X Syndrome. International Journal of Medical Sciences, 26 (13). PMID: 40060700; PMCID: PMC11888414.

Padmashri, R., Dunaevsky A. (2025) Targeting GABA Polarity During Cortical Development Improves Circuit and Sensory Deficits in Fragile X Mice. Biol Psychiatry. 2025 Mar 1;97(5):420-421, PMID: 39919885.

Gabriela Pavlinkova 1 · Pin-Xian Xu 2 · Kathryn S. E. Cheah 3 · Ebenezer N. Yamoah 4 · Bernd Fritzsch 5: Regulatory Networks Driving the Specification, Differentiation, and Diversification of Neurons in the Mouse Inner Ear.

Ebenezer N. Yamoah 1 , Gabriela Pavlinkova 2 , Jeong Han Lee 1, Jennifer Kersigo 3, Marsha L. Pierce 4 and Bernd Fritzsch 5: Dicer Deletion in the Ear Can Cut Most Neurons and Their Innervation of Hair Cells to Project to the Ear and the Brainstem.

C. K. Kovach, S. V. Gliske, E. M. Radcliffe, S. Shipley, J. A. Thompson and A. Abosch, "Interpreting the Trispectrum as the Cross-Spectrum of the Wigner–Ville Distribution," in IEEE Signal Processing Letters, vol. 33, pp. 221-225, 2026, doi: 10.1109/LSP.2025.3640510.

Jeong Han Lee 1, Ebenezer N. Yamoah 1, Jennifer Kersigo 2, Karen Elliott 2, Niya LaRoda 3, Gabriela Pavlinkova 4, Bernd Fritzsch 3 : The segregation of Calb1, Calb2, and Prph neurons reveals distinct and mixed neuronal populations and projections to hair cells in the inner ear and central nuclei.

Hall, M. C., Rempe, M. P., Casagrande, C. C., Glesinger, R. J., Petro, N. M., Garrison, G. M., John, J. A., Dietz, S. M., Schantell, M., Bai, H., Arif, Y., Embury, C. M., Bashford, S., Okelberry, H. J., Petts, A. J., Keifer, E. L., May-Weeks, P. E., Picci, G., Heinrichs-Graham, E., & Wilson, T. W. (2025). Age-related alterations in alpha and beta oscillations support preservation of semantic processing in healthy aging. npj aging, 11(1), 73. https://doi.org/10.1038/s41514-025-00263-8

Schantell, M., Lulli, M. C., McDonald, K. M., Horne, L. K., John, J. A., Coutant, A. T., Okelberry, H. J., Glesinger, R., Arif, Y., O'Neill, J. L., Bares, S. H., May-Weeks, P. E., & Wilson, T. W. (2025). Cannabis- and HIV-related perturbations to the cortical gamma dynamics supporting inhibitory processing. Brain communications, 7(3), fcaf190. https://doi.org/10.1093/braincomms/fcaf190

Wilson, T. W., Schantell, M., Dietz, S. M., Penhale, S. H., McDonald, K. M., De Luca, K. R., Voller, M. E., Volberding, L. D., Carusi, O. R., Horne, L. K., Arif, Y., Glesinger, R., John, J. A., Okelberry, H. J., May-Weeks, P. E., Case, A. J., Zimmerman, M. C., & Spooner, R. K. (2025). Neural oscillations serving abstract reasoning are differentially associated with inflammatory markers in people with HIV. Brain, behavior, and immunity, 133, 106236. Advance online publication. https://doi.org/10.1016/j.bbi.2025.106236

Transformation of brain myeloid cell populations by SIV in rhesus macaques revealed by multiomics: X Xu, M Niu, BG Lamberty, K Emanuel, MJF Apostol, HS Fox Communications Biology 8 (1), 100.

T cell-mediated SIV dissemination into the CNS: a single-cell transcriptomic analysis X Xu, M Niu, BG Lamberty, K Emanuel, LD Estrella, HS Fox Research Square, rs. 3. rs-653736.

Rizzo M, Dawson JD. Reply to "AI: Need for Comparative Studies in Complex Neurologic Diagnosis". Ann Neurol. 2025 Dec 22. doi: 10.1002/ana.78067. Epub ahead of print. PMID: 41424233.

Chang, JH., Ergun, Y. Uc., Shaffer, C., Rizzo, M. (2025) (Accepted) Objective Real-World Mobility Patterns in Parkinson's Disease: Driving and Walking After Levodopa Dosing. Parkinsonism & Related Disorders.

Joshi, A., Venkatachalapathy, A., Merickel, J., Chang, JH., Rizzo, M., Sarkar, S., Sharma, A. (2025) Impact of Acute Glucose Episdes on Adherence to Speed Limits in the Naturalstistic Setting for Drivers with Diabetes: An Application of Linear Quantile Mixed Models. Transportation Research Interdicsciplinary Perspectives. Article Number: 101633 https://doi.org/10.1016/j.trip.2025.101633

Chang, J.H., Huang, Y., Zhang, Y., Chen, S., Murman, D.L., Phatak, V., & Rizzo, M. (2025). Day-to-Day Sleep Efficiency and Driving Behaviors in Older Adults with and without Cognitive Impairment. Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring. http://dx.doi.org/10.1002/dad2.70173

Joshi A., Chang JH, Basulto-Elias G, Hallmark S, Rizzo M, (2025) Sharma A. Identifying and Predicting Cognitive Decline Using Multi-Modal Sensor Data and Machine Learning Approach. 2025 Jun 18 doi: 10.21203/rs.3.rs-6735622/v1 PMID: 40585273; PMCID: PMC12204342.

Hasan, M.Z., Basulto-Elias, G., Hallmark, S., Chang, J.H., Sharma, A., Dawson, J.D., Sarkar, S. and Rizzo, M. (2025). Classifying Cognitive Decline in Older Drivers from Behavior on Adverse Roads Detected Using Computer Vision. Journal of Transportation Technologies, 15(1),135-154. doi: 10.4236/jtts.2025.151008 [doi.org].

Chang, J.H., Sun, X., Chen, S., Zhang, Y., Murman, D., Phatak, V., Merickel, J., Vlock, E., Rizzo, M Counting Zs. Determining the Monitoring Days Needed to Obtain Reliable Sleep Metrics in Older Adults with Mild Cognitive Impairment. Submitted to Behavioral Sleep Medicine.

Rizzo, M. & Dawson, J. D. (2025). AI in neurology: Everything, everywhere, all at once. Part 1: Principles and practice. Annals of Neurology. 98, 211–230. https://doi.org/10.1002/ana.27225

Rizzo, M. (2025). AI in neurology: Everything, everywhere, all at once. Part 2: Speech, sentience, scruples, and service. Annals of Neurology. Advance online publication. https://doi.org/10.1002/ana.27229

Rizzo, M. (2025). AI in neurology: Everything, everywhere, all at once. Part 3: Surveillance, synthesis, simulation, and systems. Annals of Neurology. Online publication. https://doi.org/10.1002/ana.27230

L. Daniel Estrella, Xiaoke Xu, Collin White, Jane E. Manganaro, Lexi Sheldon, Trey Farmer, Kelly L. Stauch. The absence of Parkin in hTau mice leads to synaptic mitochondrial dysfunction, alterations to the synaptic proteome, and increased phosphorylated tau in the Hippocampus. PMID: 40914434. PMCID: PMC12680073. DOI: 10.1016/j.nbd.2025.107084.

Xu Z, Azzam M, Bivens M, Dustin M, Wan S, Blackford JU, Wang J, editors. nnU-BNST: Deep Learning-Based

Automated Segmentation of the Bed Nucleus of the Stria Terminalis2026; Cham: Springer Nature Switzerland.

Thapat Wannarong, Marherita Milone, Duygu Selcen, P. James B. Dyck, Teerin Liewluck. Natural History and Phenotypic Spectrum of Myofibrillar Myopathies and Myopathies Associated with MFM-Related Genes. PMID: 41183253. DOK: 10.1212/WNL.0000000000214255.

AWARDED GRANTS & CLINICAL TRIALS – 2025

- *Anna Dunaevsky – R01 – Contribution of Glia to Sleep/Wake Disturbances in FXS*
- *Anna Dunaevsky – P20 – CoNDA*
- *Kuan-Hua Chen – RF1 - Influence of Interpersonal Connectedness in Spousal Care Dyads on Early Progression of AD*
- *Kelly Stauch – Michael J Fox Foundation – Determining PINK1 and PRKN enzyme activities in vivo*
- *Kelly Stauch – D.O.D. – Interrelationship between PINK1-PRKN Pathway Disruption and Tauopathy in the Pathophysiology of Cognitive Impairment in Parkinson's Disease*
- *Kelly Stauch – Parkinson's Foundation – New approaches for understanding dopaminergic neuron-specific mitochondrial alterations*
- *Ezequiel Piccione – Clinical Trial: Abcuro, Inc. – An Open-label, Multicenter Study to Evaluate the Long-term Safety and Efficacy of Ulviprubart (ABC008) in Subjects Who Have Completed a Trial of Ulviprubart for the Treatment of Inclusion Body Myositis (Abcuro LTE)*
- *Joseph Americo Fernandes – Clinical Trial: Novartis Pharmaceuticals Corp. – A phase 2, randomized, double-blind, placebo-controlled parallel group study of VHB937 in Amyotrophic Lateral Sclerosis (ALS) over 40 weeks followed by an Open-label Extension (ASTRALS)*
- *Daniel Murman – Clinical Trial: Lilly USA, LLC – A Study of Remternetug Versus Placebo in Early Alzheimer's Disease Participants at Risk for Cognitive and Functional Decline (LAKI)*
- *Kelly Stauch – Vireo Systems – Assessment to see if creatine HCl is neuroprotective in the context of traumatic brain injury*
- *Joseph Americo Fernandes – Clinical Trial: Dianthus Therapeutics, Inc. – A PHASE 3 RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY TO EVALUATE THE EFFICACY AND SAFETY OF DNTH103 IN ADULTS WITH CHRONIC INFLAMMATORY DEMYELINATING POLYNEUROPATHY(Captivate)*
- *Joseph Americo Fernandes – Clinical Trial: Immunovant Sciences GmbH – A Phase 3, Multicenter, Randomized, Placebo-Controlled, Double-blind Study to Assess the Efficacy and Safety of IMVT-1402 in Patients with Mild to Severe Generalized Myasthenia Gravis (Immunovant)*
- *Dave Warren – University of California – San Diego – Measuring empathy biomarkers in persons with dementia and their caregivers: Identifying psychological, hormonal, and neural correlates of empathy, burden, and stress*
- *Jieqiong Wang – P20 Supplement – Nebraska Center for Heart and Vascular Research*
- *Daniel Murman – Alzheimer's Association – Influence of family connectedness on early AD progression*
- *Arenn Carlos – American Academy of Neurology – Cerebrovascular reactivity as a screening and monitoring tool for amyloid-beta burden in Alzheimer's disease patients receiving anti-amyloid immunotherapy*
- *Padmashri Ragunathan – Omaha Community Foundation – Heflin Auditory Research Fund*

Ways to Support Neurosciences

Emly Tiensvold

We are committed to providing the best treatment available today, as well as pioneering new therapies for the future. Our team of internationally recognized physicians and researchers is dedicated to saving lives, relieving suffering, and reducing the terrible impact of neurological disease on our patients, families, and community. Private donations play a critical role in advancing our state-of-the-art research, treatment, education, and patient care programs. Whether you would like to support patient care, research in a particular disease area, or the education of our next generation of doctors and scientists, your charitable gift can be directed to a project or topic that is most meaningful to you. Gifts can be directed to any fund of your choice, or you can talk to Emily Tiensvold with the University of Nebraska Foundation about a donation to your area of special interest: emily.tiensvold@nufoundation.org

SAVE THE DATE

Resident Research Day
Thursday, May 14, 2026, at the Davis Global Center, Omaha, Nebraska

PTSD Symposium 2.0
Friday, June 12, 2026, at the Scott Conference Center, Omaha, Nebraska

Big 10 Neuroscience Symposium
July 15-16, 2026, at the Scott Conference Center, Omaha, Nebraska

University of Nebraska Medical Center
Department of Neurological Sciences
988440 Nebraska Medical Center
Omaha, NE 68198-8440

If you have any news or upcoming events that you would like featured in the next edition of the *NeuroNExT UNMC* newsletter, please send the information to shgriffin@unmc.edu

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