



THE UNIVERSITY OF ARIZONA
COLLEGE OF MEDICINE TUCSON

Neurosurgery

SYNAPSE

Issue 3 • Summer 2026

ANNUAL UPDATE FROM THE CHAIR, DEPARTMENT OF NEUROSURGERY



As we look back on a remarkable year for the Department of Neurosurgery, I am filled with pride at the progress and achievements we have accomplished together. Through the dedication and teamwork of our faculty, staff, residents, and APPs, our department has continued to expand its programs and elevate the standard of care we provide. With our new strategic plan in motion, we are well-positioned to turn our future goals into reality.

One of the most exciting developments this year is the continued growth in our residency program, allowing

us to continue shaping the next generation of outstanding neurosurgeons. We successfully matched two exceptional new residents for Academic Year 2026 - 2027—an achievement made possible by the tireless efforts of Jules Schippers and the recruitment team. This year, we are delighted to welcome Henry Skelton, MD, PhD (Morehouse School of Medicine/Emory University) and Seth Wilson, MD (The Ohio State University). We're equally excited to introduce James Kelbert, MD (University of Arizona College of Medicine—Phoenix) as our next pre-residency fellow. We are thrilled to announce that our own rising PGY7 resident, Ryan Palsma, MD, and Abdullah Alatar, MBBS (King Saud University Medical City, Riyadh, Saudi Arabia) will be joining Dr. Hurlbert's Complex Spine Neurosurgery Fellowship Program and Kristin Nosova, MD (Residency—Banner—University Medical Center Phoenix) will be joining Dr. Pilitsis' Stereotactic and Functional Neurosurgery Fellowship Program.

Our gratitude goes out to residents and APPs—Sara Perotti, Randall Blute, Wenli Mui, Cindy Rekemeyer, and Stephanie Gillespie—whose relentless dedication ensures that our patients receive the highest quality of care every single day. I would also like to acknowledge Dr. Ryan Palsma, whose leadership as Chief Resident has been exemplary. Under his guidance, the residency program continues to thrive. We were proud to celebrate Dr. Neil Joshi's graduation this year, and even prouder that he will be joining our faculty.

A special note of appreciation goes to Dr. John Hurlbert, who continues to provide outstanding leadership and mentorship as Residency Program Director. Joining him in shaping the future of our trainees are Drs. Nehaw Sarmey and Elizabeth Tyler-Kabara, now serving as Associate Residency Program Directors.

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UAZNeurosurgery

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BioCommunications



Continuing our growth trajectory, we welcome three new faculty members since our last newsletter—Drs. Elizabeth Tyler-Kabara, Neil Joshi, and Brandon Lucke-Wold. Their expertise, energy, and innovation will strengthen our clinical programs and scholarly contributions.

Many thanks to Marisela Ramos for her outstanding coordination of candidate visits, and to Angela Castillo and her team—Maria Payne, Adrianna O'Dell, Mike Czigler, Angela Villanueva, Bobby Gonzalez, and Amy Hosman—as well as the clinic and OR staff for their steadfast commitment. Our new Neuro OR lead, Izabel Camacho, deserves recognition for fostering a strong sense of team cohesion. An extra word of appreciation to our clinic RNs and MAs, who, despite staffing challenges, have maintained impeccable standards of care.

We also proudly recognize the promotions of Alanna Gonzalez and Stephanie Dorman, who now assume leadership within our service line. Stephanie and I were selected to lead Neuroscience Quality initiatives across the Banner System, an honor following our presentation at Banner's system-wide Neuro CHaRGe Group. Congratulations as well to Dr. Michael Avery on his promotion to Associate Professor, and sincere thanks to Dr. Marty Weinand and the Promotion and Tenure Committee for their guidance throughout this process. We are grateful to Drs. Scott West and Kristin Huntoon for enriching the VA rotation—an essential part of residency training.

In research, we saw major successes this year. Dr. Kristin Huntoon received a VA Career Development Award. Dr. Terry Matsunaga was the recipient of the ARPA-H Award. Dr. Ugur Kilic, MD, PhD, was awarded the American Heart Association Post-Doctoral Fellowship award.

Alongside Drs. Paul Larson and Rick Chua, our research team has advanced numerous clinical trials, made possible by the exceptional work of Marisa Valletta, Iliana Perez, Debbie Morris, and Kylie Lew. Behind these efforts stands our indispensable pod team—Claudia Gallego, Todd Marble, Laura Doerr, and Alejandra Jacovo—who keep our educational and research missions running seamlessly. We also welcomed Nicole Held as our new department executive assistant and Olivia Lefevre as medical education liaison.

As we build on these accomplishments, I am deeply optimistic about the path ahead. Our department continues to grow stronger through collaboration, mentorship, and innovation. With such an extraordinary team, the coming year promises to be one of continued progress and lasting impact.

With gratitude and excitement for the year ahead!

Julie G. Pilitsis, MD, PhD, MBA,
Department of Neurosurgery Chair and
Physician Executive for Functional
Neurosurgery for Banner Health

FEATURED RESIDENT

Ryan Palsma, MD



I was born in New Jersey but raised in New York before eventually making my way west to the University of Arizona–Tucson for medical school. It didn't take long for Arizona to feel like home. I quickly fell in love with the desert-mountain landscape and, more importantly, the community we have the privilege to serve.

My path to medicine and ultimately neurosurgery was not a straight line, but rather a series of opportunities that guided me here. Before medical school, I worked as a surgical technician. Those early experiences in the operating room fostered my interest in surgery and instilled a deep respect for teamwork, preparation, and the responsibility that comes with caring for patients.

During my second year of medical school, I was diagnosed with leukemia, an experience that profoundly changed my perspective. Navigating treatment while continuing my training challenged me in unexpected ways, but it also strengthened my resilience and deepened my empathy for patients and their families in ways no textbook can teach. That perspective continues to guide how I approach patient care today.

I am currently completing my Chief Resident year in Neurosurgery at the University of Arizona. Drawn initially to the microsurgical anatomy that defines neurosurgery, I first pursued interests in skull base and tumor surgery. However, my experience at the Veterans Affairs hospital during my third year ultimately shaped my career path toward spine surgery. I found a deep sense of satisfaction in helping patients return to pain-free, active lives after spinal procedures.

Looking ahead, I will complete my final year of residency followed by a CAST-accredited spine fellowship at the University of Arizona under Dr. John Hurlbert. I hope to build a career centered on spine surgery while maintaining a broad foundation in general neurosurgery.

Outside of the hospital, I enjoy cycling, endurance training, and hiking with our German Shepherd, Charlie. Most importantly, my wife and I recently welcomed our son, Everett, whose arrival has brought a new sense of perspective and balance to my life.



ALUMNI UPDATE

Mauricio Avila, MD



Mauricio is originally from Colombia where he completed his medical school graduating Cum Laude. He developed an interest in the central nervous system early on in medical school, joining a neuroscience research group, excelling during his early pre-clinical years in anatomy and physiology. In particular

in anatomy, he realized he enjoyed the use of surgical instruments and dissection tools, where he found that surgery could be his future path. After finishing medical school, Mauricio was certain to pursue neurosurgery as a career. He then moved to the United States to fulfill his dream of becoming a neurosurgeon. Initially, to pursue research in neurosurgery under Ali Baaj, MD first at the University of Arizona in Tucson then at Weill Cornell in New York. During this time, he was able to publish several articles with particular emphasis on spine surgery. After his research time, Mauricio matched into neurosurgery at the University of Arizona in Tucson, his top choice. Mauricio trained under several renowned neurosurgeons during his training, and he cultivated a particular interest in spinal disorders fueled by the expertise of John Hurlbert, MD, combining rigorous surgical experience with ongoing scholarly work. Additionally, he received multiple awards during residency including the “Robert V. Ansay Humanism Resident Award”, the “Martin E. Weinand Award for Neurosurgery Resident Educator of the year” and the “Neurosurgery Resident Researcher of the year”. During residency Mauricio developed a strong foundation in both clinical neurosurgery and academic research.

He pursued advanced subspecialty spine surgery training through a Complex and Minimally Invasive Spine Fellowship at the Swedish Neuroscience Institute in Seattle. There, he trained under renowned spine surgeons Dr. Jens Chapman and Dr. Rod Oskouian, gaining extensive expertise in treating complex spinal pathologies and utilizing emerging technologies in spine surgery.

After completing his fellowship, Mauricio joined the Division of Neurosurgery in Saint Louis University as an assistant professor, where he is now the Director of the Neurosurgery Spine at a tertiary center and busy Level 1 trauma center in the Midwest. In this role, he played a key part in expanding spine services, focusing on spinal deformity, revision surgery and including launching the spinal endoscopy program. Additionally, Mauricio is in charge of mentoring neurosurgery residents, where he is the lead faculty for hands-on spinal courses and journal clubs. His dedication to education and mentorship was recognized by residents, faculty and staff with the Division of Neurosurgery “Neurosurgery Teaching Award” in 2024.

In addition to his clinical responsibilities, Mauricio remains actively engaged in academic neurosurgery. He continues to publish in leading neurosurgery and spine journals and regularly presents his work at national and international conferences, contributing to advancements in the field. His clinical focus centers on complex spinal disorders, revision surgery, and less invasive surgery with a particular interest in integrating innovative technologies and techniques to improve surgical outcomes and patient care.

Outside of his professional life, Mauricio enjoys spending time with his wife and their two young boys, valuing family life as an essential balance to his surgical career.

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neurosurgery.arizona.edu

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 [uofaz_neurosurgery](https://www.instagram.com/uofaz_neurosurgery)

 [UAZNeurosurgery](https://twitter.com/UAZNeurosurgery)



RESEARCH ON THE CUTTING EDGE

The research team is excited to report that research endeavors have continued to grow and is proud to announce the addition of our 2 post-doctoral fellows, Dr. Ugur Kilic [Pilitsis] and Dr. Maria Janina Carrera Espinoza [Matsunaga]; 4 PhD students: Justin Carter [Pilitsis], Carson McDaniels [Matsunaga], Isra Athar and Mohammadreza Saraei [Telkes], MS student Ledou Sidane Pousseu [Telkes], and Research Professional Shannon McCabe [Pilitsis].

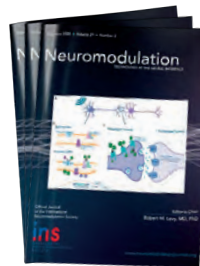
The department currently has 7 active clinical trials/NIH funded clinical studies with 5 more in the start-up phase. Of note, Dr. Larson's ASPEN stem cell trial has successfully completed 9 procedures, and his Kenai Therapeutics stem cell trial has successfully completed 3 procedures. Dr. Telkes is actively recruiting subjects for her study investigating EEG signals as a biomarker for chronic pain.

The department continues to focus on emerging technology and therapies. Dr. Matsunaga's lab is developing microbubble-liposomes as drug delivery vehicles for ultrasound-mediated delivery and is working on targeted nanodroplets to image and study lymphatic pressure and flow. Drs. Matsunaga and Huntoon teamed up to use STING-laden nanodroplets for the treatment of glioblastomas. Dr. Pilitsis' lab completed the first demonstration of a non-invasive magneto-acoustic neuromodulation device capable of delivering LIFU and TSMS simultaneously to treat chronic pain.

There have been many notable departmental accomplishments this year. The annual number of publications was at an all-time high with 68 publications. Dr. Matsunaga was part of a multidisciplinary team that received an ARPA-H Award to develop a portable, high-resolution lymphatic imaging scanner—a transformative technology with the potential to significantly improve diagnosis and monitoring of lymphatic disease.

Dr. Huntoon received the highly competitive five-year Career Development Award for her project, Immunomodulating Anti-Tumor Effects Targeting Telomerase and Radiotherapy in Glioblastoma. She also received the 2025 American Cancer Society Grant and won the Best Spiegel Abstract at the Neurosurgical Society of America annual meeting. Dr. Telkes received the CNS Young Investigator Award. Dr. Kilic received the AHA Post-Doctoral Fellowship award and a figure from her recent publication was featured on the cover of *Neuromodulation*. The NSIG successfully ran their first student Research Day.

We are excited to continue to grow research efforts and look forward to the year ahead!



Telkes Lab Updates

Building on University of Arizona Eighteenth Mile TRIF funding, our team has expanded this work into a 3-year, \$225,000 Arizona Biomedical Research Centre (ABRC)-funded project, now in its second year. The TRIF-supported infrastructure, initially developed in SCS patients, enabled a multimodal research platform that supports this broader effort. In collaboration with the College of Nursing, this multidisciplinary project aims to develop an objective approach to assess chronic pain in older adults with Alzheimer's disease and related dementias. By integrating EEG, fNIRS, and eye-tracking, our early findings demonstrate that complementary neural and behavioral signals can capture the multidimensional nature of pain, including attentional bias, without requiring verbal or motor responses, making this approach well-suited for cognitively impaired populations. This work has contributed to publications in *Nature npj Digital Medicine*¹, and the *British Journal of Pain*², as well as a top-ranked abstract recognized with the 2025 Ronald R. Tasker Young Investigator Award by the Congress of Neurological Surgeons³.

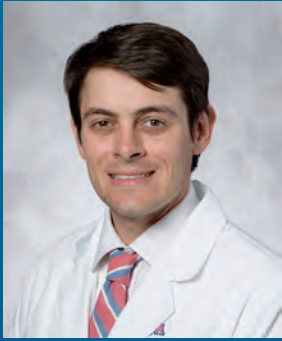
¹(doi.org/10.1038/s41746-026-02577-7), *Scientific Reports* (PMC11920397)

²(PMC12476374)

³(*Neurosurgery* 97(4):988–990, October 2025)



NEW FACULTY 2025-2026



COLIN GOLD, MD

Colin Gold, MD is an Assistant Professor and board-eligible neurosurgeon in the Department of Neurosurgery at the University of Arizona. Dr. Gold provides neurosurgical care at Banner–University Medical Center Tucson (BUMCT) and is also part of the teaching faculty in the Neurological Surgery Residency Program at the University of Arizona College of Medicine–Tucson.

He completed neurosurgery residency at the University of Iowa and subsequently completed Minimally Invasive and Complex Spine Fellowship at Swedish Neuroscience Institute in Seattle. During his residency he participated in focused training in minimally invasive spine surgery at Vail Orthopaedics and Neurosurgery, where he learned advanced minimally invasive techniques and awake spine surgery. Dr. Gold's training in spine surgery allows him to approach each patient with the most tailored surgical approach ranging from ultra-minimally invasive surgery to complex revision and deformity surgery.

He is currently working with other faculty in the neurosurgery and orthopedics department to grow and expand the spine endoscopy and spinal deformity programs. In his time as faculty, Dr. Gold has performed the first endoscopic spine surgery in the University of Arizona Neurosurgery Department. He has also worked with the department to improve the perioperative workflow and postoperative outcomes for major spinal deformity surgery.

Dr. Gold's research interests include clinical research on the evaluation and surgical treatment of degenerative and traumatic spinal pathology as well as biomechanical spine research. He is an active peer reviewer for two different neurosurgical academic journals. Ultimately, Dr. Gold aims to bring evidence-based and thoughtful spine and neurosurgical care to the Tucson and Southern Arizona communities.



MANSOUR MATHKOUR, MD, MS

Mansour Mathkour, MD, MSc is an Assistant Professor of Neurosurgery at the University of Arizona and Banner–University Medical Center Tucson. He specializes in the full spectrum of spinal disorders, with a focused clinical practice in spinal deformity, spine oncology, and peripheral nerve surgery, as well as complex revision and minimally invasive tubular and endoscopic spine procedures.

Dr. Mathkour completed his neurosurgical residency at Tulane University/Ochsner Clinic Foundation, followed by fellowship training in complex spine and minimally invasive spine surgery at Tulane/Ochsner, and advanced fellowship training in complex reconstructive spine and spine oncology at Brown University. His clinical approach integrates advanced surgical technologies, including spinal navigation, robotics, and minimally invasive techniques, to deliver precise, patient-specific care aimed at restoring function and improving quality of life.

In addition to his clinical work, Dr. Mathkour has authored over 90 peer-reviewed publications and serves as a reviewer for the Journal of Neurosurgery: Spine and World Neurosurgery. His research focuses on spinal oncology, biomechanics, deformity, and surgical innovation. He is deeply committed to mentorship, resident and medical student education, and multidisciplinary collaboration, with the goal of advancing complex spine care and training the next generation of neurosurgeons.



ELIZABETH TYLER-KABARA, MD, PHD

In February 2026, Elizabeth Tyler-Kabara, MD, PhD, joined the Department of Neurosurgery, as Chief of Pediatric Neurosurgery and Professor of Neurosurgery at BUMCT. Fellowship-trained in pediatric neurosurgery, Dr. Tyler-Kabara completed advanced training at premier institutions, equipping her with specialized expertise in the care of complex neurological conditions in children.

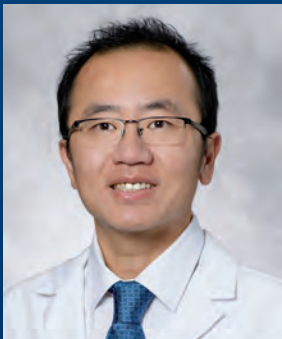
Dr. Tyler-Kabara's clinical focus includes pediatric brain and spinal tumors, epilepsy surgery, pediatric movement disorders, hydrocephalus, and congenital disorders of the nervous system. She is widely recognized for her patient-centered approach, emphasizing multidisciplinary care and family engagement to optimize outcomes for children facing serious neurological illness.

In her research laboratory, Dr. Tyler-Kabara is dedicated to advancing the understanding of neurodevelopmental disorders and improving neurosurgical technologies. Her work spans translational and clinical research, including innovation in neuromodulation, neuro-engineering, and surgical techniques designed to enhance safety and efficacy in pediatric populations. She has been continuously funded and has contributed extensively to the scientific literature, authoring numerous peer-reviewed publications and book chapters.

A respected neurosurgeon-scientist, Dr. Tyler-Kabara is actively involved in national and international neurosurgical organizations. She has held leadership roles in committees focused on pediatric neurosurgery, education, and diversity in medicine, and is a frequent invited speaker at major scientific meetings.

Dr. Tyler-Kabara also contributes significantly to academic mentorship and training, guiding medical students, residents, and fellows in both clinical excellence and research innovation. Her dedication to advancing the field is further reflected in her editorial work, where she serves as a reviewer for prominent journals such as *Journal of Neurosurgery: Pediatrics* and *Neurosurgery*.

Through her commitment to innovation, advocacy, and compassionate care, Dr. Tyler-Kabara continues to make meaningful contributions to improving the lives of children with neurological disorders and advancing the future of pediatric neurosurgery.



WUYANG YANG, MD, MS

Wuyang Yang, MD, MS is an Assistant Professor in the Department of Neurosurgery at the University of Arizona and a cerebrovascular and endovascular neurosurgeon at Banner–University Medical Center Tucson. He specializes in the treatment of complex cerebrovascular diseases—including intracranial aneurysms, arteriovenous malformations, ischemic stroke, and vascular disorders of the brain and spine—using both open microsurgical and minimally invasive endovascular techniques. He also treats general neurosurgical conditions such as brain and skull base tumors, hydrocephalus, and trigeminal neuralgia.

Dr. Yang completed his neurosurgery residency at the Johns Hopkins University School of Medicine, where he also completed an enfolded CAST-accredited fellowship in cerebrovascular surgery focused on open microsurgical treatment of neurovascular disease. He subsequently completed advanced CAST-accredited fellowship training in endovascular neurosurgery at the University of Florida.

With more than 130 peer-reviewed publications and multiple book chapters, his research focuses on outcomes in cerebrovascular and brain tumor treatment, innovation in neurointerventional techniques, and improving systems of neurosurgical care. He is committed to education, mentorship, and expanding access to advanced neurosurgical therapies.



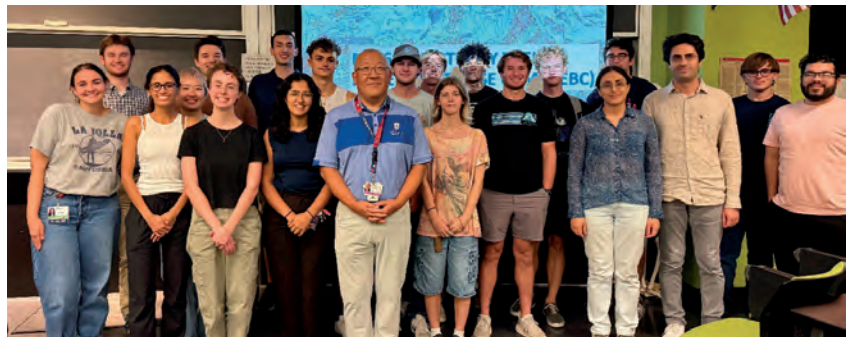
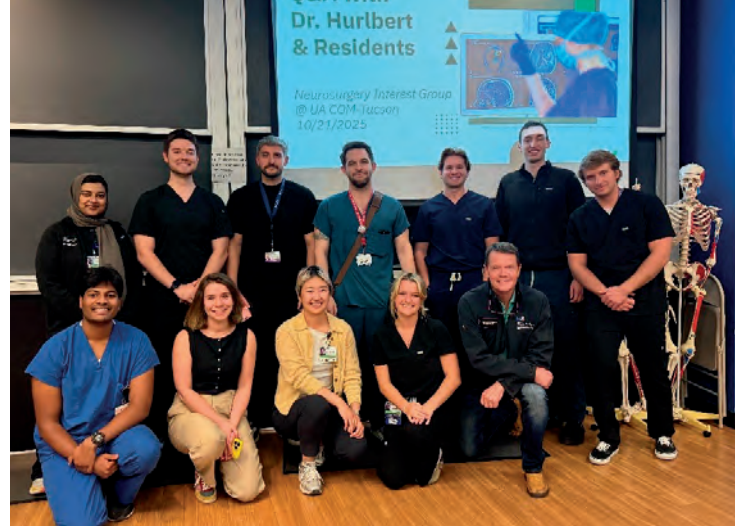
NEUROSURGERY STUDENT INTEREST GROUP

We would like to extend a special thank you to our incredible NSIG leaders—Dr. Dara Farhadi, Pravarakhya Puppalla, Manlin Shao, Sameena Rahman, Cam Bolles (pictured left to right)—for their hard work, dedication, and commitment throughout the year. Their vision, enthusiasm, and countless hours of effort were instrumental in supporting educational programming, workshops, research initiatives, and networking opportunities that shaped NSIG's activities this year. Their leadership and energy have helped foster a strong and supportive community for students interested in neurosurgery, and their impact has been felt throughout our department. Thank you, Manlin, Sameena, Prav, Cam and Dara, for your exceptional leadership and service to NSIG this year!



STUDENT RESEARCH DAY

NSIG had an exciting and impactful year, made possible by the incredible support of our department and engaged student body. We strengthened faculty–student connections through talks on global neurosurgery, career journeys, and research. Hands-on workshops, including scrub training, suture clinic, and an EVD session, gave students practical exposure to the field. We also expanded residency-focused programming with a post-match panel, sub-internship workshop, research series, and Q&A with the Program Director. Our inaugural NSIG Student Research Day showcased over 30 student presentations and strong departmental involvement. NSIG was honored as Medical Student Interest Group of November 2025 for community impact. We are thankful to Jack and Rosemary Dunn for their philanthropic support of NSIG.



NEUROSURGERY IN THE NEWS



INAUGURAL JUSTIN CETAS LEGACY LECTURESHIP

We were honored to welcome Dr. Nathan Selden as our speaker for the inaugural Justin Cetas Legacy Lectureship in November. Dr. Selden and Dr. Cetas shared a deep passion for strong mentorship in healthcare—commitment that will continue to guide us as we train the newest generation of surgeons. Alivia Cetas, along with her and Justin's family, attended as our guests of honor. Dr. Cetas's legacy will be celebrated annually through the Justin Cetas Legacy Lectureship. The next event will be held on November 6, 2026. We are pleased to announce

that this year's speaker is Dr. Joseph Neimat, the Chair of Neurosurgery at University of Louisville and a mentor to endless residents, fellows, and attendings. Please email Dr.CetasLegacy@arizona.edu to hear about future events or to donate to the memorial fund.



JOHN HURLBERT MD, PHD NAMED EDITOR IN CHIEF- WORLD NEUROSURGERY

Dr. John Hurlbert appointment as Editor-in-Chief of World Neurosurgery, effective January 2026. This appointment marks only the second editorial transition since the journal's inception, following the visionary leadership of Dr. Michael Apuzzo and most recently of Dr. Edward Benzel. Under their guidance, World Neurosurgery evolved into a truly global, clinically rigorous, and scientifically independent forum.

Dr. Hurlbert steps into this role at a pivotal moment for our field and for academic publishing.

World Neurosurgery is committed to providing social, political, educational, economic, cultural, or societal insights and knowledge significant and relevant to worldwide neurosurgery patient care.

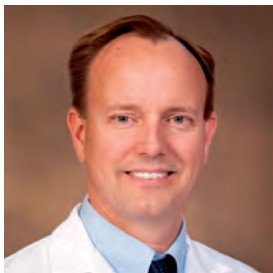


JULIE G. PILITSIS MD, PHD, MBA EARNS PRESTIGIOUS AWARDS FOR HER SERVICE

Dr. Pilitsis has been named the 2026 NANS Distinguished Service Award recipient. The North American Neuromodulation Society honor recognizes dedicated service to the organization, which began in 1994 to improve patient care through its efforts to advance science and neuromodulation. Dr. Pilitsis received the award at the society's annual meeting January 23, 2026 in Las Vegas. In her remarks, she focused on the importance of service, mentorship and vision. "I am grateful to NANS for fostering a culture that values scientific excellence, humanity and advocating for our patients," Pilitsis said. "This award belongs as much to my

colleagues and trainees as it does to me. I am excited about the future of neuromodulation and proud to continue contributing to an organization that consistently pushes the field forward while keeping patients at the center of everything we do."

Dr. Julie Pilitsis was also named the 2025 Women in Medicine & Science (WIMS) Torchbearer! This honor, awarded during Women in Medicine & Science Month, recognizes Dr. Pilitsis' remarkable dedication and accomplishments as a physician leader. Torchbearers light the way for others, and Dr. Pilitsis' leadership not only advances neurosurgery, but also creates space for future generations of women in medicine and science to thrive.



DR. WEINAND NAMED VA NATIONAL SURGERY OFFICE REPRESENTATIVE EXPERT IN VAGUS NERVE STIMULATION

Dr. Weinand served the Department of Veterans Affairs National Surgical Office as a Vagus Nerve Stimulation Subject Matter Expert in 2025. His work included the development of new guidelines for the Vagus Nerve Stimulation Procedure for our Veterans. The stimulation technology can now be used to help VA patients with intractable epilepsy, rheumatoid arthritis, depression, and after a stroke.



COMMUNITY SPINE DINNERS

Our semi-annual community spine dinners continue to grow in popularity, with attendance increasing at each event! This fall, we were honored to host Dr. Ravinder-Raj Bains and his wife Erica in Tucson. Dr. Bains, who joined us from Kaiser Permanente in Oakland, serves as Chairman and CEO of Standing Straight, an organization dedicated to "providing free life-saving spinal deformity surgery to the neediest children." During his visit, he shared his spine expertise at our dinner event and presented his latest spinal injury research at Neuroscience Grand Rounds. In March, we welcomed Dr. Nicholas Theodore, the newly appointed Chair of Neurosurgery at the University of Arizona College of Medicine Phoenix. Dr. Theodore also serves as Chairman of the NFL Head, Neck, and Spine Committee, where he provides guidance and expertise to the entire NFL community. His passion for sports and spine care is evident in all his endeavors, and we are excited to see his vision for the Banner Brain and Spine Program unfold! Email CommunitySpine@arizona.edu to hear about our future events.



ADVANCED CARE FOR EPILEPSY PATIENTS

Our ability to diagnose and treat seizure disorders continues to grow with the latest addition to our robotics lineup—the ROSA robot. This system uses advanced imaging to create a detailed 3D model of the brain, allowing for precise electrode placement while avoiding critical areas. After monitoring seizure activity, the electrodes are removed, and the care team can use the data to guide next steps for treatment. We have also introduced LITT as a therapy for these patients in our ever-expanding epilepsy program which has welcomed a new epileptologist as well.



One of the first cases was performed by Dr. Nehaw Sarmey in late 2025, helping her patient, Stephany Michel. In her late 20s, Stephany developed seizures after a serious viral brain infection. Despite medication, she was still experiencing several seizures a month, which deeply affected her daily life. With support from Dr. Sarmey and her team, Stephany became one of the first few patients here to undergo this minimally invasive procedure to help pinpoint where her seizures originate.



DR. AVERY IN THE NEWS DISCUSSING BRAIN ANEURYSMS

September is Brain Aneurysm Awareness Month, and our very own Dr. Michael Avery recently joined Ashley Bowerman from 13 News to raise awareness in our community. According to the Brain Aneurysm Foundation, an estimated 6.8 million Americans are living with an unruptured brain aneurysm, which is approximately 3% of the population. Because these fragile, balloon-like bulges on artery walls in the brain typically produce no symptoms until they rupture, many people remain unaware they have one. If a rupture occurs, patients may experience sudden, severe headaches, loss of consciousness, difficulty speaking, numbness on one side of the body, seizures, or double vision. We extend our sincere thanks to Dr. Avery for bringing attention to this often-overlooked condition to patients and helping to make our community healthier and safer for everyone.

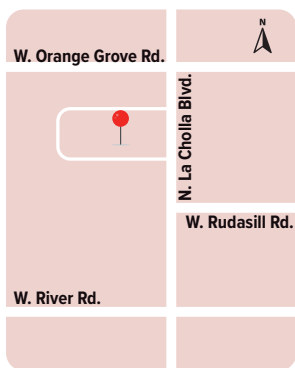


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Neurosurgery

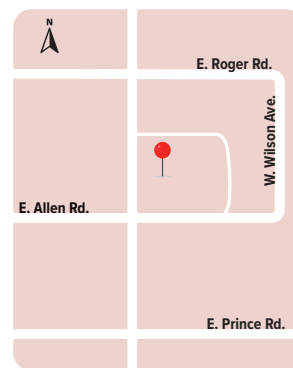
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Tucson, Arizona, 85724-5070

OUTPATIENT NEUROSURGERY CLINIC SITES



**Banner University Medical Center
PEDIATRIC SPECIALTY CLINIC**

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Tucson, Arizona, 85741
520-694-5437



**Banner University Medical Center
NORTH CAMPUS**

3838 N. Campbell Avenue, Building 2,
Neurosurgery Clinic "F," 2nd Floor,
Tucson, Arizona, 85719
520-694-8888



**Diamond Children's Multispecialty Services Clinic
BANNER UNIVERSITY MEDICINE WHOLE HEALTH CLINIC**

535 N. Wilmot Road, Suite 101
Tucson, Arizona, 85711
520-694-5437



**Banner University Medicine
MULTISPECIALTY SERVICES CLINIC**

265 W. Ina Road,
Tucson, Arizona, 85704
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Please note maps are not to scale