

NEUROLOGICAL SURGERY MOMENTS

News and Updates from the University of Washington
Department of Neurological Surgery



Message from the Chair

RICHARD G. ELLENBOGEN, MD

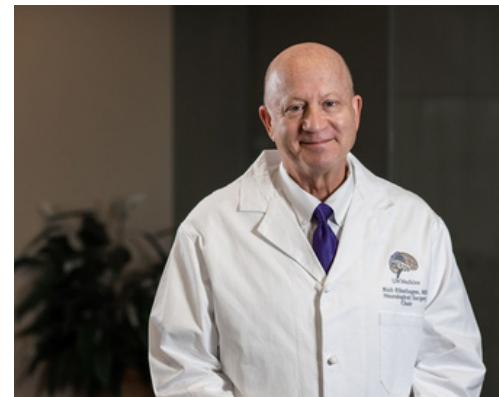
Dear Friends, Colleagues and Supporters of Neurological Surgery,

All my warm wishes to you for the New Year! May you enjoy success, health and happiness in the coming year. What do I think about in the New Year? I am thankful for and to everyone in the Department of Neurological Surgery. Our greatest jewel is our “people” assets. I am grateful every day to have you as part of our neurological surgery family. I especially thank you for the dedication and sacrifice you expend to achieve our mission. Our mission grounds and inspires us. We work to improve the health of our community, train the next generation of neurosurgeon scientist and advance the cutting-edge science of the conditions we treat.

I realize there are no trivial jobs in our small but mighty and hard-working department. Everyone...faculty, staff, residents, fellows, students, nurses, APPs, post-docs, and community supporters are impactful and provide the strength that we require to achieve our mission. For your kindness, good humor, intellectual prowess and tireless work ethic I celebrate and thank you. You all do so much every day that it is hard to capture it all in this newsletter.

My ask of you this year is to send me any news of academic accomplishments, clinical milestones or photos of a new family member you want to share with our department. It is these things that put a smile on our faces, ground us, give us hope and ensure we can charge on another day in our inspirational and aspirational mission.

Respectfully,
Rich



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New Endowed Professorship



We are thrilled to announce that Richard H. Adler, JD, and his law partners Melissa D. Carter, Arthur D. Leritz, and Steven J. Angles, at the Adler Giersch Law Firm have established a named Professorship in the Department of Neurological Surgery. The Richard H. Adler, JD, and the Adler Giersch Law Firm Endowed Professorship in Traumatic Brain Injury will allow the Department to attract and retain faculty dedicated to TBI research, mentoring neurosurgical fellows, and educating early-career physicians. This generous gift was made to honor clinicians known for exceptional expertise, skill, compassion, and commitment to education, while fostering public-facing outreach. It reflects Mr. Adler's gratitude to Harborview Medical Center neurosurgeons and their dedication to improving care for those with long-term consequences of brain injuries.

Richard Adler, founding principal and partner at Adler Giersch, has dedicated over 40 years to advocating for those who cannot advocate for themselves after suffering a traumatic neurological injury. An honors Georgetown Law graduate, he specializes in traumatic injury cases, combining legal and medical expertise to deliver exceptional client advocacy and case outcomes. His commitment extends beyond the courtroom—one example is his representation of a then 13-year-old youth football player which achieved a precedent setting outcome. He then ushered through the Washington legislature the first-in-the-nation youth sports concussion law to prevent preventable brain injuries for all youth athletes. This law is known as the Zackery Lystedt Law and has been adopted in all 50 states. He and his law partners have also established numerous endowed programs at the University of Washington to advance education and research on traumatic brain injuries. When not championing clients, Richard enjoys educating and bridge-building health care professionals on medicine and law, family time, travel, music, and discovering great wine.



Mike Williams, MD NPH work featured in NEJM

The December 4th issue of the *New England Journal of Medicine* (NEJM) featured not just one article by Dr. Williams, but two and also an editorial on Dr. Williams' PENS trial by Dr. Allan H. Ropper:

- A Randomized Trial of Shunting for Idiopathic Normal-Pressure Hydrocephalus
- Idiopathic Normal-Pressure Hydrocephalus
- Small Steps, Big Ventricles: Idiopathic Normal-Pressure Hydrocephalus



THE BACKSTORY:

In 2023, Allan H. Ropper, MD, Professor of Neurology at Harvard Medical invited Mark D. Johnson, MD, Professor and Chair of Neurological Surgery at the University of Massachusetts Medical School to write a review on Normal Pressure Hydrocephalus (NPH) for NEJM. Allan's son had trained under Johnson, who had succeeded Dr. Peter Black's NPH practice while at Brigham and Women's Hospital. Dr. Johnson asked Dr. Williams to co-author the review. By January 2025, a near-final draft was with Dr. Ropper.

Around that time, Dr. Ropper discovered the PENS trial on ClinicalTrials.gov and inquired about it. With approval from Dr. Mark Luciano and Dr. Mark Hamilton, Dr. Williams informed Dr. Ropper about the trial and plans to approach NEJM. Two days later, the DSMB recommended stopping enrollment in PENS due to compelling evidence favoring the Open Shunt arm, though nearly all patients were already enrolled.

The team then briefed Dr. Ropper in February and discussed submitting the PENS results to NEJM. He suggested expedited review to align publication with Dr. Williams' ANA meeting presentation. From March to June, the manuscript was prepared and submitted before July 4; it was accepted August 13 and published online September 16.

Later, in November, the review paper resurfaced for updates to include PENS results and other changes and was finalized by November 19. Meanwhile, the PENS trial was scheduled for the December 4 NEJM issue. Ultimately, Dr. Ropper's initiative and timing led to the December 4 issue featuring the PENS trial, his editorial, and the invited review by Dr. Hamilton and Dr. Williams.



Dr. Mac Donald's EVOLVE study finds that mild traumatic brain injury outcomes vary significantly



Christine Mac Donald, PhD's 10-year follow-up study funded by the National Institute of Neurological Disorders and Stroke and published December 10 in JAMA Network Open examined long-term outcomes for combat veterans and active-duty service members with mild traumatic brain injury (mTBI). She found that outcomes vary widely, with some individuals showing resilience and others at risk for decline.

Key Findings

- Study Design: 288 service members were tracked from deployment in Iraq/Afghanistan with evaluations at 1, 5, and 10 years, including MRI scans and assessments of 34 psychological, cognitive, and neurobehavioral functions.
- Groups Studied:
 - mTBI from blast (137) or blunt trauma (21)
 - Controls: blast exposure without TBI (36) and no blast/no TBI (94)
- Four Outcome Subtypes Identified:
 - Resilient: No significant dysfunction (36% of mTBI cases fell here which suggests that mild TBI does not necessarily result in a poor long-term outcome).
 - Mild neurobehavioral/psychological symptoms without cognitive dysfunction.
 - Moderate cognitive dysfunction with substantial symptoms.
 - Severe cognitive dysfunction with moderate symptoms.
- MRI Findings: Early scans showed structural differences (e.g., cerebellum, brainstem) in those who later developed severe dysfunction, suggesting imaging could help predict risk.
- Implications: Mild TBI does not always lead to poor outcomes, but early identification of high-risk individuals could enable proactive interventions.

"We identified evolving clinical outcomes in service members which could allow for stratification into focused intervention strategies years before they start to notably decline, essentially flipping treatment concepts on their head and being proactive instead reactive," said Dr. Mac Donald.



Experimental brain implant helps stroke survivor regain arm function

A UW Medicine safety trial led by Jeffrey Ojemann, MD professor of neurological surgery, and Jeffrey Herron, PhD, associate professor of neurological surgery, is testing a brain-stimulation device to help stroke patients regain muscle movement. The first participant, Matt Kidd, who lost movement on his left side after a second stroke in 2021, underwent surgery in July 2025 to implant two thin silicon sheets with electrodes on his brain's surface.

For six weeks, Kidd received electrical stimulation during rehab sessions to encourage neurons to fire together, strengthening brain connections. Although stimulation has stopped, the device remains temporarily implanted for monitoring.

Results: Kidd noticed improvements almost immediately after he began treatment. Now, over four months in, his fine-motor functions have advanced significantly. He has regained the ability to pick up a cup, put a nut on a bolt, and close the shower curtain.

Observers have been surprised by the speed and extent of Kidd's improvement. "It's been extremely rewarding both for Matt and for the field," said Ojemann. The next stage of the study will focus on confirming the device's effectiveness. The study is currently recruiting more patients. Until then, Ojemann said, "Making something a standard part of therapy is a many, many year process. This is an extremely exciting start down that path."



Neurosurgery, Artificial Intelligence, and Data-driven Care

Over the past decade, the Department of Neurological Surgery at the University of Washington has increasingly found itself at the center of a broader transformation in medicine: the convergence of neurosurgery, artificial intelligence, and data-driven care. What began as early adoption of advanced imaging, navigation, and analytics



has evolved into a more ambitious vision of digital neurosurgery—one in which machine learning, computer vision, and large-scale data are integral to how neurological disease is understood, studied, and treated. This evolution reflects a departmental culture that values interdisciplinary collaboration and a willingness to rethink long-standing assumptions about how the brain can be measured, modeled, and ultimately healed.

Leadership within the department has helped shape and accelerate this direction, translating emerging AI concepts into clinically meaningful work. In this context, Professor Samuel R. Browd, MD, PhD has played a pivotal role—both locally and nationally—in articulating how AI can responsibly augment neurosurgical judgment rather than replace it. Through service in academic societies, engagement with regulators, dialogue with industry, and as a multi-time technology founder and executive, he and his colleagues have emphasized AI as a precision tool: one that can reduce uncertainty in the operating room, improve safety and outcomes, and extend insight into complex neurological systems that have historically resisted quantification.

A defining milestone in this effort has been the founding of the first new neurosurgical society dedicated specifically to artificial intelligence, machine learning, computer vision, and robotics: The Foundation for Digital Neurosurgery, where Dr. Browd will serve as the society's inaugural president. This initiative reflects a growing recognition that these technologies are no longer peripheral, but foundational to the future of the field. By creating a formal home for scholarship, standards, and collaboration in AI-driven neurosurgery, the society aims to unite clinicians, scientists, and engineers around shared goals of rigor, ethics, and patient-centered innovation. In recognition of this leadership and broader impact, Dr. Browd has been selected to deliver the prestigious Theodore Kurze Lecture at the upcoming American Association of Neurological Surgeons annual meeting this spring.

Parallel to these academic efforts, the department has embraced a strong translational and entrepreneurial ethos. Collaborations with engineers, computer scientists, and external partners have produced AI-enabled surgical navigation, neurological monitoring, and emerging brain-computer interface platforms. Importantly, these efforts have been paired with careful attention to ethics, data governance, and patient trust—recognizing that the power of AI in neurosurgery must be matched by thoughtful stewardship and clear clinical purpose.

As neurological surgery enters a period of rapid technological change, the work underway at University of Washington Department of Neurological Surgery offers a model for how academic departments can lead with intention. By integrating computational innovation with deep clinical expertise—and by fostering leadership that spans medicine, technology, and policy—the department is helping define a future in which AI strengthens, rather than supplants, the human core of neurosurgical care. In doing so, we continue to position the department as a place where the next chapter of neurosurgery is not merely anticipated, but actively being written.

CONGRATULATIONS!



Louis J. Kim, MD, MBA

is now a member of the prestigious American Academy of Neurological Surgery.

The Academy serves as the leading neurosurgical organization in North America focused on promoting, sponsoring and mentoring laboratory, translational, and clinical research in the neurological sciences and the field of neurological surgery.

Dr. Kim is also currently a Director of The American Board of Neurological Surgeons (ABNS), our sole certifying ABMS Board. This is an important, elected position that reflects Dr. Kim's renowned expertise in mentoring and training the next generation of neurological surgery residents and his technical and academic expertise in cerebrovascular neurological surgery.

Dr. Ellenbogen receives Founder's Laurel Award



Dr. Richard G. Ellenbogen received the prestigious Founder's Laurel Award on October 14th at the 75th Annual Congress of Neurological Surgeons (CNS) meeting which took place in Los Angeles. The award is presented to recognize exceptional, meritorious, and lifelong contributions to the field of neurological surgery. Dr. Ellenbogen received the CNS Distinguished Service Award in 2017.

Read the full story [here](#).

Resident Research Spotlight – Dr. Zach Abecassis

Clinical Implications of Traumatic Brain Injury in E-Scooter Injuries: Long-Term Follow-Up and Lessons Learned

Neurosurgery researchers at the University of Washington School of Medicine have completed one of the largest evaluations to date of traumatic brain injury (TBI) related to electric scooter accidents, offering new insight into the long-term consequences of this rapidly growing public health concern. Led by [Dr. Zachary Abecassis](#), the study examined more than 2,700 emergency department encounters involving e-scooter injuries.



The team identified 305 patients who presented with symptoms consistent with TBI. Of those, 187 patients reported symptoms despite normal initial head CT scans, while 118 sustained visible intracranial injuries, categorized using the Marshall grading system. Dr. Abecassis and his collaborators conducted structured follow-up surveys to assess recovery, capturing detailed accounts from patients months after their injuries.

The long-term findings were striking. Many respondents continued to experience cognitive, emotional, and functional difficulties well into recovery, with some facing profound loss of independence. Several individuals described life-changing impacts from injuries they initially perceived as minor. Helmet use was notably uncommon among injured riders, and many participants urged others to “trust me—wear a helmet,” reflecting a significant gap in public awareness.

This research was made possible through the generous support of Richard H. Adler, JD and the Adler Giersch Law Firm whose commitment to improving outcomes for patients with TBI continues to drive innovation within the department.

Supported by this philanthropy, Dr. Abecassis’s work sheds light on a rapidly emerging pattern of urban injury affecting predominantly young adults. The study highlights opportunities for targeted prevention efforts, improved rider education, and strengthened helmet policy as cities continue expanding micromobility programs, ensuring that as transportation trends evolve, patient safety remains at the forefront.

Department Alumni and Friends Reception



Dr. Ellenbogen, along with the UW Department of Neurological Surgery faculty, proudly hosted a cocktail reception for department alumni during the annual Congress of Neurological Surgeons (CNS) meeting held in Los Angeles this past October. The event served as a wonderful opportunity to reconnect and celebrate the strong sense of community within the department. Over 40 attendees, including current and former residents, fellows, and faculty, gathered to enjoy an evening of excellent food, refreshing drinks, and warm fellowship. Conversations flowed easily as colleagues shared updates on their professional achievements, reminisced about training experiences, and strengthened ties that span generations of neurosurgical practice. The reception highlighted the department's ongoing commitment to fostering lifelong connections among its alumni and supporting collaboration within the broader neurosurgical community.

NEW BABIES!

Elise Radacosky, PA-C, her husband Matt and son Hugo welcomed Agnes to the world on 6/22/25. She arrived weighing 7 lbs 7 oz and measured 19.5 in.



CV-Skull Base Fellow Christopher Seward, MD and his wife Lucy Kennington welcomed son Parker on 11/7/25. Parker weighed 6 lbs 12 oz and measured 18.5 inches upon delivery.



Elisa McGee became a grandma to Nora Lily on Halloween.

