



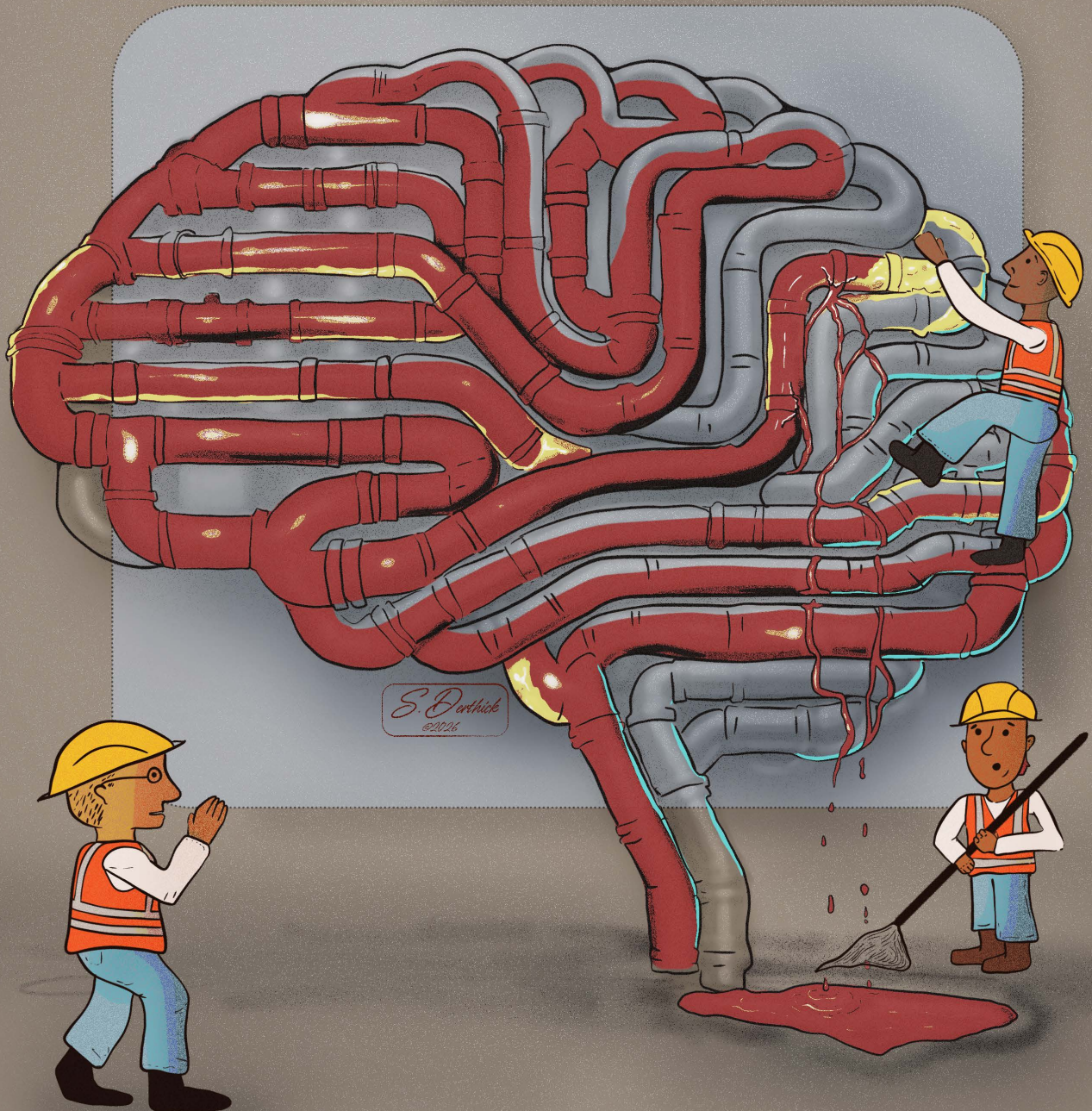
AUGUSTA UNIVERSITY
MEDICAL COLLEGE
OF GEORGIA

Neurology

NEUROLOGY NEWSLETTER

Spring Issue 2026

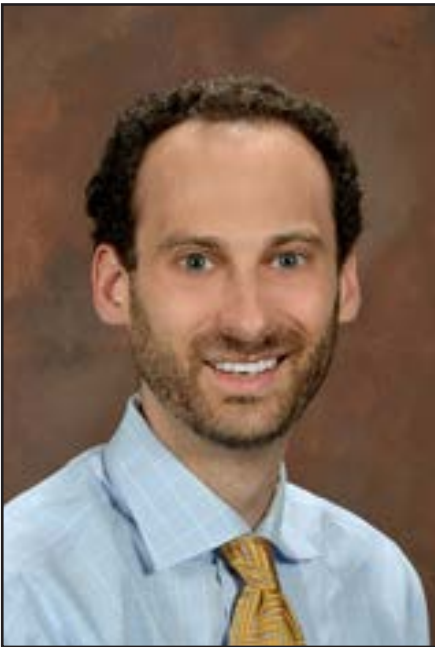
Ischemia Clean Up Crew



**Feature Article: Remote Limb Ischemic Conditioning (RIC)
for Stroke Prevention and Stroke Recovery**

Cover Illustration: Shannon Derthick, MSc

MESSAGE FROM THE CHAIR



Dear Friends and Colleagues,
I am excited to share some updates from the Medical College of Georgia Department of Neurology.

First, I want to recognize the recent retirement of Yong Park. Yong has been at the center of Child Neurology at MCG for the past four decades, an international leader in epilepsy and a skilled educator of dozens of child and adult neurologists and epileptologists. His mission work in Africa and Asia has helped reduce the seizure burden in some of the most underserved parts of the globe. Impossible to replace, I wish him and his family the best in retirement.

In this issue, we also share the transformative research of David Hess, Mohammed Khan and Askiel Bruno on remote ischemic conditioning (RIC). RIC has demonstrated potential benefits in both acute and chronic cerebral ischemic diseases in animal models, and a recent clinical suggests RIC as an add-on therapy to mechanical thrombectomy.

In follow-up to our fall issue, our pilot clinical trial of DBS for Alzheimer’s disease was recently initiated.

On the education front, we have received ACGME approval and funding support to expand to eight neurology residents per class and we will match eight interns in the upcoming cycle. It seems like only yesterday, that I arrived at MCG as part of a class of only three neurology residents with Dichen Zhao and Jason Speir. I could not have imagined a day when we will train more than double the number of residents per year than we did twenty-five years ago. In addition, we are in the process of expanding our fellowship offerings. The first new addition on this list will be neurocritical care. Manan Shah is the inaugural program director, and we plan to have our first class of critical care fellows in 2027.

Finally, our mission remains to train the best and brightest future neurologists and to make innovative advances in neurologic diagnosis and treatment. We could not achieve these successes without your support. If you plan to attend the American Academy of Neurology next month in Chicago, please let me know so we can make sure to connect.

Also, Doximity’s survey of the best Neurology and Neurosurgery Hospitals is now live. Log in to Doximity (<https://www.doximity.com/>) and cast your vote for Wellstar MCG.

Please keep in touch—and I hope to see you soon.

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We would appreciate donations that will allow our clinic to operate and grow.
Please go to <https://www.augusta.edu/giving/neurology.php> to reach our donation page.

FACULTY UPDATE

Research:

- **Dr. Yong Park** presented an abstract during the American Epilepsy Society Annual Meeting, December 2025: EAP Rare Epilepsies Syndromes Subgroup Analysis.
- **Dr. Debra Moore-Hill** co-authored an article “Counseling Reproductive-Age Youth with Epilepsy: Literature Review and Expert Opinion from the Epilepsy in the Child-Bearing Ages through Menopause Consortium (ECAM)”. To appear in Pediatric Neurology.
- **Dr. Debra Moore-Hill, Dr. Danielle Weiss, Dr. Brandon Pope, Dr. Amir Mbonde, Dr. Anthony Murro, and Dr. Fernando Vale** co-authored an article “Current best medical practices survey in vagus nerve stimulation programming”. To appear in Epilepsy & Behavior Reports in March 2026.
- **Dr. Hamid Ali** coauthored a case report “Successful IV Thrombolysis in an Adolescent with Postextracorporeal Membrane Oxygenation (ECMO) Cerebral Ischemic Infarct”. Published in January-February Stroke Supplement 2026.
- **Dr. Debra Moore-Hill** coauthored an article, “The Intersection of Menopause and Epilepsy: A Review of Current Knowledge and Gaps”, published in the European Medical Journal.
- **Dr. Debra Moore-Hill** coauthored an article, “Prescribing Practices of Antiseizure Medications at US Academic Medical Centers for Pregnant People with and Without Epilepsy”, published in the American Academy of Neurology Journal.
- **Dr. Hamid Ali** coauthored an article, “Updates in Cerebrovascular Imaging”, published in the Thieme Seminars in Neurology Journal.
- **Dr. Hamid Ali** coauthored an article, “Intracranial Occlusion in Cryptogenic Stroke is Not Predictive of Recurrent Ischemic Stroke: A Propensity-Score Matched Analysis of the Cardiac Abnormalities in Stroke Prevention and Risk of Recurrence Study.” Published in the Journal of the American Heart Association.

Achievements:

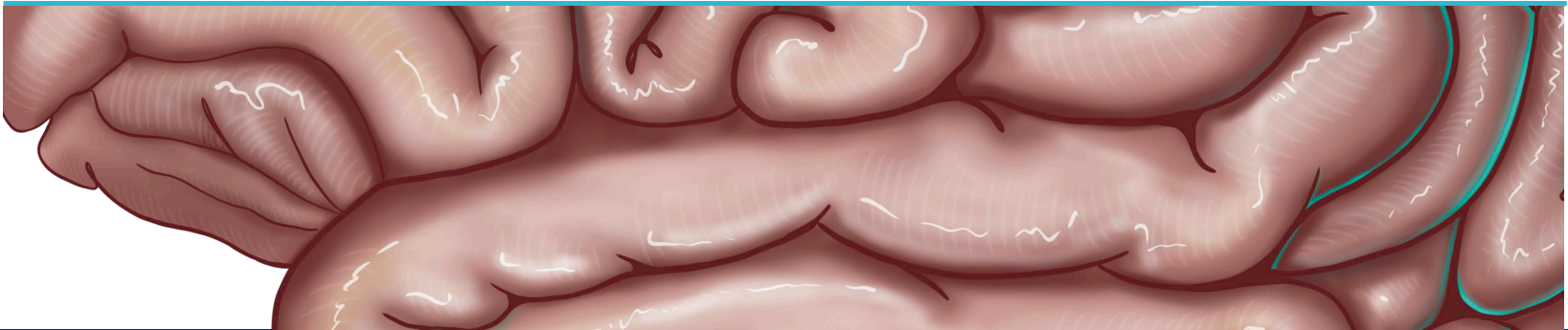
Congratulations to **Dr. Debra Moore-Hill** who was appointed as MOC/Exam Committee co-chair of the American Clinical Neurophysiology Society beginning in February 2026.

Congratulations to **Dr. Debra Moore-Hill** (UME), **Dr. David Hess** (UME), **Dr. Fenwick Nichols** (GME) and **Dr. Amir Mbonde** (GME) who all received Exemplary Teaching Awards from the Medical School.

Congratulations to **Dr. Park** on his retirement! We will miss you very much and we send you all the best moving forward.

Welcome aboard:

Office Specialist **MaKaelyn Martin** joined the team in Pediatrics!
Office Specialist **Karen Hixon** joined the team in Neuromuscular!



FEATURE ARTICLE: Remote limb ischemic conditioning (RIC)

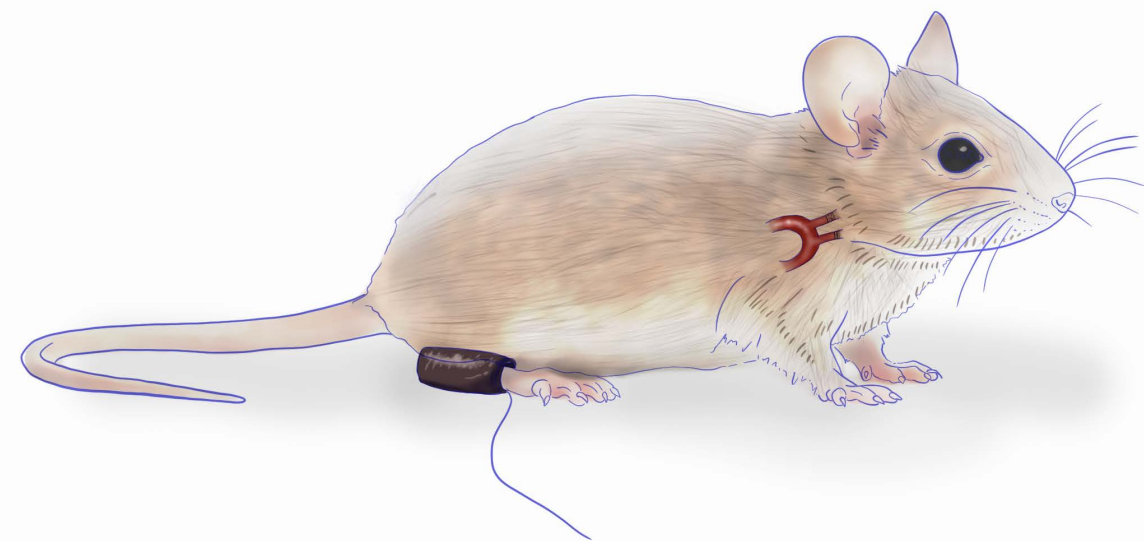
By Mohammad B. Khan, PhD and Askiel Bruno, MD

Preclinical:

Remote limb ischemic conditioning (RIC) is the simple, inexpensive, and safe practice of repeatedly inflating a blood pressure (BP) cuff on the arm or leg to protect distant organs, such as the brain, from ischemic injury. Chronic RIC (C-RIC) is the repetitive use of daily RIC from 2 weeks to 4 months. RIC shares common mechanisms with physical exercise and may be viewed as an “exercise equivalent”. We previously showed in a preclinical study in the Bilateral Carotid Artery Stenosis (BCAS) mouse model of Vascular Cognitive Impairment and Dementia (VCID) that C-RIC increased CBF in a sustained fashion, reduced cerebral white matter damage, improved cognitive performance, and reduced accumulation of amyloid-beta 42 protein (Aβ42) and induced neurovascular protection along with vascular remodeling and angiogenesis in the brain, similar to what is seen with chronic physical exercise.

Our non-invasive RIC intervention used a programmable pressure cuff that inflates and deflates. Bilateral RIC therapy was performed simultaneously on both hind limbs, with 4 cycles of 5 min on and 5 min off at 200 ±5 mmHg. Daily compressions lasted for 2 weeks, 1 month, or 4 months, 1 week after BCAS surgery.

One possible mechanism of C-RIC is an increase in plasma nitrite levels that increases NO bioavailability, mediating vascular remodeling. While once regarded as an inert molecule and an oxidative end product of NO metabolism, recent research has shown that nitrite serves as a “storage” pool of NO derived from endogenous nitric oxide synthase (eNOS) activity. Nitrite circulates in the blood, bound to RBCs/hemoglobin, and is reduced to NO in hypoxic regions, mediating vasodilatation. While NO is typically limited to a paracrine effect due to its very short half-life, the eNOS/nitrite/NO system provides a distant “endocrine” effect. NO bioavailability is associated with angiogenesis and collateral remodeling. Moreover, NO is related to the mobilization of endothelial progenitor cells.



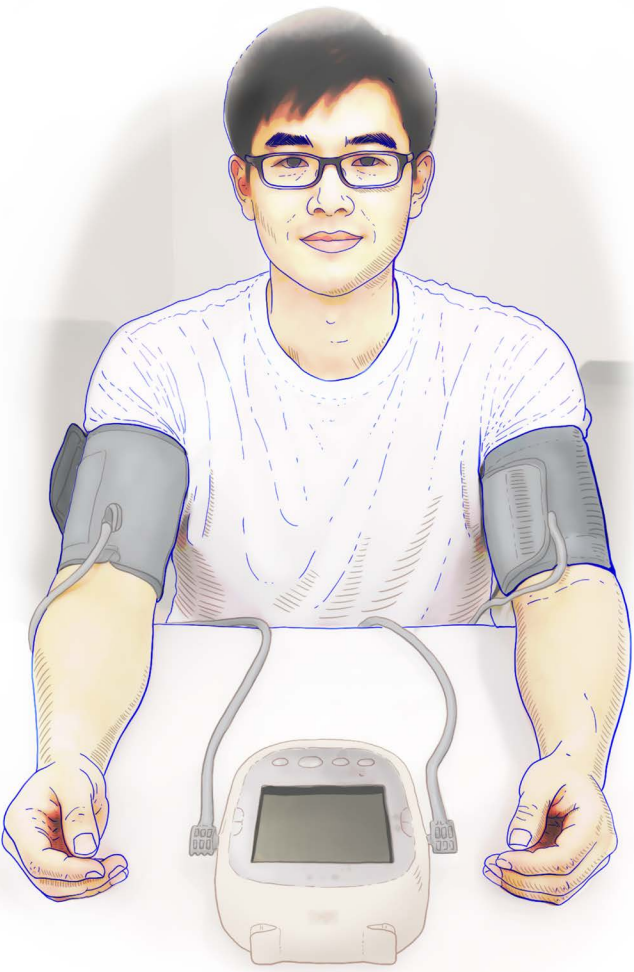
Clinical:

A simple intervention that squeezes the arms on and off for a few minutes at a time each day has repeatedly shown benefits in people with ischemic vascular disorders in remote body organs, such as the heart and brain. Hence the name remote ischemic conditioning, or RIC.

Initially, exciting protective effects were observed in the hearts and brains in animal investigations. Subsequently, many clinical studies showed that RIC may prevent or reduce the severity of heart attacks or strokes. This is especially exciting given the lack of significant side effects and minimal cost of this intervention.

How does such a simple intervention result in clinically meaningful benefits is not yet completely understood despite much research. Currently, the most popular explanation involves two pathways. One pathway is neuronal, that has an afferent and an efferent component mediated through the spinal cord and brainstem. The additional pathway is humoral, where multiple molecules in the blood involved in maintaining vascular health are augmented. The humoral component involves favorable modulation of the immune system. The two mechanistic pathways are believed to act concurrently. Although the optimal duration of the arm compressions has not yet been determined, the usual protocol involves four cycles of 5 minutes of suprasystolic arm compressions (ischemia), usually 50 mmHg above the systolic blood pressure, alternating with 5 minutes decompression (reperfusion). Thus, each session lasts 35 minutes. In clinical studies, a small proportion of people were unable to tolerate such compressions due to discomfort, petechiae in the arms, or transient arm redness.

The positive clinical results seen so far are encouraging further research in a variety of settings and in diverse patient populations to confirm the original findings. One promising setting is acute ischemic stroke, where RIC may limit the ischemic damage, lead to smaller strokes, and consequently better functional outcomes. Alternatively, RIC may enhance the stroke recovery process. Another promising setting is prevention of small strokes that lead to vascular dementia.



Grand Rounds every **Thursday at 8:00 am EST.**
Contact Deana Brown for more information at dbrown3@augusta.edu

RESIDENCY UPDATES

Where are the graduating residents going next?

- **Han Yoo**—Matched at Emory for Clinical Neurophysiology
- **Brian Brown** (Chief)—Matched with the MS program at Baylor
- **Hesam Chamgordani** (Chief)—Matched with the Vascular Neurology Fellowship program here
- **Mitchell Oie**—Matched with the Vascular Neurology program at University of Arizona College of Medicine in Phoenix
- **Brandon Pope**—Matched with the Epilepsy Fellowship program here at MCG
- **Shane Musick**—Matched with the Neuro ICU program at Northwestern

All residents who graduated last year passed their boards.

Congratulations to Senior Resident, **Dr. Brandon Pope** who received an Exemplary Teaching Award from the Medical School for his work with our students.

We have successfully been awarded funding to increase our incoming residents from 6 to 8. This change will be reflected in the upcoming match.

RESIDENCY RESEARCH UPDATE

Shane Musick published a neuroimaging paper and noted “the cornerstone is presenting interesting images of a rare neurologic / embryologic entity, highlighted with help of our neuroradiology department with some great reconstructed images. Bilateral internal carotid artery agenesis is an extremely rare entity, hence the desire and need for publication.”

Brandon Pope, with Drs. Moore-Hill, Weiss, Mbonde, and Vale, did a study on Vagus Nerve Stimulation (VNS) therapy is a nonpharmacologic adjunctive treatment used to reduce seizures in patients with drug-refractory epilepsy (DRE). Although clinical guidelines for VNS therapy exist, they may not fully reflect real-world best practices.

“Our study sought to characterize current programming strategies by surveying epilepsy specialists who routinely manage and program VNS devices. We found substantial variability in programming approaches among providers. These findings suggest that greater standardization of VNS programming may improve patient outcomes and further reduce seizure burden in individuals with DRE.”

2nd Annual

Neurology Residency

Research Day

Date: March 13, 2026

noon to 5p

Location: Lee Auditorium BC 1400

RSVP:

<https://forms.cloud.microsoft/r/WfZvb6FJ1C>



Having Fun with the Residents

FELLOWSHIP UPDATES

We are proud to announce that the MCG Neurocritical Care Fellowship has officially received accreditation. Thanks to the hard work and leadership of our physicians, nurses, advanced practice providers, pharmacists, therapists, and support staff, the program has met the rigorous standards required to train the next generation of neurocritical care specialists. We are excited to welcome our first fellows in 2027, marking the beginning of a new chapter in advanced neurological critical care education and patient care at MCG. Thank you to the entire ICU team for making this achievement possible.

CLERKSHIP

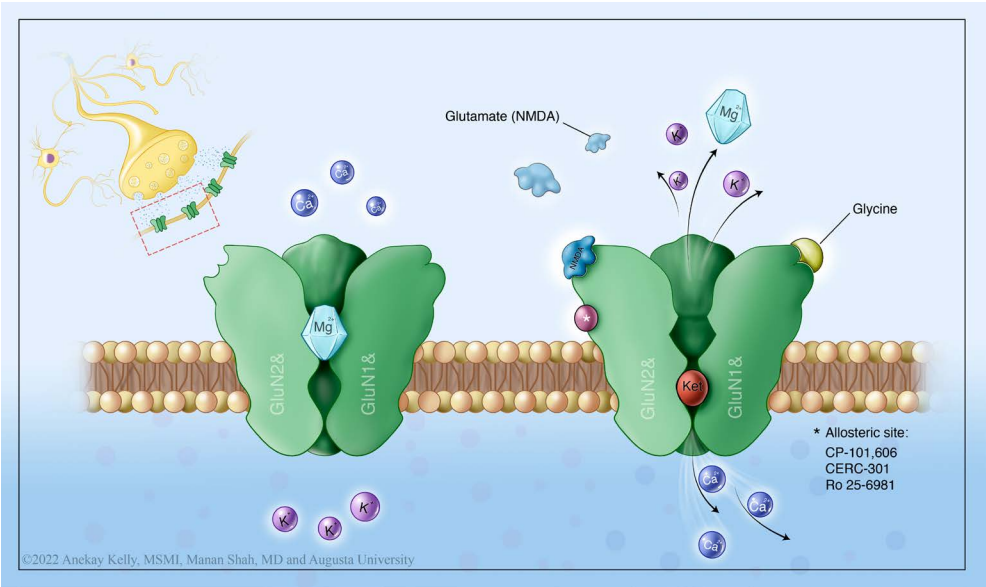
We selected the Neurology Clerkship liaisons for this new year. These are senior students who performed exceptional in the neurology clerkship who are a peer resource for students in the Neurology Clerkship:

- Maaz Gul
- Hilena Gilbre
- Hope Nestlehutt
- Allison Chase

We have awardees for medical student excellence in Neurology. These are graduating students who are receiving graduation awards for excellence in Neurology.

- Bhavya Bakshi- AAN student award for excellence
- Delany Lockwood - AAN student award for excellence
- Madelaine Lowery- MCG neurology student award

If preceptors have an interest in working with students on a research, QI, or case report contact Dr. Bruno (ABRUNO@augusta.edu).



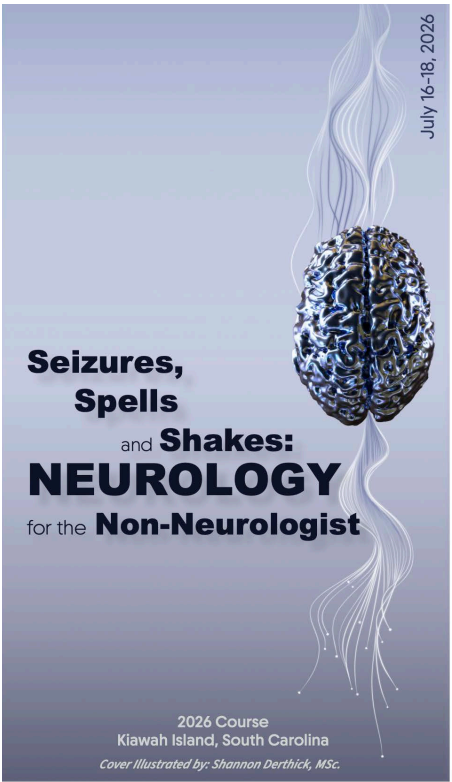
UPCOMING EVENTS

MCG Statewide Faculty Development Conference 2026 is an opportunity for MCG community faculty, educational affiliates, and academic leadership to connect, recognize current transitions in medical education, inspire innovation in curricular implementation and learner professional development.

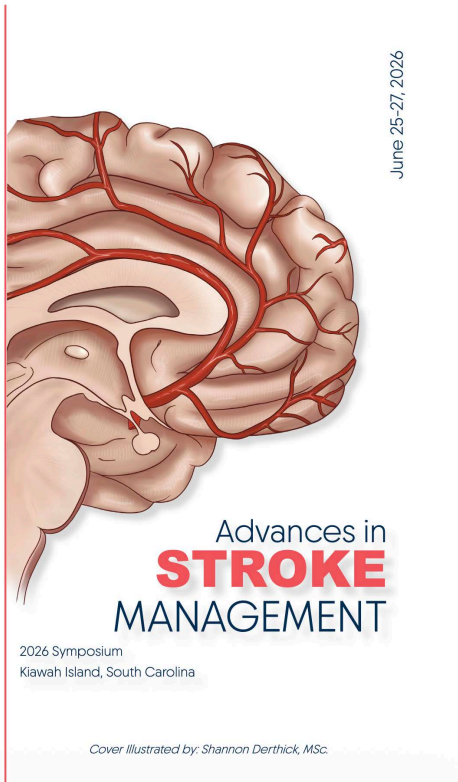
Dates: Thursday, May 28 - Saturday, May 30
Jekyll Island Convention Center, 75
Beachview Dr. N., Jekyll Island, GA

Credits
AMA PRA Category 1 Credits™ (12.00 hours),
Non-Physician Credit For Attending An AMA PRA Category 1 Event (12.00 hours)

For more information: <https://mcg.cloud-cme.com/course/courseoverview?P=0&EID=36549>



<https://tinyurl.com/AUneurology>



<https://tinyurl.com/AUStrokeRegistration>

Alumni Dinner at the AAN: Monday, April 20 at 6:00
Fatpour McCormick: The Ultimate Chicago Sports Bar, 2206 S Indiana Ave, Chicago, IL 60616
RSVP to Kerry Cartledge at kcartledge@augusta.edu