

neuroscience

outlook

news and research from the department of neurosurgery



AUGUSTA UNIVERSITY
**MEDICAL COLLEGE
OF GEORGIA**

Neurosurgery

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From the chair



Dear colleagues and friends,
Welcome to the Department of Neurosurgery newsletter!

In this issue of Neuroscience Outlook, we're excited to kick off our annual update and share the latest news within our department. In this edition, you'll find details on activities and presentations from our residents at national meetings as well as clinical spotlights showcasing our faculty's current research. Stay tuned to learn more about the milestones we've reached and the outstanding contributions of our team.

As we revamp our newsletter, we want to use this opportunity to shine a spotlight on the exciting work happening within our wonderful community. We invite you to share updates and news about your own initiatives, especially anything you'd like to highlight for our colleagues. Your contributions will help keep everyone informed and connected since we plan to circulate this newsletter to our MCG alumni and friends of the department. Please contact our editor-in-chief about all updates.

This year, we are proud of the success of our department. We are happy to announce the department's rank in NIH funding currently sits at 26th in the United States. We continue to be better than we were yesterday. This momentum carries us towards our goal of seeking excellence with our entire surgical team.

In August, we were excited to host our 2nd Annual Marshall Allen Symposium. Dr. John Wilson (Interim Chair, Wake Forest University) was selected as our guest lecturer. Featured presentations highlight our increased engagement in research within our department. Thank you to everyone who helped to make this symposium a great success. We are looking forward to hosting again next year.

The autumn season brought incredible challenges to our community. Hurricane Helene roared through Augusta; we were impacted personally by the devastation of the storm. While we continue to work through those tragedies, I am continually inspired by the camaraderie and the collaboration of so many in our department and in the community.

Wishing you a happy New Year and we are excited to see what 2025 will bring.

Fernando L. Vale, M.D.

Chair, Department of Neurosurgery
Marshall B. Allen, Jr., M.D. Distinguished Chair
Director, Functional and Epilepsy Section
Professor

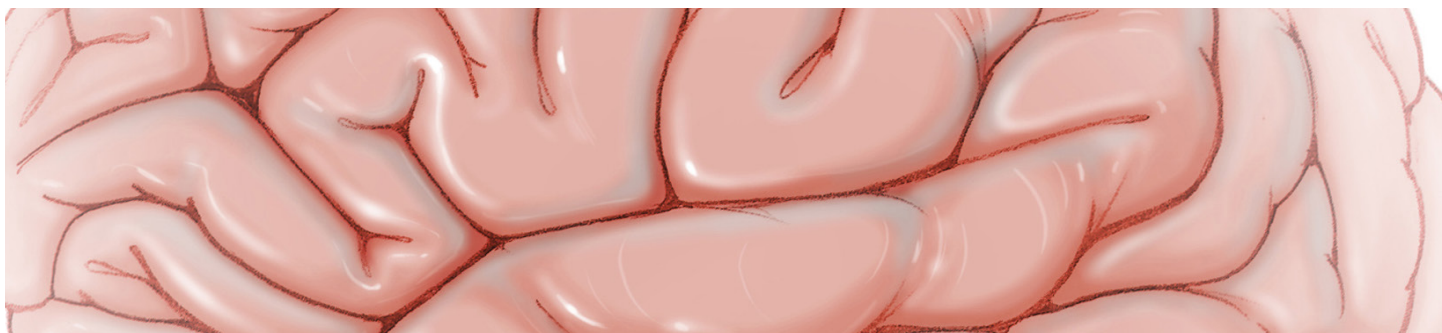
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Anekay Kelly, MSMI

In this issue

Neuroscience Outlook is produced annually by the Medical College of Georgia Departments of Neurology and Neurosurgery at Augusta University.

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Department news 2024

Second annual Marshall B. Allen symposium

On behalf of Augusta University, we would like to extend our gratitude for your participation in the second annual **Marshall B. Allen Symposium**. This year, Dr. John Wilson (Interim Chair, Wake Forest University) was selected as our guest lecturer. Your dedication and contributions to this meeting were instrumental in elevating the quality of our educational content. We are grateful for your commitment to the advancement of knowledge and your efforts in making this meeting a great success. We look forward to seeing you again in August!



Welcome aboard: new residency coordinator



Sarah Tate Edmond joined our department in July alongside our new PGY 1 resident, they have been transitioning into their respective roles alongside each other. We welcome her passion for education to help shape the neurosurgeons of the future.

We are sad to say goodbye to our previous residency coordinator, Laurel Jones, who was with us for 10 years! She has now retired and is spending her time traveling, renovating homes and baking for her six grandchildren.

Welcome aboard: new medical illustrator

Shannon Derthick, MSc. joined our department in September as our new medical illustrator. Shannon earned a Bachelor of Fine arts in Digital art, a Bachelor of Arts in Integrative Physiology and a minor in Art History from University of Colorado. She then completed a MSc with distinction in Medical Art from University of Dundee (AMI accredited). Her interactive master's dissertation project titled "Auscultation: The Art of Listening" has been implemented into the curriculum of multiple medical universities worldwide. We welcome Shannon's creative thinking and expertise to our department.

Anekay Kelly, MSMI, our previous medical illustrator has joined the medical illustration team at MediVisuals, a medical- legal firm based out of Richmond, Virginia. We wish her the best!



Welcome aboard: PGY-1

In July we welcomed our new PGY –1 neurosurgery resident **Mehul Mehra, MD**. Dr. Mehra graduated from Augusta University with a bachelor's degree in Cell and Molecular Biology with minors in Chemistry and Business Administration. He then went on to earn his MD and MPH in spring of 2024 making him a triple Jaguar! We welcome him to the team and look forward to watching his development during residency.



Farewell: chief resident

We say goodbye to our graduating resident, **Earl 'Dane' Jones, MD**, who has accepted a Neurovascular fellowship at University of Tennessee, Memphis. We wish you the best of luck in the future at the Semmes- Murphy Clinic!

Resident interviews



We have successfully hosted three resident recruitment interview dates. Candidates have enjoyed meeting the residents in a casual setting at rep sponsored top golf events. They have also had the opportunity to meet the department faculty and tour the MCG facilities. We are excited for the remainder and looking forward to meeting all of the candidates. Thank you to everyone who has applied and thanks to our reps for sponsoring such memorable events.

Resident accomplishments and recognition

This year, our PGY-6 resident **Luca Debs, MD**, was awarded the Best Resident Presentation Award at the Georgia Neurosurgical Society Spring Meeting 2024 as well as the Young Surgeon Grant at the 74th Southern Neurosurgical Society Annual Meeting.

In September, our PGY-4 resident, **Christopher Carr, MD**, was promoted to Lieutenant Commander (LCDR, O4) in the Navy.

Clinical spotlight: Pursuit of Perfection

by M. Salman Ali, MD

Every block of stone has a statue inside it and it is the task of the sculptor to discover it – Michelangelo

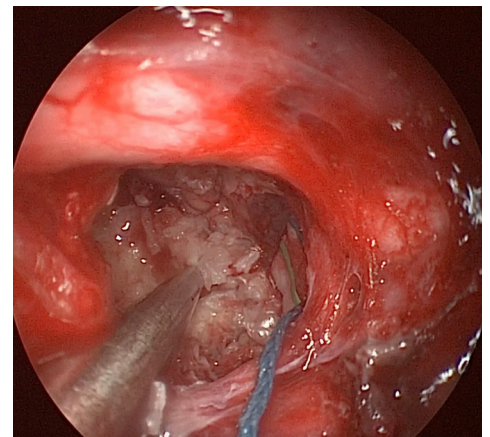
Skull base is an art, a mindset and a way of life. Skull base is one of the subspecialties of neurosurgery, where the bone is drilled to reach into the deepest corners to expose tumors and artfully separate them from critical nerves and blood vessels. It has the highest stakes in neurosurgery and the steepest learning curve. No wonder why so few of us embark on this long and challenging journey. One may have to deal with life altering complications one day and be ready to tackle another equally complex case the next day. There is no time to be down, only to learn from one's complications and continue the pursuit of perfection.

What attracted me to neurosurgery was the challenging nature of it. Long work hours, complex cases and doing things that others would not even imagine doing. As a resident at University of Iowa Hospitals and Clinics (UIHC), my interest in skull base grew. This led me to a 6 month lateral skull base fellowship at UIHC in my 7th year of residency. To gain a diverse experience, I travelled to London, England to do a 6 month fellowship in open and endoscopic skull base neurosurgery at King's College Hospital, one of the largest skull base programs in Europe. Eventually, I completed a post-graduate fellowship in advanced endoscopic endonasal skull base at the world's leading skull base program, University of Pittsburgh Medical Center. The use of endoscope is probably one of the most sentinel advancements in neurosurgery along with the use of microscope and endovascular techniques.

I joined the department of neurosurgery at Medical College of Georgia at Augusta University as an assistant professor in the fall of 2023. The task assigned to me was to create the world's leading skull base program as the director of skull base, pituitary and surgical oncology. In the short span of 12 months, we have made huge strides towards our goal. We have not only provided a comprehensive surgical management of all intracranial tumors, but we have built a team of experts from specialties such as otolaryngology, oncology, ophthalmology, endocrinology, and genetics to provide excellent care to our patients in the community and beyond.

Skull base 360 is an idea we believe in very strongly. We provide expertise not in one or two areas of skull base but all areas of skull base surgery. From the frontal sinus to foramen magnum and everything in between petrous bones. This requires years of training and intricate knowledge of anatomy. Our utmost priority is to provide minimally invasive surgical options for our patients so that they are not reminded of having undergone complex surgeries, leaving them with large scars, instead they can forget their scars. The majority of our cases are performed going through the nose using an endoscope, a long-elongated tube with a camera and a light source at its tip. This allows us to remove large tumors through the nose without shaving hair and causing cosmetically unpleasant scars. When we do have to make incision, we hide them in the eyebrow, behind the ear, or by making the smallest possible incisions using a keyhole approach. We do not believe in making things easier for ourselves as surgeons but for our patients.

My goal is to redefine the term inoperable. Some patients with new tumors and others with residual tumors from prior surgeries are told their tumors cannot be removed, either because they involve cavernous sinus, or other deep neurovascular structures. I thoroughly review each case before I meet with the patients in the clinic so I can discuss all surgical treatments options with them. I encourage them to bring family members along. For more complex cases, I setup multiple clinic visits to allow patients and families to understand these complex procedures, come up with questions and discuss them in subsequent visits before finalizing for surgery.





I believe that our current knowledge of anatomy has allowed us to come up with innovative surgical techniques and corridors which were not possible just a few years ago and still not practiced in most of the country. This is demonstrated by a series of cases we have performed in a short span of 12 months. Examples of

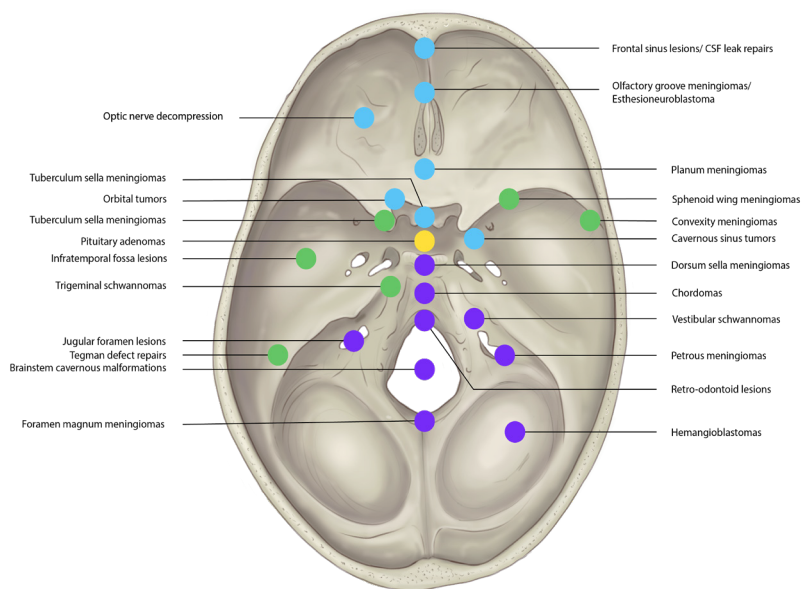
some these cases include the first endoscopic endonasal decompression of optic nerve in a pediatric patient at Children Hospital of Georgia (CHOG), which has been performed on only a handful of patients across the country. We have also performed the first documented resection of brainstem metastasis through an endoscopic endonasal approach (EEA) by drilling Clivus and we have reported the first documented case of Hemipharyngeal Spasm, a compressive syndrome of the Vagus nerves which results in transient spasms of pharyngeal muscles upon swallowing.

For tumors invading the cavernous sinus, we open the medial cavernous wall to remove tumor from it or the cut the medial cavernous wall for functioning adenomas which tend to invade the cavernous wall. Our pituitary tumors are removed using curettes and using microsurgical techniques under direct visualization ensuring complete tumor resection. Whether it is removing brainstem cavernous malformations or performing supracerebellar trans-tentorial approach for epidermoids, we challenge the word, Inoperable, every single day.

As we advance our skull base program next year with the addition of the most advanced 4K endoscopes and the newest microscopes to meet with the growing needs of our community and beyond, we do not underscore the importance of basic science and clinical research. On the basic science front, we have discovered the presence of specialized lymphoid structures in Chordomas, a part of our collaboration with the center of Immunology at MCG and the University of Pittsburgh Medical Center. On the clinical research front, we have presented our new techniques and surgical outcomes at the world's leading conferences as the North American Skull Base Society (NASBS) annual meeting, European Skull base Society and European Association of Neurological Surgeons annual meetings. Our most recent submission to NASBS has resulted in six oral presentations and five poster presentations.

Our true pleasure comes from serving our local, state and out of state patients. Every day, with each individual patient, our goal is to provide the most advanced, sophisticated and safe surgical and oncological care. We take tremendous pride in the fact that none of our neurosurgery patients with skull base and brain tumors need to be transferred to another facility. We constantly work to be better than we were yesterday.

Skull base surgical locations

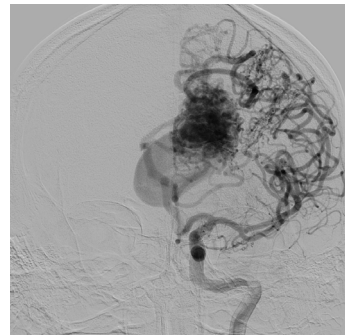
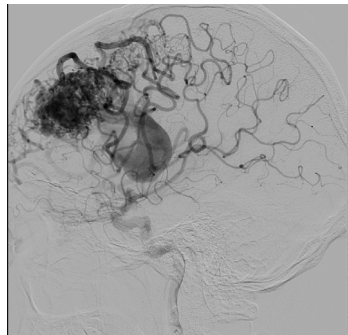
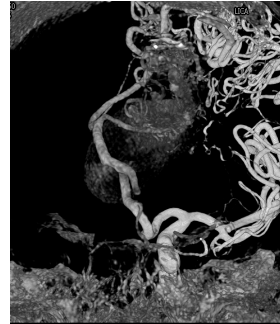
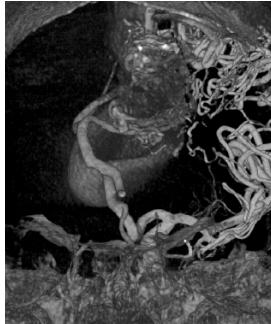


Case Study: AVM Treatment With Resection

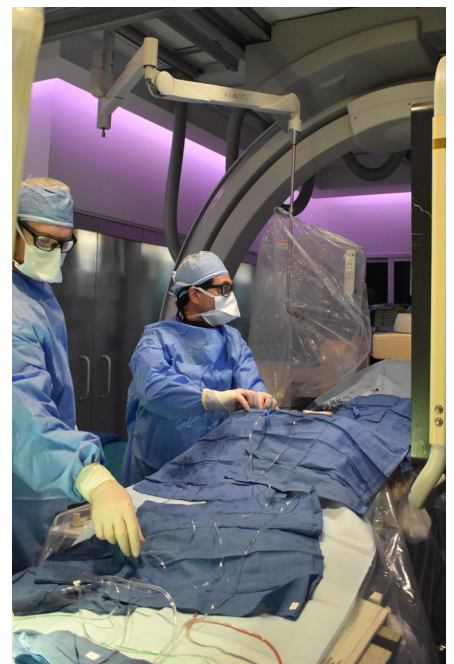
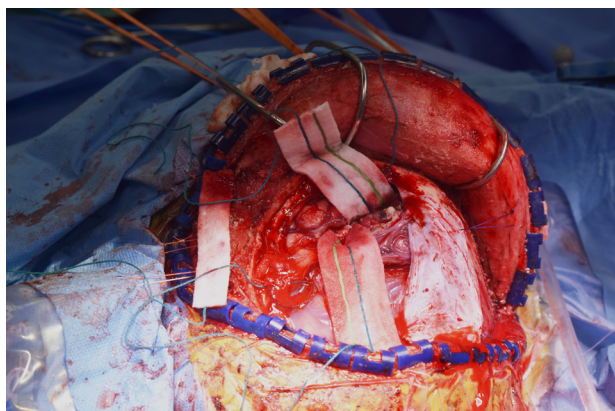
by Scott Y. Rahimi, MD

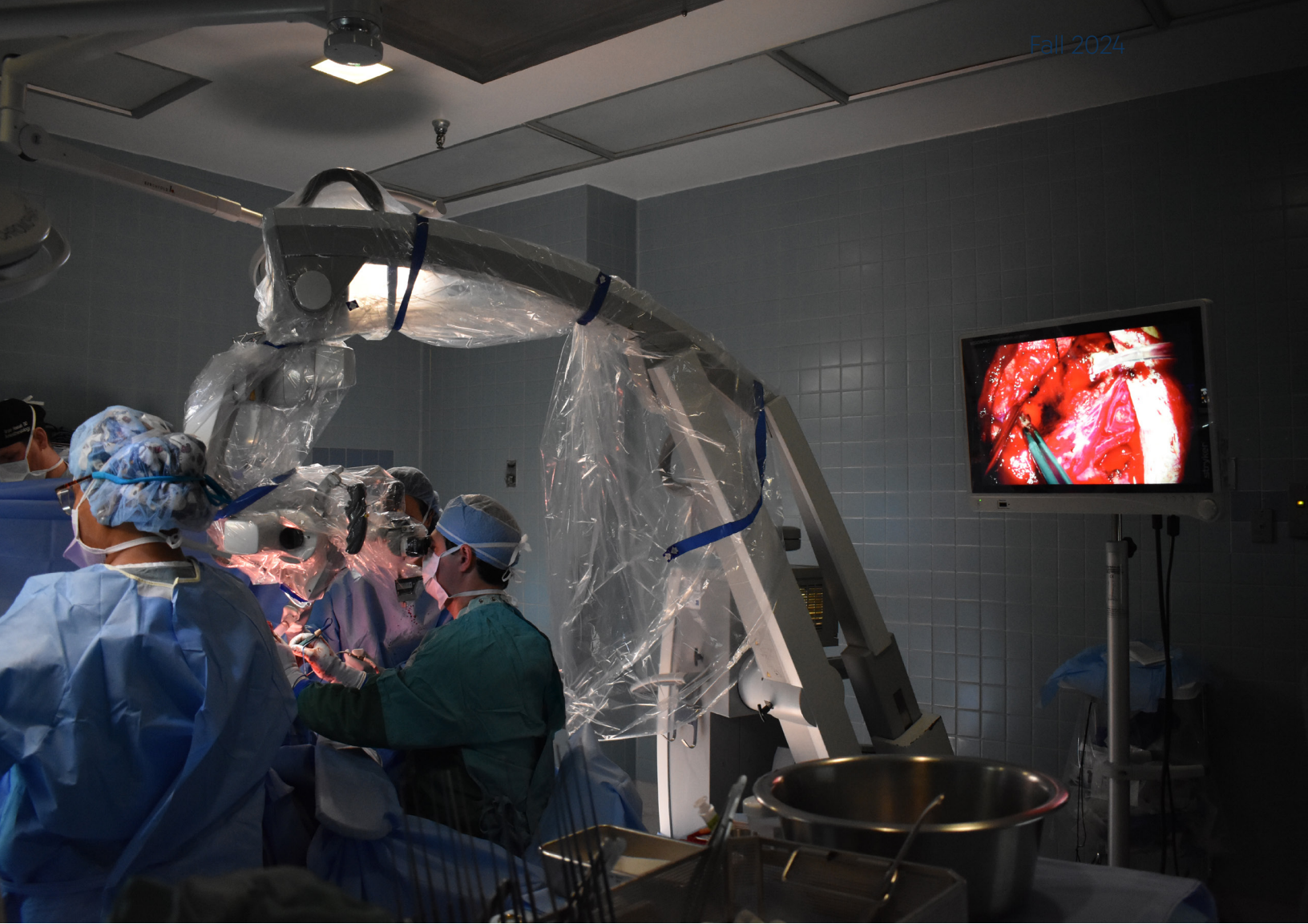
December 2024- 30 y/o patient who presented following loss of consciousness and fall with spine fractures associated with new onset seizures. Workup including CT/CTA of the head showed a large left Frontal AVM.

Pre-Operative Images

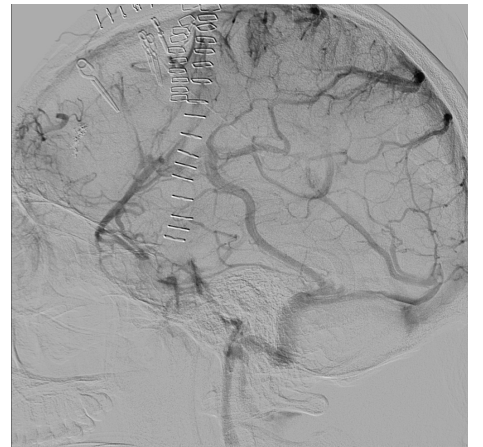
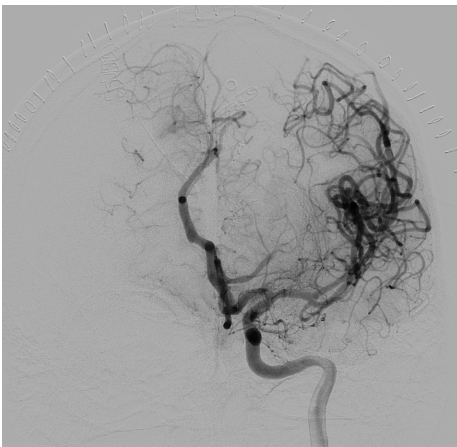


Patient underwent pre-operative embolization of the AVM followed by microsurgical resection. An external ventricular drain was placed for ivh noted postoperatively. Post resection angiogram showed no residual AVM. Patient recovering appropriately and improving daily.





Post-Operative Images



Research spotlight: Kumar Vaibhav, PhD: research and dedication to student success

Dr. Kumar Vaibhav is an Assistant Professor on tenure track in the Department of Neurosurgery at the Medical College of Georgia (MCG) at Augusta University, where he also holds an adjunct position in the Department of Oral Biology and Diagnostic Sciences. He is also affiliated with the Transdisciplinary Research Initiative in Inflammaging and Brain Aging (TRIBA) and The Graduate School at Augusta University. His academic journey has been marked by a strong foundation in toxicology, neuroanatomy, immunology and neuropharmacology, leading to a significant focus on neuroscience research, particularly in the areas of TBI, neurovascular injury, neuroimmunology, senescence, PTE, neurodegeneration and the effects of hypoxia and hypoglycemia on neuronal injury.

He actively contributes to various institutional, national, and international committees. He has served on AU committees, reviewed award applications, and participated in admissions interviews. He is a dedicated member of the National Neurotrauma Society and other professional societies. Vaibhav is also involved in community service, particularly in judging school science fairs. His efforts exemplify his dedication to AU's vision and global student success.

Teaching

Vaibhav has been actively involved in teaching at Augusta University (AU) since 2017, focusing on both research mentorship and direct teaching. As an Assistant Professor, his efforts include mentoring undergraduate and graduate students, medical scholars, research staff, and postdoctoral fellows. He delivers didactic lectures in the DCG graduate curriculum.

Vaibhav has expanded his teaching and mentorship at Augusta University (AU). He mentors undergraduate and graduate students, medical scholars, research staff, and postdoctoral fellows, using innovative instructional approaches to maximize engagement and success. His efforts are reflected in positive feedback and evaluations.

Since joining AU as an Assistant Professor, he has mentored numerous students, contributing to publications,

presentations, and career progression. Vaibhav has also served on PhD Thesis Committees and received the 2022 Outstanding Young Basic Science Faculty Award. His commitment to diversity, inclusion, and leadership enhances his teaching and mentorship.

Student Success

Vaibhav lab has been dedicated to inclusion of students in research and scientific work and to developing a research aptitude to fulfill their career goals since 2014. Our students have contributed to 23 publications, eight talks in conferences (five international, one national and two regional), and 17 posters (seven international, four national and six regional) and four individual awards in conferences within the last five years. Students and staffs who completed training in the lab, have been successful in their careers and are currently working in reputed institutions and medical school.

Our constant effort to adapt to our mentorship and teaching according to the individual's need and background helped us to achieve this success. In summary, Vaibhav's mentorship at institutional and national level represents a noteworthy contribution to the AU vision of education and has been instrumental to our students' success and growth.



Future Directions

Looking forward, Dr. Vaibhav aims to expand his research into the role of other organs in neuroinflammatory processes and neurovascular health. His lab has expanded the work in TBI-induced senescence and neurodegeneration. He is also interested in exploring the potential of regenerative medicine and stem cell therapies in promoting recovery from neurovascular injuries.

Lab staff:

Dr. Mayuri Gulhane is a Research Associate in the Department of Neurosurgery, currently focused on "Traumatic Brain Injury (TBI)", TBI-induced retinopathy, Histology, Flow Cytometry, PCRs, Cell culture and other laboratorial work.

Tabitha Royal is a research associate in Dr.Vaibhav's Lab at MCG-Neurosurgery, Augusta University, where she has been a member of the lab staff since April 2024. Tabitha specializes in molecular biology techniques and histology, assists with the maintenance of the mouse colony, and is skilled in mouse handling and the induction of Traumatic Brain Injury through controlled cortical impact, contributing to the lab's research efforts.

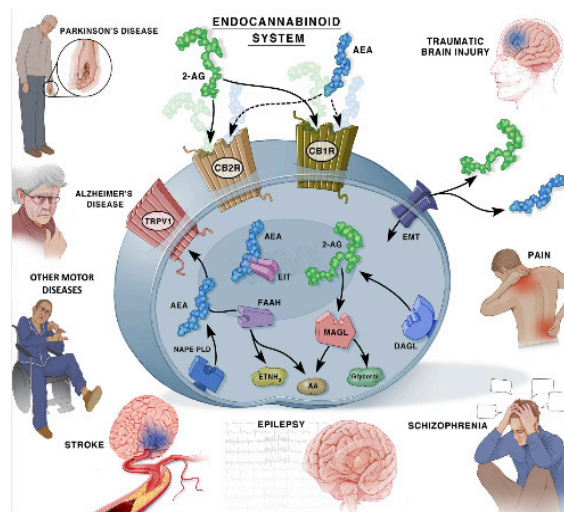


Figure 1. Endocannabinoid System and different neuropathologies. Schematic diagram shows endocannabinoid system and its different components in normal cellular homeostasis. The dysregulated ECS as result of injury or pathologies to brain exaggerate the progression of disease. *EPMA J.* 2020 Apr 15;11(2):217-250. doi: 10.1007/s13167-020-00203-4

Medical Students:

Mario Espinosa

Liam Goldman (Residency in UT, Austin)

Undergraduate Students:

Manuela Guzman Zabala: a Junior and a first graduate in the family, exploring circulatory defects post-TBI

Tajman Randhawa: a Junior and exploring the sexual dimorphism in brain injury.

Sriram Budim: a sophomore and working on neurodegeneration.

Vibha Amble: a junior and working on cerebral atrophy post-TBI.

Shreya Sunil: She is a sophomore and working on neuroinflammation.

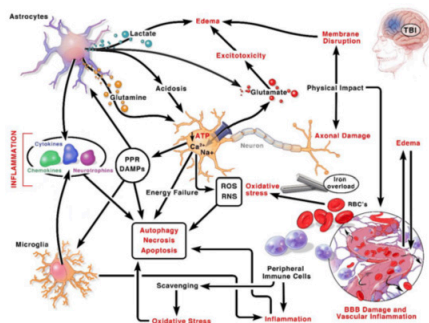


Figure 2. Pathophysiology of TBI. A schematic flow chart of the pathological changes after TBI that lead to acute and chronic neurovascular damage and immune activation. *Biomedicines* 2020, 8(10), 389; <https://doi.org/10.3390/biomedicines8100389>

Research news: **Molly Braun, PhD** featured in Women in Medicine Month (September). The MCG Office for Faculty Success has had the great honor of celebrating one inspiring woman faculty member each day in September on X (formerly Twitter) at @AUG_OFS. These faculty individually and collectively have made tremendous contributions benefiting patients, trainees, colleagues, the community, and science--locally, nationally, and internationally. We are proud to call them our peers.

Manuela Guzman Zabala achieved Best and overall poster awards in 24th Undergraduate Research and Fine Arts Conference, Augusta University.

Historical vignette: Marshall B. Allen, Jr. MD

by Ildemaro J. Volcan, MD

The walls of the AU hospital building whisper the tales of Marshall B. Allen, Jr. MD. So you may be asking, who was he and why was he so influential?

Dr. Allen's journey into medicine began after he completed his undergraduate studies at the University of Mississippi. During this time, he served as a medic in the United States Army in Korea. This experience ignited a passion for medicine and the art of healing that could not be diminished. He went on to attend the University of Mississippi Medical School before finishing his medical degree at Harvard University. After completing his medical training, Dr. Allen completed his neurosurgical residency at the University of Mississippi. Here, he met his soulmate and wife, Dorothy Herron, with whom he shared 58 years of marriage. He then pursued further training through an NIH scholarship that allowed him to spend a year in France to study general and functional neurosurgery.

In 1964, following the tragic death of Dr. George W. Smith in an aviation accident, the president of the Medical College of Georgia, sought out Dr. Marshall B. Allen, Jr. to assume the role of Chief of Neurosurgery. Dr. Allen was tasked with continuing the neurosurgical program Dr. Smith had founded, which had recently gained prestigious recognition from the American Board of Neurologic Surgery.

Dr. Allen was instrumental in shaping the department and preparing future pioneers in neurosurgery. He took pride in ensuring that his residents mastered the technical aspects of surgery and developed the intellectual and ethical foundations necessary to lead in medicine. His daily schedule was rigorous: he started his day at 5:00 AM and often finished late in the evening. Teaching was integral to his work, whether it was in the operating room, at conferences, or in the clinic. Dr. Allen made sure that residents were involved at every level, from performing diagnostic procedures to participating in grand rounds, and he expected nothing less than excellence from those under his mentorship.

There are tales of the left-handed surgeon teaching his residents to perform surgeries from a left-handed perspective. He made the residents put tape on the floor to mark where the surgical table and the wheels of the fluoroscopy machine were to be placed, the night

before, so there was no wasted time the morning of surgery. Efficiency in the operating room was essential, not only for the success of the surgery but for maximizing the educational experience of his residents.

Notably, Dr. Allen worked hard to introduce one of the first EMI (CT) scanners to the United States, located at the Augusta campus. Early on, the neurosurgical and radiology residents performed all the diagnostic procedures: Pneumoencephalogram, Ventriculogram, Angiogram (Direct Carotid stick) and Myelograms for spinal pathology. This advanced imaging tool revolutionized neurosurgical diagnostics. The residents breathed a sigh of relief as this new diagnostic tool along with the rise of the M.R.I. became the preferred diagnostic method used for patients.



Seated left to right:
Dr. L.O.J. Manganiello- private practice neurosurgeon, Augusta, GA
Dr. Marshall B. Allen, Jr.- chief, section of neurosurgery

*
Dr. Pomeroy Nichols- private practice neurosurgeon, Augusta, GA
Frances DeRoller- neurosurgery medical illustrator
Ms. Joyce Utley- neurosurgery secretary

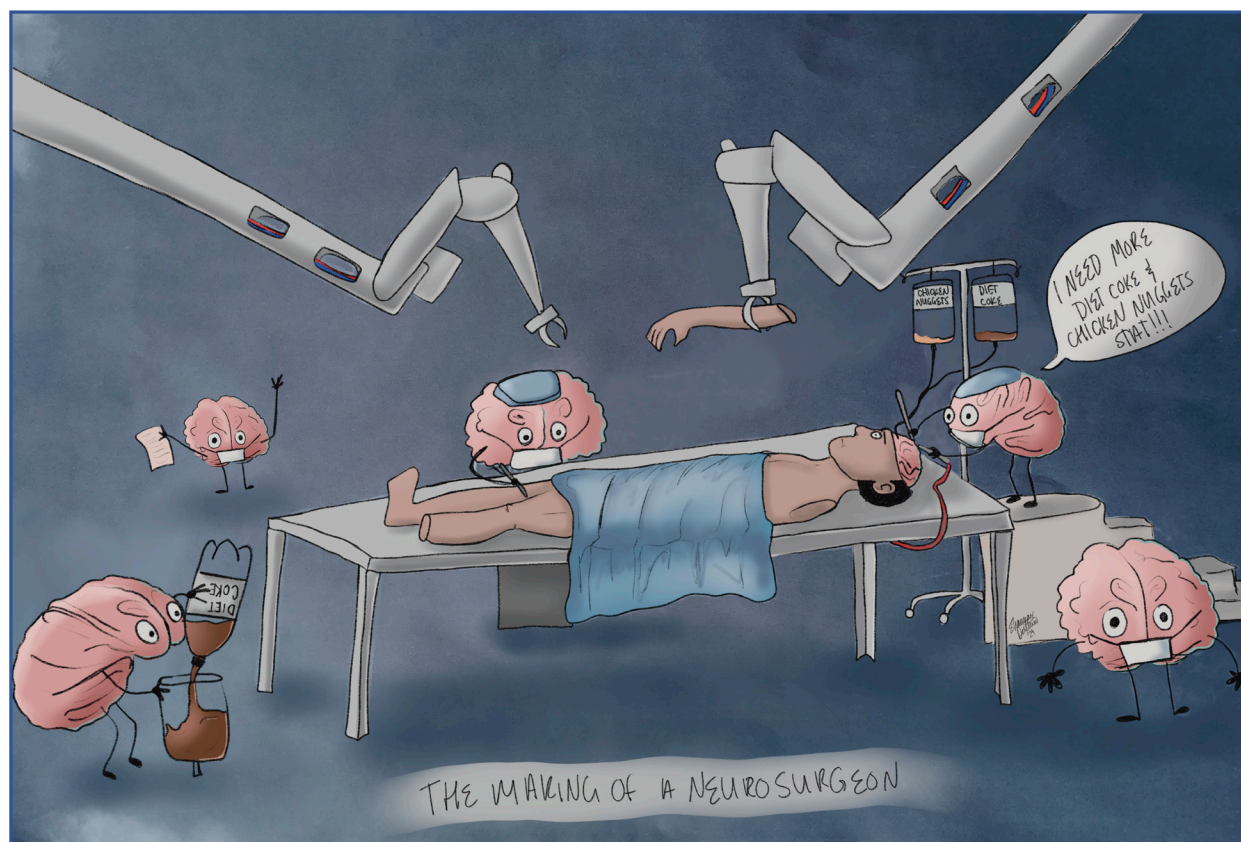
Dr. Allen developed strong collaborative relationships with colleagues across disciplines. Dr. Allen's close partnership with the Endocrinology Department led to several important publications, and his research on pituitary surgery culminated in the publication of a textbook on the subject. He was also a pioneer in vascular neurosurgery. In the early 1970s, he performed an innovative procedure to treat carotid-cavernous fistulas using a detachable balloon. He continued to push the boundaries of medical science and received much respect for his approaches to complex neurosurgical problems.

Dr. Allen was beloved in the neurosurgical community, his contributions to the field were recognized both nationally and internationally, and he became a sought-after speaker, presenting lectures and seminars on neurosurgery across the world. He retired from MCG Neurosurgery in 1994 but continued to be a support and ally to the department until his passing in 2015.

He left his mark on the world of neurosurgery, both here in Augusta and worldwide.

Marshall Bonner Allen, Jr., M.D
October 19, 1927 -November 13, 2015

Neurofabulous doodles: The Making of a Neurosurgeon



Resident corner



Lydia is our wonderful Chief. She loves coffee, being social and most of all, being social when coffee is involved. In her free time, she can be found running and sharing pictures of niece and nephews.



Luca is our PGY- 6 neurosurgery resident. Luca and his wife welcomed their 2nd kid this year. In his free time, he can be found doing anything related to mountain biking and motor bikes, he especially likes watching super cross championships.



Kenny is our PGY- 5 neurosurgery resident. He recently published an article and he accepted a fellowship Orthopedic spine fellowship to begin in fall of 2025 at MCG. Outside of work, he enjoys working out and watching sports.



Matt is our PGY 4 neurosurgery resident – He had an exciting year, on his 30th birthday, he ran super speedy marathon at Hilton head and won first overall. There are a few more races on the calendar so stay tuned. He also got married!



Chris is our PGY- 4 neurosurgery resident. He was recently promoted to Lieutenant Commander in the Navy. This year he went on a road trip with family to the West to see the hot air balloon festival in New Mexico. In his free time, he can be found writing books and working on his moustache.



David is our PGY 3 neurosurgery resident- This year he ran a marathon and broke his personal record by 14 minutes and was the best man at a wedding! He still likes hiking and has hiked the first 170 miles of the Appalachian trail. When he's lucky, his dog, Harvey, will join him on his adventures.



Billy is our PGY 2 neurosurgery resident- This year he helped to successfully organize a surgical observation and immersion program at the AU hospital for high school and college students. In his free time, he loves playing volleyball, riding motorcycles and spending time with his wife and kids.



Mehul is our PGY 1 neurosurgery resident- In his free time, he enjoys fishing, teaching Hindi to kindergarteners, tinkering with electronics and building computers. He loves traveling and went to Bogota, Columbia this year for a wedding. His favorite place to travel to is to India to visit family!





Thank you to our donors!

We want to thank our 2024 donors for helping to enhance our program's didactic and clinical needs. We couldn't have our success without your generosity.

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Fernando Vale
David C. Parker
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We ask you to consider donating to our program in preparation for the 2025 academic year. Your donation helps us to further the diverse needs of the neurosurgical department. To donate please visit the following:

Neurosurgery Resident Education

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*Gifts are tax-deductible to the extent allowed by law, less the fair market value of the benefits received. The CARES Act which became law on March 27, 2020, may enhance the tax deductibility of your gift. Please consult with your tax advisor.

Publications and presentations of 2024

Publications

Ahluwalia P, Ballur K, Leeman T, Vashisht A, Singh H, Omar N, Mondal AK, **Vaibhav K**, Baban B, Kolhe R. Incorporating Novel Technologies in Precision Oncology for Colorectal Cancer: Advancing Personalized Medicine. *Cancers* (Basel). 2024 Jan 23;16(3):480. doi: 10.3390/cancers16030480. PMID: 38339232; PMCID: PMC10854941.

Ahluwalia P, Gaur P, Ahluwalia M, **Vaibhav K**. Brain Injury and Neurodegeneration: Molecular, Functional, and Translational Approach 2.0. *Biomedicines*. 2024 Nov 12;12(11):2586. doi: 10.3390/biomedicines12112586. PMID: 39595152; PMCID: PMC11591557.

Braun M, Simon MJ, Jang J, Sanderson K, Swierz J, Sevaio M, Pincus AB, Schaser AJ, Elliott JE, Lim MM, Unni VK, Schindler AG, Keene CD, Latimer CS, Iliff J. Aquaporin-4 mis-localization slows glymphatic clearance of α -synuclein and promotes α -synuclein pathology and aggregate propagation. *bioRxiv* [Preprint]. 2024; Aug 19:2024.08.14.607971. doi: 10.1101/2024.08.14.607971. PMID: 39229234; PMCID: PMC11370328.

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Carr C: Mediterranean Diet and Evidence-Based Medicine. Fort Eisenhower Naval Reserve Center Health Promotions Lecture Series, March 2024.

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Episcopal Day School Science Lecture. Augusta, GA April 2024.

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Summer Meeting, May 2024.

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Report, Comprehensive Review of the Literature, and Considerations for the Spine
Surgeon. Marshall B. Allen, MD Neurosurgery Symposium. North Augusta, SC,
August 2024.

Carr C, Butler M*, Baker D, Bhatia A, Vale FL, Nguyen K: Laser Interstitial
Thermal Therapy for a Giant Sessile Hypothalamic Hamartoma in an Eight Year
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Analysis of Discontinuation & Nonpublication Prevalence and Trends. Congress of
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Rashidi SM, Habibi MA, Reyhani M, Fallahi MS, Arshadi MR, Vakharia K,
Rahimi SY: Pipeline Embolization Device and Flow Re-Direction Endoluminal
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Analysis. Congress of Neurological Surgeons. Houston, TX, September 2024.
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Carr C: Structural and Functional Organization of the Nervous System. Medical
College of Georgia Neurosurgery Grand Rounds American Board of Neurological
Surgery Neuroanatomy Exam Lecture Series, September 2024.

Carr C: Suicide Prevention. Fort Eisenhower Naval Reserve Center Health
Promotions Lecture Series, September 2024.

Carr C, Butler M*, Baker D, Bhatia A, Vale F, Nguyen K: Robot-assisted
MR-guided Laser Interstitial Thermal Therapy for a Giant Sessile Hypothalamic
Hamartoma in an Eight-year-old Boy: Case Report and Comprehensive Review of
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October 2024.

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Artery Injury to BIFFL grade III. 16th World Stroke Conference. Abu Dhabi, UAE,
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Extensive Compressive Plexiform Neurofibromatosis Type 1 Lesions of the
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Surgeon. Congress of Neurological Surgeons Annual Meeting, October 2024.

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of the Posterior Longitudinal Ligament in the Cervical Spine. Congress of
Neurological Surgeons Annual Meeting, 2024.



Fernando Vale, MD. and resident Mathew Lee, MD. in the OR



Department of Neurosurgery
Clinical Faculty 2024



Fernando L. Vale, MD
Chairman
Functional & Epilepsy
Neurosurgery



John R. Vender, MD
Professor & Vice Chair
Surgical Pain Management,
Surgical Oncology, Pituitary
Surgery



Samuel D. Macomson, MD
Residency Program Director
Hydrocephalus, Peripheral Nerve
Surgery, General Neurosurgery



Scott Y. Rahimi, MD
Professor
Vascular & Endovascular
Neurosurgery, General
Neurosurgery



M. Salman Ali, MD
Assistant Professor
Skull Base Surgery, Pituitary Surgery,
and Surgical Neuro-oncology



Dan-Victor Giurgiutiu, MD
Assistant Professor
Interventional Neurologist,
Vascular Neurology



Alexander F. Post, MD
Assistant Professor
Spine Surgery



Khoi Nguyen, MD
Assistant Professor
Pediatric Neurosurgery,
General Neurosurgery



John W. Henson, MD
Professor
Neuro-oncology,
Genetics



Klepper A. Garcia, MD
Associate Professor
Neurocritical Care



Michel C. Paré, MD
Associate Professor
Spine Surgery



Manan Shah, MD
Assistant Professor
Neurocritical Care



Annie Dennis-King, PA-C
Physician Assistant



Anah Bhatia, CPNP-AC
Nurse Practitioner



Chasitie McIntosh, ACNP-BC
Nurse Practitioner



Department of Neurosurgery
Residents 2024



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Chief Resident (PGY 7)
University of Sydney, Australia
Surgical Prelim at Beth Israel,
Boston
Hometown: Cyprus



Luca Debs, MD
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of Medicine
Hometown: Strasbourg, France



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University of Texas, San Antonio
Hometown: Tempe, AZ



Matthew Lee, MD
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Resident (PGY 4)
Tulane University School of Medicine
Hometown: Boston, Massachusetts



David Baker, III, MD
Resident (PGY 3)
University of Arkansas for
Medical Sciences
Hometown: Conway, Arkansas



William 'Billy' Woodall, MD, MPH
Resident (PGY 2)
West VA University School of
Medicine
Hometown: Irvine, California



Mehul Mehra, MD
Resident (PGY 1)
Medical College of Georgia
Hometown: Snellville, Georgia

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Upcoming events

Look out for upcoming details for the third annual Marshall B. Allen Symposium, August 2025!