Neurosurgery News

Spring 2023

Dr. Christopher Shaffrey presents inaugural Spinal Neurosurgery Lectureship

On Friday, February 17, BCM Neurosurgery welcomed Dr. Christopher Shaffrey, chief of the Duke Spine Division, for the inaugural Spinal Neurosurgery Lectureship.

"Established through the generosity of a BCM Neurosurgery patient, the lecture features a leader in the field of spine surgery and encompasses both a grand rounds presentation and a dedicated teaching session with our residents and fellows," explained Dr. Alexander Ropper, associate professor and director of spine surgery.

Dr. Shaffrey presented "When to Say 'No' to Major Surgery." The lecture was preceded by a special dinner for BCM Neurorusrgery residents, faculty and Dr. Shaffrey the evening before.

The inaugural Spinal Neurosurgery Lecture was made possible in part by the generous support of an appreciative former patient.

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inside...

Chair's Message

I am very pleased to provide this quarterly update on the Department of Neurosurgery here at Baylor College of Medicine. There have been numerous exciting developments in the last three months.

Our educational programs continue to flourish and we matched four outstanding candidates this year: Jackson Allen from Vanderbilt University, Luis Carrete from UCSF, Jeffrey Chen from Vanderbilt University and Sai Chilakapati from UT Southwestern. We are very excited to have them on board. We also hosted Dr. Christopher Shaffrey from Duke University as our inaugural lecturer in Spinal Surgery. Dr. Shaffrey shared his immense expertise in deformity surgery and met with the residents after his talk. We were also thrilled to host Dr. Fady Charbel as the 9th annual Raymond Sawaya Lecturer. Dr. Sawaya made a special appearance for his lecture and made a significant contribution to the Department to endow his lectureship ensuring that it will endure. Finally, Dr. Nisha Giridharan, a PGY5 resident, was awarded the prestigious R25 Neurosurgery Resident Research Grant from the NIH.

Our research program continues to thrive. We were recently ranked #6 in the country in terms of funding from the NIH among neurosurgery departments with well over $9M in federal funding. We have also recruited two top notch scientists to the department as McNair Scholars, Sarah Heilbronner and Ben Hayden and I'm pleased to report that they have already started here in Houston. Congratulations to first author Rachel Curry and Professor of Neurosurgery, Ben Deneen for their publication, "Glioma epileptiform activity and progression are driven by IGSF3-mediated potassium dysregulation" in *Neuron* which was also given the cover of the most recent issue of the journal.

Our clinical practice continues to grow. We have been actively recruiting and expect two more surgeons to join the practice this summer. The residents continue to benefit from the wide array of cases performed at our five affiliate hospitals.

Upcoming Events

- April 14: McNair Faculty and Staff Field Day
- April 14: Resident Research Meeting
- April 20-22: Baylor College of Medicine Alumni Reunion
- April 26: Administrative Professional's Day
- April 26-30: Patient Experience Week
- May 5-6: 31st Annual George Ehni Lectureship

Education Spotlights

Lectureships, labs, awards and more, trainees, students and faculty keep busy

On Friday, March 24, BCM Neurosurgery welcomed Dr. Fady Charbel, professor and Head of the Department of Neurosurgery at the University of Illinois at Chicago, as the guest lecturer for the 9th annual Raymond Sawaya Lecture.

Dr. Charbel's presentation, "From Beirut to Chicago; with a nod to Mediterranean Antiquity, Ulysses and CP Cavafey," discussed his journey in neurovascular surgery and emphasized the importance of a supportive learning environment, seeking additional viewpoints and overcoming challenges. The lecture was followed by an open forum between Dr. Charbel and trainees.

This annual lectureship honors Dr. Raymond Sawaya, former chair of the BCM Department of Neurosurgery, for his ten years of serivce to the department. BCM Neurosurgery thanks Dr. Sawaya for his continued generous support of this lecture.

BCM Neurosurgery hosts several endowed lectureships throughout the year and looks forward to hosting Dr. Juan Carlos Fernandez-Miranda in May for the 31st annual George Ehni Lectureship.

Left to right: Drs. Howard Weiner, Frederick Lang, Raymond Sawaya, Fady Charbel, Ganesh Rao, Akash Patel

Dr. Fady Charbel was the invited speaker for the 9th Annual Raymond Sawaya Lectureship

A Perfect Match (Day)

BCM Neurosurgery welcomes four new residents to the team

After four years of rigorous training in med school, Match Day is a universal day of celebration for med students and their loved ones, as well as the institutions hoping to train the best and the brightest. Match Day 2023 was no exception. Falling on March 17 — St. Patrick's Day — this year's Match Day was less about luck and more the result of dedication and commitment.

"Match Day is...a culmination of years and years of hard work, starting often as an undergrad," explains BCM Neurosurgery Residency Program Director Dr. Akash Patel. "Overall, it's a lot of fun, and probably one of the things I most look forward to in the year."

In this highly competitive field, finding the perfect match is no easy task. Dr. Patel reflects, "Each year, I think the applicants get more and more competitive and we were fortunate to match four really spectacular candidates."

As one of the largest neurological surgery residency programs in the nation, this year BCM Neurosurgery is proud to welcome **Jackson Allen** (Vanderbilt University), **Luis Carrete** (University of California San Francisco), **Jeffrey Chen** (Vanderbilt University) and **Sai Susheel Chilakapati** (Rice University) to the team.

For three of the four trainees, the match marks a return to Baylor, with Allen, Carrete, and Chilakapti having previously completed sub-internships at BCM Neurosurgery. As Dr. Patel notes, their decsion to return for formal training at Baylor is a testament to the quality of the program.

"We were lucky that three of the four were already interested in our program. A lot of that speaks to the history of this program, and the alumni that we have and the reputation that they have built for [BCM Neurosurgery]."

Dr. Patel notes that a successful Match Day is cause for celebration not only for the department, but for Baylor overall. He names Baylor med students **Ron Gadot**, **Jae Eun Lee**, and **Ricardo Najera**, who matched into neurosurgical programs at the Brigham and Women's Hospital, the University of Southern California and the University of Alabama, respectively. "As a mentor, I'm really proud of them. Ultimately, they will go on to be abmassadors for Baylor."

"Overall, it's a lot of fun, and probably one of the things I most look forward to."

BCM Neurosurgery residency program director Dr. Akash Patel recaps an exciting match day and discusses the significance of the event and an existing link to Baylor for three of the four matches.

Lights, Camera, Action: Celebrating Residents and Fellows

Thank a Resident Day — or, as it is sometimes known at BCM Neurosurgery, Thank a Trainee Day — was celebrated on February 24. The day is meant to remind all of the crucial role residents and fellows play in our practice and thank them for the care they show our patients.

Members from across the department took the time to share a few words of gratitude for our residents and fellows. Click here to watch the full video.

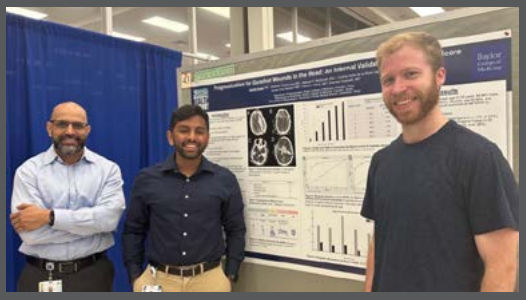
Fourth Annual Lateral Skull Base Lab

On Thursday, March 9, BCM Neurosurgery residents participated in the fourth annual lateral skull base lab in partnership with Stryker.

Residency program director Dr. Akash Patel and associate professor Dr. Alex Sweeney were on hand to offer additional guidance.

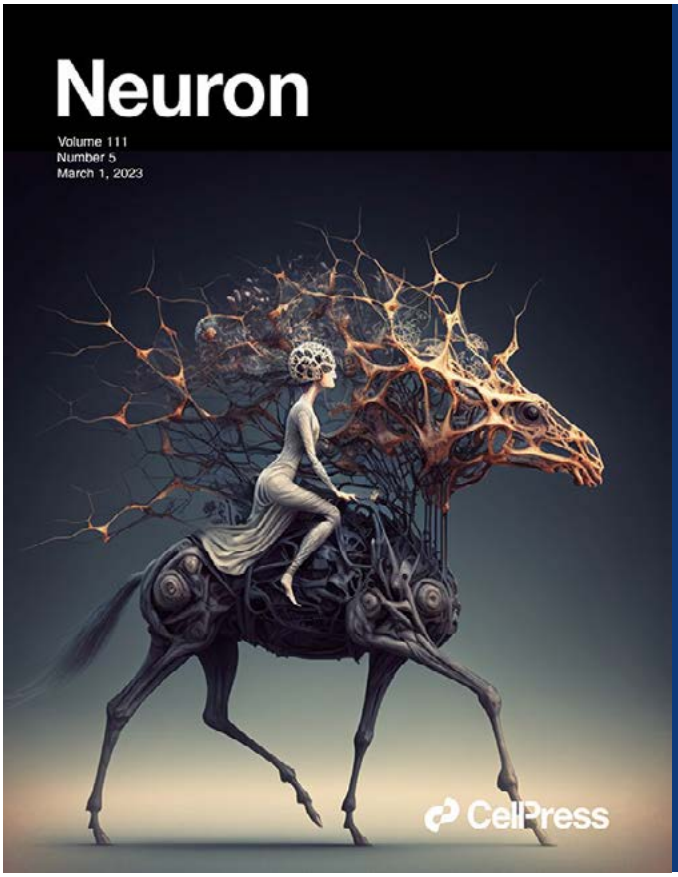
The event served as an opportunity for our residents to gain hands-on experience as they underwent retrosigmoid, translab, and mastoid drilling.

BCM Neurosurgery shines at Medical Student Research Forum



In March, medical students from all across Baylor College of Medicine participated in the BCM Medical Student Research Forum. BCM Neurosurgery was well-represented, with several poster presentations.

Pictured left to right: chair Dr. Ganesh Rao, medical student Adrish Anad, and research assistant Malcolm McDonald.



Research Roundup

Pictured left: First author Rachel Curry and Professor of Neurosurgery, Benjamin Deneen were awarded the cover of the most recent issue of *Neuron* for their publication, "Glioma epileptiform activity and progression are driven by IGSF3-mediated potassium dysregulation."

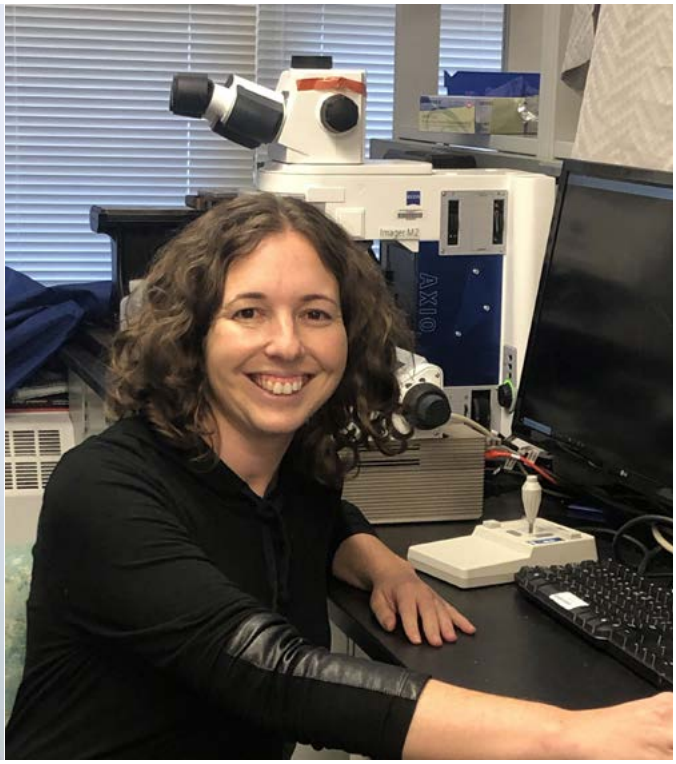
BCM Neurosurgery ranks No. 6 in the nation and first in the state for NIH funding, new Blue Ridge rankings report

The department moves up from No. 9 to No. 6 with more than $9 million in funding according to the most recent report

From the Blue Ridge Institute for Medical Research

Rank	Name	Neurosurgery
1	University of California San Francisco	$28,858,523
2	University of California Los Angeles	$14,729,303
3	Stanford University	$14,603,672
4	University of Florida	$13,844,179
5	Duke University	$11,358,001
6	**Baylor College of Medicine**	**$9,825,768**
7	Ohio State University	$8,958,725
8	Yale University	$8,779,983
9	Northwestern University Chicago	$8,739,530
10	University of Pennsylvania	$8,037,557

Rankings as compiled by Robert Roskoski Jr. and Tristram G. Parslow



Drs. Ben Hayden and Sarah Heilbronner join BCM Neurosurgery as McNair Scholars

Consistently ranked by the Blue Ridge Institute for Medical Research among the top research programs in the nation for NIH funding, the department of neurosurgery continues to strengthen its program with the addition of two new McNair Scholars.

Established by the Robert and Janice McNair Foundation and managed by the McNair Medical Institute, the McNair Scholars program pursues collaborative and transformational research by identifying and recruiting leading scientists in the neurosciences.

Drs. Ben Hayden and Sarah Heilbronner, a husband-and-wife duo, were previously at the University of Minnesota before they both joined Baylor.

"I am very honored to have this recognition," said Hayden, who specializes in human decision-making.

An electrophysiologist with an interest in cognition for twenty years, Hayden looks forward to what his lab can accomplish by calling the sixth most NIH-funded neurosurgery research program in the nation home. "I am especially interested in self-control — what goes wrong when self-control fails and what goes right when it succeeds. I am excited to try to understand self-control in naturalistic situations, instead of in artificial laboratory contexts."

Similarly, Heilbronner, who earned her Ph.D. in neurobiology from Duke University and performed postdoc work in neuroanatomy at the University of Rochester, also looks forward to building on her research, which aims to understand the pattern of connections made by neurons to determine how behavior, cognition and emotion arise. She explains, "My work is focused on mapping the wiring diagram of the brain. I believe that once we know what this diagram is, we will be better able to treat many brain disorders, because they themselves seem to be caused by problems of connectivity."

Hayden and Heilbronner both cite the translational research opportunities Baylor offers as motivating factors for their relocation to Houston. "I am looking forward to working within a truly translational team," Heilbronner shares. "It is easy in academic biosciences to be siloed, making the link between bench and bedside so difficult. Being part of the team here will allow me to bring fundamental insight about the brain's anatomy to the clinic." Hayden echoes this sentiment, "I am excited to join [the team], which has a remarkable record of research and clinical innovation. I hope to bring a new perspective, one founded on cognitive neuroscience and cognitive psychology, as well as on modern statistical techniques for the analysis of psychological data."

Members from across the Baylor community gather for the monthly Center for Cancer Neuroscience seminar. The monthly meeting is open to all.

Publications

Anand A, Flores AR, McDonald MF, Gadot R, Xu DS, Ropper AE. A computer vision approach to identifying the manufacturer of posterior thoracolumbar instrumentation systems. J Neurosurg Spine. 2022 Dec 27. Available here.

Curry RN, Aiba I, Meyer J, Lozzi B, Ko Y, McDonald MF, Rosenbaum A, Cervantes A, Huang-Hobbs E, Cocito C, Greenfield JP, Jalali A, Gavvala J, Mohila C, Serin Harmanci A, Noebels J, Rao G, Deneen B. Glioma epileptiform activity and progression are driven by IGSF-3-mediated potassium dysregulation. Neuron. 2023 Mar 1. Available here.

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Siddiq F, Nunna RS, Khan I, Khan M, Beall J, Tekle W, Ezzeldin M, Tanweer O, Burkhardt JK, Jabbour P, Tjoumakaris SI, Herial N, Siddiqui AH, Grandhi R, Qureshi AI, Hassan AO. 101 30-Day outcomes of resolute onyx stent for symptomatic intracranial stenosis: a multicenter propensity-score matched comparison with SAMMPRIS trial. Neurosurgery. 2023 Apr 1. Available here.

Welcome to the Team!

Join us in welcoming the following members to the BCM Neurosurgery family.

Maria Castillo — *Research Coordinator I*

Nabeel Diab — *Research Technician II*

Justin Fine — *Assistant Professor*

Tia Gordon — *Research Technician I*

Kennedy Guess — *Speech Lang Pathologist*

Mayuri Gupta — *Research Technician I*

Benjamin Hayden — *Professor*

Sarah Heilbronner — *Assistant Professor*

Catina Herring — *Manager, Research Admin*

DeAndria Mobley — *Medical Assistant II*

Teresa Mose — *Senior Coord, Patient Services*

Sameer Rajesh — *Research Technician II*

Aksa Siddiqui — *Research Admin Associate*

Su Wang — *Postdoctoral Associate*

Yue Zhang — *Instructor*

Healthcare Highlights

Patient and Practitioner: Lona Winnegan reflects on her her experiences at BCM Neurosurgery

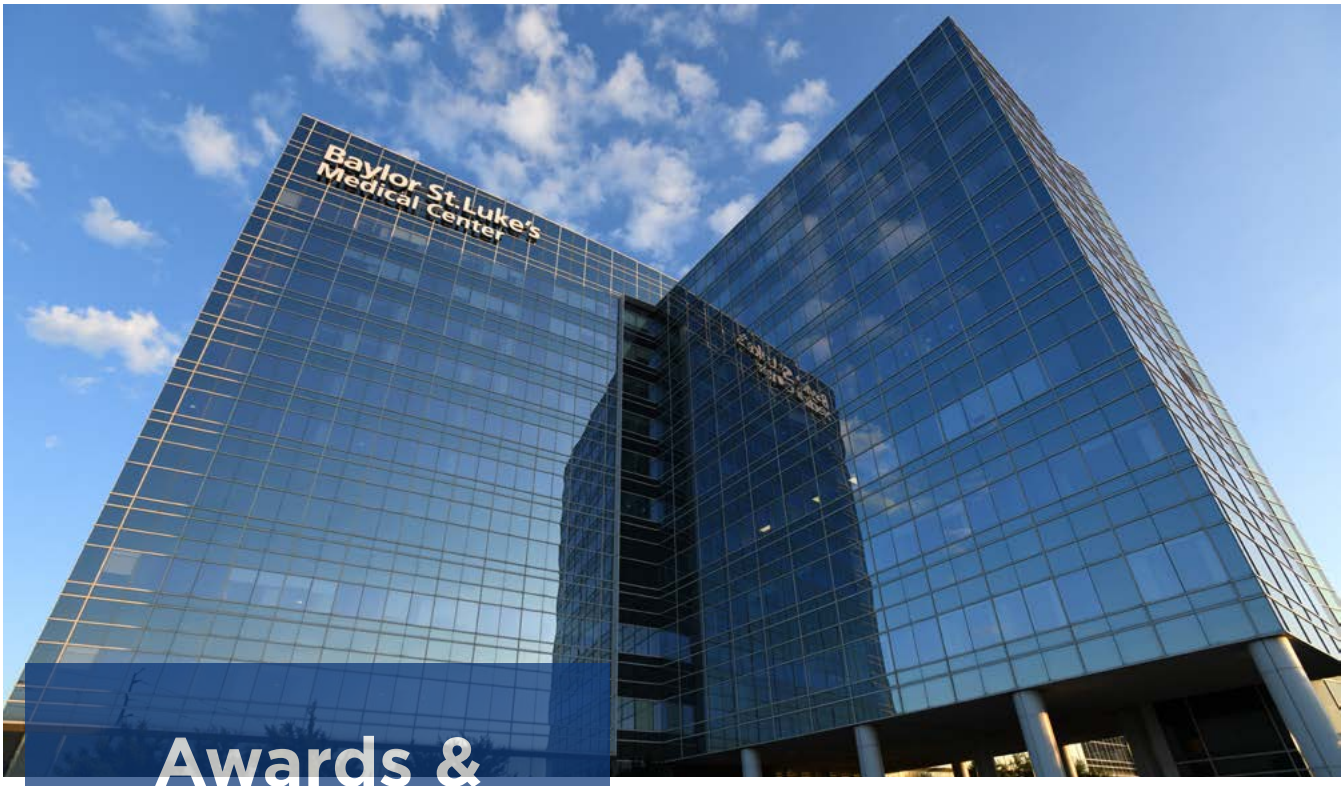
With more than a decade of service to the department, Lona Winnegan, MSN, APRN, NP-C, is a fixture at BCM Neurosurgery. As a nurse practitioner, she values the trust between her and her patients, as well as the empowerment she receives from the NPs, surgeons and administrators she works with on a daily basis.

Citing her experience as both a patient and a nurse practitioner, Lona shares what inspired her to enter the field, the challenges she has overcome, and offers advice for anyone considering a career in medicine. Read the excerpt below, then click **here** for the full story.

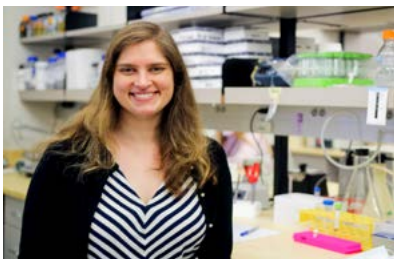
Q What inspired you to pursue a career as a nurse practitioner?

A I have always loved educating patients and empowering them to make decisions that will improve their health. It is so rewarding when you can make an impact on a patient and see changes in behavior that result in improvement in quality of life. The autonomy you have as an NP really allows you to build your own relationships with your patients.

National Doctors' Day is celebrated yearly on March 30. This year, various members of the BCM Neurosurgery team came together to send their greetings to all our doctors and offer words of appreciation. Click here to watch the full video. Doctors also received a sweet treat in celebration of the day.



Awards & Recognitions



Members of BCM Neurosurgery shine across areas of healthcare, education and research

In March, pediatric faculty member, assistant professor **Dr. Samuel McClugage** was recognized as the recipient of the Joe Niero Foundation (JNF) Patient Choice Award. Dr. McClugage will receive his award during the annual JNF Knuckle Ball on April 22.

In February, PGY-5 **Dr. Nisha Giridharan** was named as this year's recipient of the Resident Research Award from the Texas Association of Neurological Surgeons for her NIH R25-funded work on deep brain stimulation for obsessive-compulsive disorder in the lab of Dr. Sameer Sheth.

This spring, assistant professor **Dr. Jamie Anastas** was awarded a grant co-funded by the Rally Foundation and Kids Join the Fight for her research on "Targeting the SAGA Chromatin Regulatory Complex in Diffuse Midline Gliomas."

Neurosurgery News **is a publication of The Department of Neurosurgery at Baylor College of Medicine.**

To submit content for the next newsletter, please email:
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