



Weill Cornell Medicine

Neurological Surgery

News and Updates From Weill Cornell Medicine Neurological Surgery

SUMMER 2024

A MESSAGE FROM THE CHAIR

Philip E. Stieg, PhD, MD

Many people will advise you not to get sick in July—and certainly not to go to an emergency department over the summer. According to that old tale, summer is when freshly minted residents with little or no experience are charged with learning their specialties by practicing on real patients. I can tell you after decades in neurosurgery that this is not the case! As we enter the new academic year, our patients are seen by dedicated young neurosurgeons, most likely in their sixth or seventh year of residency, with the kind of experience that only New York City can provide. I wouldn't wish a trip to the ED on anyone, of course, but I assure you that if fate brings you to us over the summer, you are in good hands.



This month we send our two graduates out into the professional world, more than ready to become independent practitioners. **Dr. Joseph Carnevale** has accepted a position as Assistant Professor in the Department of Neurosurgery at Hackensack Meridian School of Medicine, and he will be practicing as an endovascular and cerebrovascular neurosurgeon at New Jersey Brain and Spine. **Dr. Jacob Goldberg** will be joining Metropolitan Neurosurgery Associates, a private practice with offices in Manhattan, Westchester, and New Jersey. I know their seven years here probably felt very long to them (and I remember that feeling all too well), but it seems like the blink of an eye to me and to the faculty members here who have been working with them all these years. We all wish Joey and Jake the very best, and we have every confidence that they will provide excellent care to their patients.

As we send our graduates out into the world, we welcome our two newest PGY-1's, **Lily McLaughlin, MD**, of Georgetown University School of Medicine and **David Sykes, MD**, of Duke University School of Medicine. They will begin their rotations through the many areas of neurological surgery, learning at the side of senior residents and attendings. These are two highly promising young neurosurgeons-in-training, and I look forward to guiding them toward the amazing careers that are no doubt in store for them. In several years (not this summer!), they may be at your bedside, and you will have every reason to have confidence in them.

In between our graduates and our incoming residents, we have a truly accomplished team of young neurosurgeons who are not only skilled surgeons but also innovative researchers. At our recent graduation dinner, we honored two of them for their research (see page 3), with winning publications chosen from a remarkable roster of creative abstracts and research articles. I am so proud of all of them.

Yours in good health,

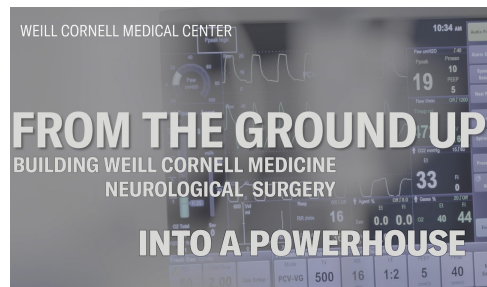
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Weill Cornell Medicine Hosts SNS 2024

We were exceedingly proud to have been selected as the host institution for the 2024 meeting of the Society of Neurological Surgeons (SNS, commonly called "the senior society"). After two years of planning, the meeting came together in May and was a tremendous success. More than 300 top neurosurgeons from across the United States, along with 90 neurosurgery residency program coordinators, gathered to discuss issues in neurosurgical training.

As is traditional, the meeting included a morning session in which the hosts provide a view into their service. **Dr. Philip Stieg**, the founding chair of neurosurgery at Weill Cornell Medicine, reflected on his nearly 24 years spent building a fledgling department into one of the leading neurosurgical services in the world. Equally renowned for its clinical care, research, and education, Weill Cornell Neurological Surgery boasts some of the world's leaders in subspecialties including stroke and other cerebrovascular conditions, brain and spine tumors, pediatric neurosurgery, movement disorders, and complex and minimally invasive spine surgery. It was gratifying indeed to have the opportunity to share our story with colleagues.

Top to bottom: The meeting saw the debut of our new video, which tells the story of how we created a new department and built it into a national leader over the past 25 years (available on YouTube). Keynote speaker John Waldron, COO and President of Goldman Sachs, shared insights into how economic trends will affect healthcare in the coming years. David Rhew, MD, Global Chief Medical Officer and VP of Healthcare at Microsoft, talked about the effects of artificial intelligence in medicine. Dr. Stieg, Dr. Kaplitt, Dr. Souweidane, and Dr. Härtl await their time at the podium, where they provided overviews of the department, its research, pediatric specialty, and comprehensive spine service.



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FACULTY NEWS

Dr. Fu Promoted to Professor

Kai-Ming Fu, MD, PhD, has been promoted to full professor of neurological surgery. Dr. Fu, who is director of spinal trauma and co-director of the Spinal Deformity and Scoliosis Program, is a board-certified neurosurgeon at Och Spine at NewYork-Presbyterian at the Weill Cornell Medicine Center for Comprehensive Spine Care and chief of neurosurgery at NewYork-Presbyterian Lower Manhattan.



AWARDS AND HONORS

Dr. Souweidane Wins Dean's Award for Mentorship

Dr. Mark Souweidane won the 2024 Dean's Award for Excellence in Mentorship at the Weill Cornell Medical College commencement ceremony, held at Carnegie Hall. This prize recognizes a faculty member who demonstrates an outstanding commitment to supporting colleagues to become academic leaders in clinical care, research, or education.



In more than 25 years at Weill Cornell, Dr. Souweidane has served as a mentor to dozens of residents, fellows, medical students, researchers, and academic writers. During his tenure he has inspired no fewer than six former neurosurgery residents at Weill Cornell Medicine to enter pediatric neurosurgery. In choosing Dr. Souweidane for this award, Dean Robert Harrington noted how he had cultivated an appreciation for academic research in trainees, and praised his generosity for the time he has reserved for mentorship despite his own full clinical schedule and academic workload.

25 Faculty Members Named 2024 Super Doctors



A record 25 faculty members from Weill Cornell Medicine Neurological Surgery were named to the 2024 list of New York Super Doctors. The list of outstanding physicians was assembled based on peer nomination, credentials, and achievement; it is an elite roster of physicians deemed the very best in their fields, including not just neurological surgery but also neuroradiology, neuro-endocrinology, and orthopedics, who are all members of our department.

Dr. Fouda Awarded Daedalus Fund Grant

Mohammed A. Fouda, MD, a fellow in the Department of Neurological Surgery, has been awarded a two-year, \$400,000 grant from the Weill Cornell Medicine Daedalus Fund for Innovation. The grant is for the development of a Magnet Actuated Cranial (MAC) Bioresorbable Distraction System for children with syndromic craniosynostosis and craniomaxillofacial (CMF) abnormalities. This new system has the potential to revolutionize care for children, not only in Western nations but also in low- and middle-income countries, where children often go untreated because of the cost of the surgeries and the risk of infection.



Upcoming Professional Courses

AUGUST 16-17, 2024

NYC-MISS 2024 Summer Intensive (Registration Open)

Directed by Roger Härtl, MD, and Ibrahim Hussain, MD

An exciting extension of the NYC-MISS course held every

December, this Summer Master Class will provide

intensive, in-depth training

in tubular spine surgery for

decompression and for CSF leak repair, with advanced training in VR technology. This is a rare opportunity to learn demanding techniques from world leaders in a highly focused environment that offers personal attention and training. Scan code for info and to register. >



OCTOBER 25, 2024

Spine Tumor Seminar

Directed by Michael Virk, MD, PhD; Kai-Ming Fu, MD, PhD;

Galal Elsayed, MD, and Paul Pagnini, MD

Specialists in neurological surgery, neuro-oncology, medical and radiation oncology, neuroradiology, and pain anesthesia will share state-of-the-art treatment paradigms for patients with primary and metastatic spinal tumors. Registration opening soon.

DECEMBER 13-14, 2024

18th Annual Course: NYC-MISS 2024

Directed by Roger Härtl, MD, and Luiz Pimenta, MD, PhD

Spine surgeons travel from around the world to take part in this annual course in leading-edge navigation and minimal-access surgical techniques. Registration opening soon.

Visit neurosurgery.weillcornell.edu/education for information.

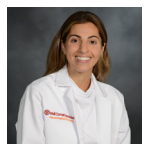
IT'S A NO-BRAINER: EMPLOYEE RECOGNITION AWARD

The Neurosurgery Outstanding Service Award spotlights members of the department who exemplify our core values. The winner for Q2 2024 is **Christopher Padilla**, a research technician/tissue navigator in the Children's Brain Tumor Project lab. Chris joined the team as a new grad, assigned the difficult task of obtaining parents' consent for tumor tissue donation either before a child undergoes surgery or, even more difficult, post-mortem. Chris always manages to have these conversations with gentle compassion. Chris joins the neuropathologist during tissue procurement in order to process the tissue in the lab immediately. These procedures often happen on nights, weekends, or holidays, and he has often turned around and headed back to the city instead of taking a planned weekend getaway. In one particularly sensitive case, he worked with the team over Easter weekend to secure a diener (mortuary staff) and courier in Salt Lake City to be ready to perform a procedure and get the rare tissue to our lab.



Christopher Padilla with Dr. Stieg

This quarter's runner-up is **Alyssa Phelan, RN**, a spine center nurse whose colleagues praise for her "outstanding collegiality," commending her for being hardworking and collaborative. "She never says no to helping out one of her colleagues!"



Visit neurosurgery.weillcornell.org/nominate for more about these and previous winners and to nominate the next one. Congratulations, Chris and Alyssa!



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WCM NEUROLOGICAL SURGERY IN THE NEWS

Dr. Mark Souweidane

has spent much of his career treating children with brain tumors and researching new treatment paradigms for them. Among his many supporters is John Rivera, whose son Cristian lost his life at age 6 to diffuse intrinsic pontine glioma (DIPG). Rivera established the Cristian Rivera Foundation in his son's memory and has worked tirelessly to support research into the deadly tumor. In March, Rivera and Dr. Souweidane appeared on Fox 5's Good Day Street Talk with Antwan Lewis to talk about DIPG, research that is creating hope for families, and the bossy little boy whose life was claimed far too soon. Watch the interview at neurosurgery.weillcornell.org/news.



In May, for stroke awareness month, CBS News New York invited **Dr. Stieg** and his patient Kyle McMorrow to talk about the signs of stroke. McMorrow was just 36 when he suffered a stroke, but thanks to timely treatment he is doing well today. Dr. Stieg stressed the importance of the American Stroke Association's acronym BE FAST to help identify symptoms of stroke and the need for quick response: B (balance suddenly seems off), E (eyes/vision problems), F (face drooping), A (arm weakness), and S (speech difficulties) means T (time to call 911). Watch the interview at neurosurgery.weillcornell.org/patient-stories.



Dr. Michael Kaplitt

made two appearances in the media recently. In a video interview with Neurology Live, he discussed the regulatory barriers that exist for the approval of gene therapies and how recent approvals in other neurological disorders have influenced the pathway for treatments for Parkinson's disease. He also talked about the challenges associated with conducting long-term safety studies for gene therapies compared with conventional drugs. On *The Wall Street Journal's* "The Future of Everything" podcast, he talked about how the latest ultrasound technologies are being used for much more than pregnancy sonograms. They are used to treat essential tremor and the tremor of Parkinson's disease, and are being tested for opening the blood-brain barrier to allow treatment for brain tumors, dementia, even addiction and depression.



In an interview with *Targeted Oncology* for brain cancer awareness month in May, **Dr. Theodore Schwartz** discussed the recent landscape for treatment for malignant gliomas, including emerging therapies, the challenges of targeting brain tumors, and strategies to overcome the blood-brain barrier.



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RESIDENT AND EDUCATOR HONORS

At this year's resident graduation ceremony and dinner, amidst the roasting and toasting of graduates Dr. Joseph Carnevale and Dr. Jacob Goldberg, we also recognized two outstanding residents whose research earned them our top annual awards, along with the faculty member honored by the residents with the annual teaching award.

Dr. Umberto Tosi was awarded the 2024 Michael L. J. Apuzzo Resident Literature Award for Creativity and Innovation. Dr. Tosi's winning paper was "Endoscopic endonasal repair of encephaloceles of the lateral sphenoid sinus: multi-institution confirmation of a new classification," co-authored with **Dr. Theodore H. Schwartz**. The paper was published in the March issue of the *Journal of Neurosurgery*.



Dr. Alexandra Giantini Larsen was awarded the 2024 Christopher Gaposchkin '99 Research Prize in Neurological Surgery. Dr. Larsen was honored for "Non-invasive diagnosis of brain-stem gliomas in pediatric, adolescent, and young adult patients through cerebrospinal fluid cell-free DNA sequencing," based on research she conducted at Memorial Sloan Kettering Cancer Center. The abstract was published in the journal *Neuro-oncology*.



Dr. Kai-Ming Fu was selected by the residents for the 2024 Philip E. Stieg Faculty Teaching Award for Dedication and Excellence in Resident Education. The award, established in 2004, recognizes an educator who has achieved distinction in the training of our residents. In presenting the award, **Dr. Umberto Tosi** praised Dr. Fu as "a master of supervised autonomy and technical teaching."



Dr. Tosi with Dr. Apuzzo; Dr. Greenfield with Dr. Larsen; Dr. Kai-Ming Fu

Dr. McGrath Performs First Endoscopic Spine Surgery in Tanzania

Endoscopic spine surgery pioneer **Dr. Lynn McGrath** spent a week with Dr. Roger Hartl's Tanzania Neurosurgery Project this spring, training local surgeons on the techniques. He led classroom sessions first, followed by hands-on training with high-tech spine models, then took the staff into the OR to perform two surgeries. These were the first-ever endoscopic spine procedures performed in Tanzania and are believed to be the first endoscopic spine procedures performed anywhere in sub-Saharan Africa. As this pilot program develops, patients in Africa will have shorter recovery times, reduced risk of infection or other complications, and faster discharge to home.



FACULTY DIRECTORY

Brain Tumor Surgery

Benign and malignant tumors in adults

Philip E. Stieg, PhD, MD 212-746-4684

Theodore H. Schwartz, MD 212-746-5620

Babacar Cisse, MD, PhD 646-962-3389

Pediatric brain tumors

Mark Souweidane, MD 212-746-2363

Jeffrey Greenfield, MD, PhD 212-746-2363

Caitlin Hoffman, MD 212-746-2363

Cerebrovascular Surgery

Aneurysms, AVMs, carotid occlusive disease

Philip E. Stieg, PhD, MD 212-746-4684

Jared Knopman, MD 212-746-5149

Justin Schwarz, MD 212-746-2821

CSF Leak Repair

Multidisciplinary management of cranial and spinal CSF leaks

John Park, MD, PhD 718-670-1837

Jeffrey Greenfield, MD, PhD 212-746-2363 (pediatric)

Epilepsy Surgery

Curative and palliative surgical approaches to epilepsy

Theodore H. Schwartz, MD 212-746-5620

Caitlin Hoffman, MD 212-746-2363 (pediatric)

Interventional Neuroradiology

Minimally invasive image-guided diagnosis and treatment

Jared Knopman, MD 212-746-5149

Y. Pierre Gobin, MD 212-746-4998

Srikanth Boddu, MS, MRCS, FRCR, MD 212-746-2821

Justin Schwarz, MD 212-746-2821

Neuro-oncology

Comprehensive treatment options for cancers of the brain and spine

Susan Pannullo, MD 212-746-2438

Howard Fine, MD 212-746-2596

Rajiv Magge, MD 646-962-2185

Husain Danish, MD 212-746-6575

Neuropsychology

Testing, psychotherapy, and cognitive remediation

H. Allison Bender, PhD, ABPP 212-746-2197

Amanda Sacks-Zimmerman, PhD, ABPP 212-746-3356

Pediatric Neurosurgery

Treatment of the full spectrum of CNS conditions in children

Mark Souweidane, MD 212-746-2363

Jeffrey Greenfield, MD, PhD 212-746-2363

Caitlin Hoffman, MD 212-746-2363

Neil Feldstein, MD 212-305-1396 (Columbia campus)

Pituitary Tumors/Neuroendocrinology

Endoscopic approaches to anterior skull base surgery

Theodore H. Schwartz, MD 212-746-5620

Babacar Cisse, MD, PhD 646-962-3389

Rohan Ramakrishna, MD 212-746-1996

Jeffrey Greenfield, MD, PhD 212-746-2363 (pediatric)

Georgiana Dobri, MD 646-962-3556 (neuroendocrinology)

Stereotactic/Functional Neurosurgery

Parkinson's disease, essential tremor, and pain

Michael Kaplitt, MD, PhD 212-746-4966

Stereotactic Radiosurgery

Noninvasive treatments for brain tumors and other conditions

Susan Pannullo, MD 212-746-2438

Rohan Ramakrishna, MD 212-746-1996

Babacar Cisse, MD, PhD 646-962-3389

Och Spine at NewYork-Presbyterian/

Weill Cornell Medical Center

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Roger Härtl, MD, Director of Spinal Surgery

Kai-Ming Fu, MD, PhD

Ibrahim Hussain, MD, PhD

Paul Park, MD, MMS

Daniel Riew, MD

Michael Virk, MD, PhD

In addition to our campus on the Upper East Side, we now offer our world-class neurosurgical services in Lower Manhattan, Queens, and Brooklyn. Patients come from around the globe for our experience and skill—and now you can visit us closer to your home.

NewYork-Presbyterian Lower Manhattan

Call for appointment: 646-962-5115

Minimally invasive and complex spine

Kai-Ming Fu, MD, PhD

Chief of Neurosurgery

NewYork-Presbyterian Queens

Call for appointment: 718-670-1837

John Park, MD, PhD, Chief of Neurosurgery

Brain tumors, neuro-oncology

Ning Lin, MD *Cerebrovascular surgery*

Srikanth Boddu, MS, MRCS, FRCR, MD *Interventional neuroradiology*

Caitlin Hoffman, MD *Pediatric neurosurgery* (212-746-2363)

Och Spine at NewYork-Presbyterian Queens

Endoscopic, minimally invasive, and complex spine

Galal Elsayed, MD

NewYork-Presbyterian Brooklyn Methodist

Call for appointment: 718-780-3070

Rohan Ramakrishna, MD, Chief of Neurosurgery

Brain tumors, neuro-oncology, stereotactic radiosurgery

Michael Ayad, MD, PhD *Cerebrovascular surgery*

Justin Schwarz, MD *Cerebrovascular surgery*

Martin Zonenshayn, MD *Movement disorders, peripheral nerve conditions*

Minimally invasive and complex spine

Osama Kashlan, MD, MPH

Paul Park, MD, MMS

Caitlin Hoffman, MD *Pediatric neurosurgery* (212-746-2363)



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