News and Updates From Weill Cornell Medicine Neurological Surgery

Summer 2021

A MESSAGE FROM THE CHAIR Philip E. Stieg, PhD, MD

Once again I find myself counseling patience about the pandemic, as we continue our global dance with the virus. And once again I have a message of hope: The Delta variant may be dominating the news right now, but I am confident that medicine will triumph. As more people



get vaccinated, we pull closer to the end of this painful episode.

In the meantime, we continue to care for our patients, forge ahead on research, and train the next generation of neuroscientists. As this issue shows, we are opening new clinical trials (see right column), expanding our clinical faculty (page 2), and planning a full season of CME events (page 3). We are also implementing a new model of care in our hospital neuro units, with expanded staffing that makes physician assistants available to patients 24/7 to provide specialized medical care and discharge planning to our brain and spine patients (page 3).

We are also happy to announce that we are now recruiting for a newly accredited pediatric neurosurgery fellow (page 2). Our world-class team of pediatric neurosurgeons has spent years training young neurosurgeons in the nuances of treating children, but with this new certification we take our place among the top institutions that train pediatric specialists. We will be recruiting top residents from neurosurgery training programs around the country to spend a fellowship year here, and we expect to turn out the leaders of tomorrow in this exacting subspecialty. With Weill Cornell Medicine and Columbia University having combined our pediatric neurosurgery teams last year into one service under the NYP Kids umbrella, we are a new powerhouse in neurosurgical care for children.

This summer brought us two new faculty members, as Dr. Lynn McGrath and Dr. Justin Schwarz joined our team (page 2). Nothing gives me more joy than watching young neurosurgeons develop their expertise. They bring new energy and a new spirit of innovation to our team, and as they collaborate with our more experienced neurosurgeons, we develop a synergy that's beneficial to patients and to the field overall. We truly are better together.

Please stay safe, and continue taking pandemic precautions. Let's get through this together. Yours in good health, and enjoy the read!

New Trial Opens for Parkinson's Disease

In July, **Dr. Michael Kaplitt** performed an ablation of the pallidothalamic tract (PTT) using high-intensity focused ultrasound as he treated the first patient in a new clinical trial for individuals with Parkinson's disease. The trial, "Evaluation of the Safety and Effectiveness of Bilateral Exablate Ablation of the Pallidothalamic Tract (PTT) for the Treatment of the Motor Complications of Parkinson's Disease (PD)" is designed to deliver highly targeted ultrasound beams to the PTT to improve motor control in patients with Parkinson's disease.

The first patient in the trial was a 62-year-old woman with significant motor complications of Parkinson's disease, which had not responded well to medications. She underwent the treatment on the left side







Top, Dr. Kaplitt adjusts the MRI and FUS array before the procedure; below, Dr. Kaplitt and radiologist Sara Strauss, MD, manage the procedure from the control room

of her brain, greatly improving motor control on the right side (her dominant side), and went home the same day. The patient, whose career in finance as well as her activities of daily living have been greatly affected by her condition, achieved improved motor control and strength on her right side after the treatment. She will be evaluated for treatment on the other side of her brain in six months.

High-intensity focused ultrasound has been used successfully to calm essential tremor for several years. Dr. Kaplitt was one of the leaders of the clinical trial of its effectiveness for ET and performed the first procedure in New York after FDA approval in 2016. The technology is currently being tested for symptoms of Parkinson's disease.

The trial is now recruiting patients. For additional information, contact Dr. Kaplitt at 212-746-4966.

Pediatric Neurosurgery Fellowship Now Accredited

Weill Cornell
Medicine Brain and
Spine Center has
long been proud of
the fellows we've
trained in pediatric neurosurgery.
With the merger
of the Weill Cornell
Medicine and Columbia University
pediatric neurosurgery practices into
one service, our
fellowship training



Dr. Mark Souweidane, Dr. Caitlin Hoffman, Dr. Jeffrey Greenfield, and Dr. Neil Feldstein are the pediatric neurosurgeons of the combined Weill Cornell Medicine and Columbia service of NewYork-Presbyterian

has also stepped up a notch. Effective with the academic year starting in July 2022, our pediatric neurosurgery fellowship is certified by the Accreditation Council for Pediatric Neurosurgery Fellowships (ACPNF). Fellows will be selected through the regular process managed by the Fellowship Match for Neurological Surgery (San Francisco Matching Programs).

The newly accredited pediatric fellowship training program is based at the two main campuses of NewYork-Presbyterian (Weill Cornell Medicine on the Upper East Side and Columbia on the Upper West Side). Fellows will train under the mentorship of the four board-certified pediatric neurosurgeons of the combined pediatric neurosurgery service of these two lvy League institutions.

"We couldn't be prouder that our fellowship will take its place among top accredited training programs, expanding access to pediatric neurosurgical training" says **Dr. Mark Souweidane.** "For years we have sent our bright resident graduates off to train in pediatric neurosurgery at other top institutions. Now we will be accepting top graduates from other residency programs to train here, with a formally accredited fellowship that will provide a comprehensive exposure to clinical pediatric neurosurgery."

The fellowship will offer intensive training on the detailed diagnostic and therapeutic options available for children with neurosurgical conditions. The fellow will spend a year involved in patient care, including outpatient clinic for consultations, pre- and post-operative evaluations, and follow-up care. Inpatient activities include consultations and active involvement in the pre-operative, operative, post-operative, and non-operative management of pediatric neurosurgical patients. Supported by a clinical team of four pediatric neurosurgeons, five advanced practice providers, and neurological surgery residents from both Weill Cornell Medicine and Columbia, the fellow will also have ample time for research.

We are now accepting applications for 2022. For more information, visit **neurosurgery.weill.cornell.edu/education**

KEEPING IN TOUCH

We are committed to ongoing outreach to patients, families, and colleagues. Our efforts provide opportunities to hear from and speak with faculty members on a wide range of topics.

Podcast: This Is Your Brain with Dr. Phil Stieg explores the wonders and mysteries of the brain's workings, from sleep to humor to menopause. Visit **DrPhilStieg.com** or your favorite podcast player to listen and subscribe.



Webinars: We offer Spine Time from the multidisciplinary team at the WCM Center for Comprehensive Spine Care; Virtual Brain from the brain experts at Weill Cornell Medicine; and House Calls from the pediatric neurosurgeons of Weill Cornell Medicine and Columbia University.

Visit weillcornellbrainandspine.org/webinars for more information.

New Faculty

Dr. Lynn McGrath is an award-winning neurosurgeon trained in both traditional open as well as cutting-edge minimally invasive and endoscopic spine surgical techniques. Dr. McGrath is internationally renowned as an innovator working to develop diagnostic tools using artificial intelligence, work for which he was named the Congress



of Neurological Surgeons "Innovator of the Year" in 2019. An acclaimed speaker and educator, Dr. McGrath has given more than 30 invited lectures around the world about advanced minimally invasive spine surgery techniques, neurosurgical applications of machine learning, and cutting-edge diagnostic methods for concussion and traumatic brain injury. He received his BA from Dartmouth College and his MD from the University of Central Florida. He then completed his residency in neurological surgery at the University of Washington, followed by a fellowship in which he trained in minimally invasive and complex spine surgery under **Dr. Roger Härtl** at the Weill Cornell Medicine Center for Comprehensive Spine Care.

Dr. Justin Schwarz is an award-winning neurosurgeon with fellowship training in stroke, AVMs, and other neurovascular conditions. He specializes in advanced, minimally invasive approaches to treating cerebrovascular disorders, using the most innovative new tools and technologies. He has expertise in endovascular embolization, venous stent-



ing, vertebroplasty and kyphoplasty, and other cutting-edge techniques that use only the tiniest of incisions. Dr. Schwarz received his MD from Weill Cornell Medical College after earning his BA *magna cum laude* from Dartmouth College. As a medical student he was elected to the Alpha Omega Alpha honor society; he also earned honors in both service and research. Dr. Schwarz completed his residency in neurosurgery at NewYork-Presbyterian/Weill Cornell Medicine, where he also completed fellowship training in neuroendovascular surgery.

Fall CME Courses

We are back to presenting a full fall season of CME events this year, using a combination of virtual and in-person sessions as conditions allow. Visit neurosurgery.weill.cornell.edu/education for the latest information on all events.

Spine Tumor Seminar 2021 Sept. 30, 2021

Directed by Dr. Susan Pannullo, Dr. Kai-Ming Fu, and Dr. Michael Virk Specialists from Weill Cornell Medicine and NewYork-Presbyterian Hospital and affiliates share state-of-the-art treatment



paradigms for patients with spinal tumors (metastatic as well as primary). The seminar covers surgical and nonsurgical options, including leading-edge minimally invasive approaches. Providers representing neurological surgery, neuro-oncology, medical and radiation oncology, neuroradiology, and pain anesthesia will be presenting their work.

4th ANNUAL WEILL CORNELL PITUITARY SYMPOSIUM Multidisciplinary Care of the Patient with Pituitary **Disease** Oct. 15, 2021

Directed by Dr. Georgiana Dobri and **Dr. Theodore Schwartz**

The pituitary gland plays an enormously important role in human development, functioning, and aging. Pituitary disorders can have a profound impact on multiple organ systems, but many practitioners may not be fully aware of the widespread impact of the pituitary gland in health and disease. This course is a comprehensive overview and discussion of the evaluation; management; and medical, surgical, and radiation treatments of pituitary disease.

GLOBAL HEALTH IN NEUROSURGERY 2021 Development of Global Neurosurgery Fellowship Models of the Future Nov. 19, 2021

Directed by Dr. Caitlin Hoffman, Dr. Roger Härtl, and Dr. Gail Rosseau This unique consortium of international leaders in global neurosurgery programs will convene to review and evaluate fellowship positions around the world. The meeting will produce a consensus statement on the requirements of successful, productive fellowships.

NYC-MISS 2021

Minimally Invasive Spinal Surgery and Navigation Hands-On Symposium Dec. 9-11, 2021

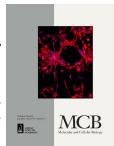
Directed by Dr. Roger Härtl

This must-attend course for spine surgeons provides a comprehensive overview of the latest in minimally invasive techniques (with and without stereotactic navigation) for the operative treatment of spinal disorders. This annual course will include surgical demos or hands-on lab components, as conditions allow.



Cover Story From Dahmane Lab

A new paper from Dr. Nadia Dahmane and her team is featured on the July 2021 cover of Molecular and Cellular Biology. The paper, "RP58 Represses Transcriptional Programs Linked to Nonneuronal Cell Identity and Glioblastoma Subtypes in Developing Neurons," explores the role of the transcription factor known as RP58 in managing the differentiation of neural cells. The paper shows for the first time that RP58 acts as



"master guardian" of the neuronal identity transcriptome, and that its function may be required to prevent the development of brain disease, including glioma progression.

PAs Provide Service-Based Expertise

e are excited to be implementing a service-based model of care for neurosurgical patients, with care provided by an expanding team of certified physician assistants. The PAs, like the residents and fellows with whom they collaborate, specialize in cranial, spine, or pediatric neurosurgery. This new 24/7

model, to be implemented by year end, will allow us to provide rapid response to patient care needs, with defined operative and non-operative roles. This new PA model will provide enhanced consistency and competency while providing an exceptional patient experience days, nights, and weekends.

"This is an exciting development of the inpatient care model," says Suzan Wollard, chief PA for the neuro unit. "Senior PA Beth Higgins will lead a team Bottom: Beth Higgins and of cranial surgery providers, senior PA Allison Basham will head the team of



Top: Suzan Wollard and **Allison Basham** Synda Schultz

spine surgery providers, and senior PA Synda Schultz will head the team on pediatric neurosurgery. This follows the model of the surgeons themselves and allows PAs to provide expert care in a professional, responsive manner, day or night. We expect this to improve the patient experience."

Neurosurgeons Honor Their Mentor

A new Philip E. Stieg "Honor Your Mentor" Fund from the Neurosurgery Research and Education Foundation (NREF) will help fund a a skull base research fellowship



in Neurological Surgery. NREF is the philanthropic arm of the American Association of Neurosurgeons (AANS); its HYM funds are supported by neurosurgeons as a way to recognize those who provided mentorship. The Philip E. Stieg HYM Fund was initiated by Dr. Susan Pannullo and supported by many of the faculty members and former residents and fellows who have been mentored by Dr. Stieg over his distinguished career. Visit **nref.org** for more information.

RESIDENCY COORDINATOR GOES THE EXTRA MILE

The Neurosurgery Outstanding Service Award spotlights members of the department who go above and beyond their assigned duties. and who exemplify the core values of the

department.

The most recent winner is resident coordinator Neria Douglass. From the 2020 Match Day and onboarding new residents and managing virtual graduation details last summer, through recruiting candidates for interviews and managing them through the interview and match process for 2021, culminating in Match Day 2021 and an in-person graduation in June, Neria handled all the details smoothly and professionally. She never missed a beat, even as her husband's job required a move out of state during her pregnancy with their second child.





"Neria simply has been invaluable," says Dr. Jeffrey Greenfield, Vice Chair for Academic Affairs and associate director of the residency program. "She has become a part of our residency fabric, sharing in our milestones, and preparing for the future. I can't think of anyone more worthy of this recognition!"

HIP HOP FOR HOPE Freestyle Love Supreme Academy Supports Children's Brain Tumor Project

Friday, September 24, 7 PM
New York Athletic Club (180 Central Park South)

The "No Laughing Matter" comedy fundraiser is back! Hosted by families affected by pediatric brain tumors, this hilarious annual event supports the important research of Dr. Jeffrey Greenfield and Dr. Mark Souweidane at the Children's Brain Tumor Project. This year, Freestyle Love Supreme (the hip-hop improv troupe founded by Lin-Manuel Miranda, Thomas Kail, and Anthony Veneziale) will perform at "Hip Hop for Hope" to support the



Weill Cornell Medicine Children's Brain Tumor Project. Audience participation is encouraged for an interactive experience, and all ages are welcome.

INFORMATION AND TICKETS AT HIPHOPFORHOPE.ORG

NewYork-Presbyterian Weill Cornell Medicine

Brain Tumor Surgery

Benign and malignant tumors in adults and children

Dr. Philip E. Stieg 212-746-4684
Dr. Theodore H. Schwartz 212-746-5620
Dr. Babacar Cisse 646-962-3389
Dr. Mark Souweidane 212-746-2363 (pediatric)
Dr. Jeffrey Greenfield 212-746-2363 (pediatric)
Dr. Caitlin Hoffman 212-746-2363 (pediatric)

Cerebrovascular Surgery

Aneurysms, AVMs, carotid occlusive disease

Dr. Philip E. Stieg 212-746-4684 Dr. Jared Knopman 212-746-5149 Dr. Justin Schwarz 212-746-2821

Stereotactic and Functional Neurosurgery

Parkinson's disease, essential tremor, and pain

Dr. Michael Kaplitt 212-746-4966

Epilepsy Surgery

Curative and palliative surgical approaches to epilepsy

Dr. Theodore H. Schwartz 212-746-5620 Dr. Caitlin Hoffman 212-746-2363 (pediatric)

Interventional Neuroradiology

Minimally invasive image-guided diagnosis and treatment

Dr. Y. Pierre Gobin 212-746-4998 Dr. Srikanth Boddu 212-746-2821 Dr. Jared Knopman 212-746-5149 Dr. Justin Schwarz 212-746-2821

Neuro-oncology

Comprehensive treatment options for cancers of the brain and spine

Dr. Howard Fine 212-746-2596 Dr. Susan Pannullo 212-746-2438 Dr. Rajiv Magge 646-962-2185 Dr. Evan Noch 646-962-2185

Neuropsychology

Testing, imaging, psychotherapy, and cognitive remediation

Heidi Bender, PhD 212-746-2197 Amanda Sacks-Zimmerman, PhD 212-746-3356 Jessica Spat-Lemus, PhD 646-962-3336 (pediatric)

Pediatric Neurosurgery

Treatment of the full spectrum of CNS conditions in children

Dr. Mark Souweidane 212-746-2363 Dr. Jeffrey Greenfield 212-746-2363 Dr. Caitlin Hoffman 212-746-2363 Dr. Neil Feldstein 212-305-1396 (Columbia campus)

Pituitary Tumors/Neuroendocrinology

Endoscopic approaches to anterior skull base surgery

Dr. Theodore H. Schwartz 212-746-5620 Dr. Babacar Cisse 646-962-3389 Dr. Jeffrey Greenfield 212-746-2363 (pediatric) Dr. Georgiana Dobri 646-962-3556 (neuroendocrinology)

Spinal Surgery

Comprehensive care for spine conditions and injuries

Dr. Roger Härtl 212-746-2152
Dr. Roger Härtl 212-746-2152
Dr. Eric Elowitz 212-746-2870
Dr. Kai-Ming Fu 212-746-2260
Dr. Daniel Riew 212-746-1164
Dr. Michael Virk 646-962-3388

Stereotactic Radiosurgery

Noninvasive treatments for brain tumors and other conditions

Dr. Susan Pannullo 212-746-2438 Dr. Babacar Cisse 646-962-3389

New York-Presbyterian Lower Manhattan

646-962-5115

Minimally invasive and complex spine Dr. Kai-Ming Fu, Chief of Neurosurgery Dr. Michael Virk

NewYork-Presbyterian Queens

718-670-1837

Dr. John Park, Chief of Neurosurgery Brain tumors, neuro-oncology, spine surgery Dr. Ning Lin, cerebrovascular surgery Dr. Srikanth Boddu, interventional neuroradiology Dr. Rupa Gopalan Juthani, brain and spine tumors Dr. Lynn McGrath, spine surgery Dr. Caitlin Hoffman (pediatric) 212-746-2363

NewYork-Presbyterian Brooklyn Methodist

718-780-3070

Dr. Rohan Ramakrishna, Chief of Neurosurgery Brain tumors, neuro-oncology, stereotactic neurosurgery Dr. Martin Zonenshayn, movement disorders and peripheral nerve conditions Dr. Michael Ayad, cerebrovascular surgery Dr. Louis Chang, minimally invasive and complex spine Dr. Justin Schwarz, cerebrovascular surgery Dr. Caitlin Hoffman (pediatric) 212-746-2363



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