



A MESSAGE FROM THE CHAIR

Philip E. Stieg, PhD, MD

These are exciting times at the Brain and Spine Center, and I am happy to share a full issue's worth of new and noteworthy developments with you. This fall we are looking forward to bringing our new Gamma Knife online, after a dramatic delivery that closed down our 68th Street entrance for full day (see story at right). Postponed by the pandemic, the long-awaited installation is now in progress, and we will be treating patients in a few more weeks. The precision and comfort this latest generation of Gamma Knife offers is unparalleled, and it makes advanced options available to patients all across the metropolitan region.



I'm also delighted to announce that we continue to grow, with two new spine surgeons joining us (see page 2) and new clinical locations throughout the region for convenient office visits no matter where you live (see page 3). For a full list of our locations in Manhattan, Brooklyn, Queens, Westchester, and Nassau, visit our revamped web site at weillcornellbrainandspine.org/locations (the site is filled with useful information, inspiring patient stories, and printable resources, so take a look around while you're there).

As I write this we are entering residency interview season. This annual ritual, when we think about which young doctors will train here for the next seven years, offers a good opportunity to reflect on the outstanding quality of our current and former residents. Of all the things I have taken pride in over my past two decades here—and there are many—I would rank our residency program near the top of the list. We continue to attract some of the top medical school graduates to our program, and we turn out some of the nation's leading neurosurgeons after their training here. Our residency graduates are on the faculty of top academic medical centers from coast to coast, where they are now training residents themselves. I could not be more optimistic about the future of neurosurgery than I am when I look at the "alumni wall of fame" in our offices.



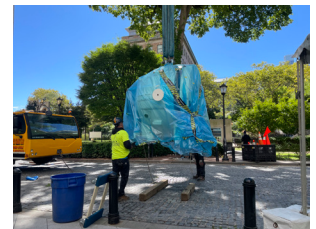
Read on for more about our expanding stereotactic radiosurgery program, our award-winning residents and fellows, and some exciting new CME courses (hands-on again, finally).

Yours in good health,

A NEW ERA IN BRAIN CARE

NYP/WCM doubles its advanced radiosurgery options with the arrival of state-of-the-art Gamma Knife Icon

In a major step forward for stereotactic radiosurgery in New York, NewYork-Presbyterian/Weill Cornell Medical Center will soon debut a state-of-the-art Gamma Knife® Icon™ that was recently delivered to the Upper East Side campus. When the Gamma Knife goes online later this fall, it will allow the neurosurgery and radiation oncology teams at Weill Cornell Medicine to offer the latest, most precise technology available to patients with brain tumors and other lesions in the shortest amount of time.



The Gamma Knife Icon will be the latest addition to what is already one of the most robust stereotactic radiosurgery (SRS) programs in the Northeast. NewYork-Presbyterian provides spine-specific radiosurgery with the ViewRay® system at its world-class David H. Koch Center on York Avenue as well as radiosurgery for larger brain lesions with the Novalis® configuration in the Stitch Radiation Oncology Center on 70th Street. There are also Gamma Knife and Ethos installations at the Columbia campus.



A towering rig lifted the 20-ton Gamma Knife off a flatbed and maneuvered it into position.

"The Gamma Knife is a crown jewel for us here at Weill Cornell," says **Dr. Philip E. Stieg**, chair of neurological surgery and neurosurgeon-in-chief of NewYork-Presbyterian/Weill Cornell Medical Center. "Having this advanced new tool will allow us to design a personal treatment plan for each patient—each SRS technology has particular benefits for different types of lesions, and access to the Gamma Knife allows us to treat patients using the absolute best machine based on their conditions."

"For patients with metastatic brain tumors and for some primary brain tumors, the Gamma Knife remains an indispensable tool," says **Dr. Silvia Formenti**, chair of radiation oncology at NewYork-Presbyterian/Weill Cornell Medical Center. "Adding the Gamma Knife Icon to our suite of world-

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Residency and Fellowship News

Dr. Bander Awarded CNS James Rutka Pediatric Brain Tumor Award

Seventh-year resident **Evan Bander, MD**, was named winner of the prestigious James Rutka Pediatric Brain Tumor Award by the AANS/CNS Section on Tumors for his abstract “A Positive Impact on Patterns of Relapse in Diffuse Intrinsic Pontine Glioma after Convection-Enhanced Delivery of Omburtamab.”



Dr. Bander (right) in the OR with Dr. Souweidane

The winning abstract, based on a study Dr. Bander conducted with **Dr. Mark Souweidane**, evaluates the outcomes of DIPG patients treated with convection-enhanced delivery (CED) in Dr. Souweidane’s clinical trial. The study looked at 63 children with DIPG treated between 2010 and 2022, all of whom received conventional external beam radiation (EBRT); 31 received CED of radiolabeled 124-Iodine-Omburtamab following radiation.

Although the study showed only a trend in improved overall survival, CED treatment was associated with a statistically significant decrease in local progression rates relative to the control group. That prompts consideration for modifying the design of future trials with serial treatments for a wider treatment field or with craniospinal irradiation.

Dr. Bander delivered his abstract at the 2022 CNS annual meeting in San Francisco.

Award-Winning Study Shows Endoscopic Treatment Works, Cost-Effectively, for Sciatica

Spine research fellow **Pravesh Gadjradj, MD, PhD, MSc**, recently published two papers showing that endoscopic treatment for sciatica caused by disc herniation is just as effective as open microdiscectomy, at a lower total cost. The papers, which Dr. Gadjradj co-authored with his colleagues in the Netherlands, report on the results of a clinical trial of more than 600 patients with sciatica treated at four different hospitals in that country over the course of a year. Half of them had percutaneous transforaminal endoscopic discectomy (PTED) and the other half underwent open microdiscectomy. Results indicated that endoscopic surgery is as effective as microdiscectomy at relieving symptoms of sciatica, with lower overall costs.



The first paper, “Full Endoscopic Versus Open Discectomy for Sciatica: Randomised Controlled Non-Inferiority Trial,” was published in the *British Medical Journal*. The second, “Cost-Effectiveness of Full Endoscopic Versus Open Discectomy for Sciatica,” was published in the *British Journal of Sports Medicine*.

The research was given a Charlie Kuntz Scholar Award and the Sanford Larson Award for Best Research at the annual meeting of the AANS in 2022.

Two New Spine Surgeons Join the Neurosurgery Faculty

We are delighted to welcome Dr. Ibrahim Hussain and Dr. Paul Park, two extremely talented spine surgeons who bring remarkable experience and skill to our patients.

Ibrahim Hussain, MD, is an accomplished neurosurgeon with advanced fellowship training in endoscopic, minimally invasive, and complex reconstructive spine surgery. Dr. Hussain earned his MD from Rutgers-New Jersey Medical School, where he was one of the top medical students in his graduating class. He completed his residency in neurological surgery at the combined program at NewYork-Presbyterian/Weill Cornell Medical Center and Memorial Sloan Kettering Cancer Center, followed by a minimally invasive and complex spine fellowship at the University of Miami and Jackson Memorial Hospital in Miami, Florida.



“Dr. Hussain was an outstanding resident here, and I could not be happier to have him join the faculty,” says Dr. Roger Härtl, the Hansen-MacDonald Professor of Neurological Surgery and director of spine neurosurgery at the Weill Cornell Medicine Brain and Spine Center as well as the co-director of Och Spine at NewYork-Presbyterian. “He offers tremendous clinical skills and surgical expertise to our patients, and he is also remarkably compassionate and understanding of their lives and their needs.”

Paul Park, MD, MMS, is an accomplished orthopedic surgeon with fellowship training in adult and pediatric spine surgery. Dr. Park earned his Master’s Degree of Medical Science (MMS) in immunology at Yonsei University School of Medicine in Seoul, South Korea, then went on to earn his MD from Case Western Reserve University School of Medicine, where he was among the top in his class. He completed his residency in orthopedic surgery at NewYork-Presbyterian/Columbia University Irving Medical Center, then stayed on to train with his mentors at the Och Spine Hospital of NewYork-Presbyterian/Columbia University Irving Medical Center, where he completed the Adult and Pediatric Comprehensive Spine Fellowship.



“Dr. Park was an exceptional resident and fellow, and he is an excellent addition to our team,” says Dr. K. Daniel Riew, director of orthopedic spine surgery at the Weill Cornell Medicine Center for Comprehensive Spine Care. “We are committed to providing our patients with a full spectrum of surgical approaches and techniques to improve their experience and outcomes. Expanding and enriching our spine faculty with another orthopedic spine specialist is a tremendous plus for our patients.”

Dr. Hussain and Dr. Park will both provide care at our Center for Comprehensive Spine Care on the Upper East Side as well as at NewYork-Presbyterian Brooklyn Methodist.

A NEW ERA IN BRAIN CARE

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class approaches allows us to further integrate neurosurgery, neuro-oncology, and radiation oncology to provide the most precise and individualized treatment for each patient." Dr. Formenti is professor and chair of radiation oncology, professor of medicine, and the Sandra and Edward Meyer Professor of Cancer Research. She is also associate director for translational research of the Meyer Cancer Center at Weill Cornell Medicine.

"For lesions under three centimeters, the Gamma Knife is unparalleled in its ability to achieve excellent results," says **Dr. Michael L.J. Apuzzo**, a pioneer of stereotactic neurosurgery and now on the faculty of Weill Cornell Medicine as a mentor and advisor.



An access hatch was opened to allow the machine to be lowered into the sub-basement, then maneuvered to its destination in the Stitch Radiation Oncology Center.

"We are looking forward to adding this great technology to our already strong brain and spine radiosurgery program," comments **Dr. Susan C. Pannullo**, director of neurosurgical radiosurgery for New York-Presbyterian Weill Cornell Medicine. Dr. Pannullo is one of the few neurosurgeons in the country with a surgical practice focused solely on stereotactic radiosurgery.

The latest Gamma Knife technology allows non-invasive, frameless radiation treatment of brain tumors, arteriovenous malformations (AVMs), and other lesions. Earlier models required a metal frame to hold the patient's head motionless during treatment, but the Icon uses a simple mesh mask. The Icon also enables neurosurgeons and radiation oncologists to target multiple areas of the brain simultaneously. For patients with small, difficult-to-reach lesions, the Gamma Knife Icon is well suited for fast, accurate, and painless treatment, typically without an overnight stay and virtually no recovery time.

The Gamma Knife was delivered in late September and is expected to be available for treatment later in the fall.

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Wherever You Are, We're There for You

The state-of-the-art facilities at New York-Presbyterian/Weill Cornell Medical Center's campus at 525 East 68th Street attract patients from around the world—but as we New Yorkers know too well, it's not always easy to get there from here if "here" is a borough or neighboring suburb. That's why we've spent the last several years developing a regional approach to neurosurgical care, building world-class Brain and Spine Centers in Brooklyn and Queens and adding clinical offices from Long Island City to Scarsdale. We want to make it easy for you to get the same world-class care, from the same Ivy League faculty, no matter where you live.

Brooklyn

At New York-Presbyterian Brooklyn Methodist, an expert team treats the full roster of brain and spine conditions, with specialists in tumors, cerebrovascular conditions, spinal disorders, trauma, stroke, and more. The hospital is located in beautiful and historic Park Slope, with the brand-new, state-of-the-art Center for Community Health across the street. Office visits are available in Sunset Park, on Kings Highway, or near Barclays Center downtown for maximum convenience.



Queens

Getting around New York's largest borough can be taxing, which is why we have seven locations for office visits. In addition to our hospital on Main Street, we offer appointments in Fresh Meadows, Jackson Heights, Long Island City, and downtown Flushing, just for starters. Specialty centers for spine, pediatric, and brain conditions get patients the services they need, where they need them.

Westchester and Nassau

Dr. Jeffrey Greenfield sees patients in an office in Scarsdale, allowing convenient consults for Westchester residents. Dr. Mark Souweidane now sees patients in New Hyde Park, sparing Long Island residents a trip to the Upper East Side for visits and evaluations. For addresses, phone numbers, and more information, visit weillcornellbrainandspine.org/locations

Upcoming CME Courses

We are delighted to be hosting live CME courses again in addition to ongoing streaming events that will maintain our global reach. Visit neurosurgery.weill.cornell.edu/education for information.

DEC. 15-17, 2022

NYC-MISS 2022: 16th New York City Minimally Invasive Spine Surgery Symposium

Directed by Dr. Roger Härtl and Dr. Luiz Pimenta

Our biggest course of the year: A comprehensive overview of less invasive techniques for the operative treatment of spinal disorders.

Proponents and critics of MIS surgery will discuss the pros and cons of MIS approaches, establishing the skills for selecting appropriate patients for MIS surgery. Visit nycmiss.com



Coming in 2023

Endoscopic and Open Surgical Approaches for Craniosynostosis

Directed by Dr. Caitlin Hoffman and Dr. Thomas Imahiyerobo

Back in the lab for hands-on training:

This innovative course uses unique 3D-printed models of actual patient pathologies for both open and endoscopic procedures. New this year: Special training in Virtual Surgical Planning, which improves accuracy and reduces surgical time. Course date to be determined. Sign up to be notified when registration opens: neurosurgery.weill.cornell.edu/education



IT'S A NO-BRAINER: EMPLOYEE RECOGNITION AWARDS

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 winners for Q2 and Q3 are **Sandra Soeknandan** and Daysi Fernandez.

Sandra Soeknandan is administrative specialist to **Dr. Michael G. Kaplitt** and **Dr. Babacar Cisse**. In addition, Sandra works as the in-office support for the residency program and manages Grand Rounds for **Dr. Ibrahim Hussain**. Sandra's co-workers find her to be helpful and hardworking, exemplifying the



Sandra Soeknandan

department's core values of collegiality, perseverance, and integrity. Nominators call Sandra "unfailingly pleasant to work with, even under high-stress conditions."



Daysi Fernandez

Daysi Fernandez is practice manager at our 1305 York Avenue office, where she not only assists patients but also works to ensure smooth daily operations. Under Daysi's direction, staff and patients are treated with collegiality and respect. Colleagues describe her as "a team player" and "a great addition to the team," with "an unrelenting work ethic, professionalism, and empathy."

Congratulations to Sandra and Daysi!

NEWYORK-PRESBYTERIAN WEILL CORNELL MEDICINE

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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. Jared Knopman 212-746-5149
 Dr. Y. Pierre Gobin 212-746-4998
 Dr. Srikanth Boddu 212-746-2821
 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, psychotherapy, and cognitive remediation

Heidi Bender, PhD 212-746-2197
 Amanda Sacks-Zimmerman, PhD 212-746-3356

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)

CSF Leak Repair

Multidisciplinary management of cranial and spinal CSF leaks

Dr. John Park 718-670-1837

Stereotactic Radiosurgery

Noninvasive treatments for brain tumors and other conditions

Dr. Susan Pannullo 212-746-2438
 Dr. Rohan Ramakrishna 718-780-3070
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 Dr. Daniel Riew
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NEWYORK-PRESBYTERIAN LOWER MANHATTAN

646-962-5115

Minimally invasive and complex spine
 Dr. Kai-Ming Fu, Chief of Neurosurgery
 Dr. Ibrahim Hussain

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. 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, peripheral nerve conditions
 Dr. Michael Ayad, cerebrovascular surgery
 Dr. Ibrahim Hussain, minimally invasive and complex spine
 Dr. Paul Park, minimally invasive and complex spine
 Dr. Justin Schwarz, cerebrovascular surgery
 Dr. Caitlin Hoffman (pediatric) 212-746-2363



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