News and Updates From Weill Cornell Medicine Neurological Surgery

FALL 2023

A MESSAGE FROM THE CHAIR

Philip E. Stieg, PhD, MD

hese have been very difficult weeks and months for so many around the world, and my heart truly breaks when I watch the news or read the headlines. There's a reason why "may you live in interesting times" is considered a curse. It has certainly been no blessing to live through it, and I know so many people are feeling everything from grief and pain to anger and confusion. I encourage everyone on my team, and elsewhere in the college, to take advantage of the many resources available to help process the overwhelming emotions that come with these troubled times.



As we make our way through these waning days of 2023, I know it can be difficult to find sparks of joy, but I remain committed to finding them. Some of them are in this newsletter, with reports of our successful efforts in Salzburg (see opposite column), the amazing outcomes we've had with focused ultrasound for tremor (see page 3), and our high-tech new Och Spine unit on the second floor of the hospital. We've added an amazing new spine surgeon (see page 2) and continue to host innovative professional development courses (also on page 2). Most importantly, our patient quality metrics are above industry benchmarks.

Looking ahead, I am delighted to announce that we will be hosting the 2024 annual meeting of the Society of Neurological Surgeons (SNS), one of the most important gatherings of neurosurgeons each year. **Dr. Michael Kaplitt** and **Dr. Jeffrey Greenfield** are taking the lead on that important meeting. Later in 2024 NewYork-Presbyterian will be co-hosting the annual meeting of the American Association of Neurological Surgeons/Congress of Neurological Surgeons Joint Section on Pediatric Neurological Surgery. **Drs. Mark Souweidane** and **Neil Feldstein** are leading that effort, along with colleagues from NYU Langone and Mount Sinai.

Our patient caseload continues to grow, and our award-winning faculty grows with it (see page 2). To ensure that we maintain our highest standards of care, **Dr. Ibrahim Hussain** will take on the role of Quality and Safety Czar, overseeing all our practice in a role originated by **Dr. Eric Elowitz** and held most recently by **Dr. Robert Snow.**

Our research faculty continue to win grant awards to pursue their investigations, and we are always amazed and gratified by the support we receive for the Children's Brain Tumor Project. That important research lab, which focuses 100% of its time on the seriously underfunded field of pediatric brain tumors, recently raised \$1 million at its annual No Laughing Matter comedy night. We are grateful for the families, friends, and communities affected by a child's brain tumor, who support this critical work (see page 3).

Yours in good health,



Weill Cornell Surgeons Share Brain and Spine Expertise Around the Globe

The Open Medical Institute seminars in Salzburg provide a forum for extending neurosurgical and orthopedic knowledge to international students

The 30-year-old initiative known as the Open Medical Institute (OMI) recently held its annual neurosurgery courses in Salzburg, Austria, led and instructed by many top names from the Weill Cornell Medicine neurological and orthopedic surgery faculty. The courses consisted of two weeklong seminars, the first focused on the brain and the second on the spine, instructing dozens of international fellows in advanced diagnostics and treatments.

The brain course, the OMI's tenth, was directed by **Dr. Jared Knopman**, Director of Cerebrovascular Surgery and Interventional Neuroradiology here at Weill Cornell Medicine, and co-directed by internationally renowned spine surgeon **Claudius Thomé**, **MD**, Professor, Director, and Chairman of the Department of Neurosurgery at the Medical University of Innsbruck. Other Weill Cornell Medicine faculty included Professor and Chairman **Philip E. Stieg**, **PhD**, **MD**, and **Antonio Bernardo**, **MD**, director of our neurosurgical training lab.



The faculty of the 2023 Open Medical Institute brain surgery course

"We are deeply committed to these courses," says Dr. Stieg. "Our surgeons recognize what a privilege it is to be invited here to train these young fellows from around the world. This week gives us the opportunity to spread our expertise around the globe, quite literally, as the fellows return to their home countries with their newfound skills and knowledge."

The brain course led 34 fellows from 29 countries through a wide variety of neurosurgical topics, including not only diagnosing and managing brain tumors, trauma, and functional and cerebrovascular conditions, but also a workshop in how to present cases. Presenting their own cases to the expert faculty provided fellows with the opportunity to get feedback and advice from highly experienced neurosurgeons, who provided guidance on diagnostics, surgical techniques, and case management.

"We are committed to training our international students in the very latest learnings in all areas of neurosurgical brain conditions," says Dr.

Continued on page 3

FACULTY NEWS

Dr. Elsaved Joins the Faculty

Neurosurgeon Galal Elsayed, MD, has joined the faculty of the Weill Cornell Medicine Brain and Spine Center, and will see patients at Och Spine at NewYork-Presbyterian Queens. Dr. Elsayed is an award-winning neurosurgeon with advanced fellowship training in endoscopic, minimally invasive, and complex reconstructive spine surgery, with specialty training in the use of augmented reality and robotics. He will see patients primarily at clinical offices in Long Island City, Queens, and perform surgery at NewYork-Presbyterian Queens.



Dr. Galal Elsayed

Dr. Härtl Named to American Academy of Neurological Surgery

Roger Härtl, MD, was officially welcomed as a member of the American Academy of Neurological Surgery at the organization's 2023 meeting. The Academy, an elite group of top North American neurosurgeons, was organized to promote, sponsor, and mentor laboratory, translational, and clinical research in the neurological sciences. Dr. Härtl joins several other Weill Cornell Medicine neurosurgeons in this prestigious organization.



Dr. Roger Härtl

Upcoming Professional Courses

NOVEMBER 10, 2023

6th Annual Pituitary Symposium

Directed by Georgiana Dobri, MD, and Theodore Schwartz, MD

A comprehensive CME overview and discussion of the evaluation; management; and medical, surgical, and radiation treatments of the pituitary tumor.





DECEMBER 15-16, 2023

17th New York City MIS, Endoscopy, Robotics, 3D Navigation, and Augmented Reality Spine Symposium, **Case-Based and Hands-On**

Directed by Roger Härtl, MD, and Dr. Luiz Pimenta, MD, PhD NYC-MISS brings together national and international practicing neurosurgeons and orthopedic spine surgeons, fellows, and residents to explore minimally invasive spinal surgery techniques and navigation.

SAVE THE DATES

MAY 11, 2024

The Interplay of Muscle and the Neuraxis in Spine Pain: Mechanisms, Treatment, Recovery, Prevention

Directed by Neel Mehta, MD, Roger Härtl, MD, and Norman Marcus, MD

JUNE 7-8, 2024

Transorbital, Supraorbital, and Endoscopic Endonasal **Surgical Approaches: A Hands-on Dissection Course** Directed by Theodore Schwartz, MD

Visit neurosurgery.weill.cornell.edu/education for information.

Dedicated Och Spine Unit Opens at NewYork-Presbyterian/Weill Cornell Medical Center

A new world-class hospital unit dedicated to spine patients has opened on the second floor of NewYork-Presbyterian/Weill Cornell Medical Center, thanks to the generosity of the Jane and Daniel Och Family Foundation. The new unit features all single-occupancy rooms, where patients will be cared for by spine specialists that include physician assistants and physical therapists in addition to bedside nurses.

Och Spine at NewYork-Presbyterian is an innovative multicampus initiative that provides patients with spine specialists who provide a full spectrum of care, from pain management to rehabilitation medicine to the very latest in minimally invasive surgery by internationally renowned neurosurgeons and orthopedic surgeons. For patients who require hospitalization, the new spine unit offers advanced technology and personalized care to make the experience as comfortable as possible.



Daniel Och cuts the ribbon opening the new Och Spine unit on 2N at NewYork-Presbyterian/Weill Cornell Medical Center

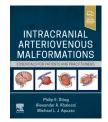
The neurosurgeons and orthopedic spine surgeons on the Weill Cornell Medicine faculty use the most technologically sophisticated instruments and software to provide a full spectrum of surgical solutions for back pain. Our team recommends surgery only as a last resort after conservative measures have not been effective, and will always opt for the least invasive approach possible. Our experts have been leading the field in the development of minimally invasive, ultra-minimally invasive, and complex surgical techniques for the treatment of scoliosis, spinal tumors, degenerative spine disorders, and spinal trauma.

The Och Spine unit officially opened its doors on August 8, 2023, with a ribbon-cutting ceremony that thanked the Ochs for their generosity.

NOW AVAILABLE

Intracranial Arteriovenous Malformations **Essentials for Patients and Practitioners**

Addressing both the patient's perspective and the neurosurgeon's concerns, Intracranial Arteriovenous Malformations: Essentials for Patients and Practitioners, edited by Drs. Philip E. Stieg, Alexander A. Khalessi, and Michael L. J. Apuzzo, starts with an up-to-date approach to the matter of doctor-patient communication and moves on to the highly technical details of iAVM treatment options.



This book was published in September and is now available for order on the Elsevier site. See neurosurgery.weill.cornell.edu for more information and the link to order.

FOCUSED ULTRASOUND

Our First Focused Ultrasound Patient Comes Back for Seconds

Back in 2016, business executive Alexandra Lebenthal became our first patient treated with MRI-guided focused ultrasound (FUS) after the FDA approved it for essential tremor. Since then she has grown happily accustomed to having her dominant (left) hand be steady for the first time since her childhood. The innovative procedure worked well, and seven years later Alexandra is still over the moon about the improvement.



When the FDA approved focused ultrasound for use on the second side of the brain earlier this year, Alexandra was ready to do it again, and once again she called on Dr. Michael Kaplitt, Professor of Neurological Surgery and Director of the Movement Disorders service at the Weill Cornell Medicine Brain and Spine Center. Dr. Kaplitt had been one of the pioneers in using FUS for ET, and in the seven years since he first treated Alexandra he has become one of the top experts in the country in its use for ET. He currently performs half a dozen of the procedures a month and is now testing it for use on patients with the tremors of Parkinson's disease as well.

After barely an hour in the MRI suite and four ultrasound pulses, Alexandra's treatment was complete. Moments after leaving the MRI scanner, Alexandra lifted a paper cup to her lips—a simple act that had eluded her for decades. A week later she sent us the selfie above, which she shot with her newly steady right hand. For more about focused ultrasound for tremor, visit weillcornellbrainandspine.org/et

Comedy Night Raises \$1 Million for **Children's Brain Tumor Project;** Dr. Dahmane Grant Adds \$240K

Research into children's brain tumors is notoriously underfunded, and our research lab, like many others, relies so much on private support. We are grateful to the Children's Brain Tumor Project Foundation (CBTPF), an organization of families, friends, and communities dedicated to funding our Drs. Souweidane and Greenfield research. In October, the fifth annual



No Laughing Matter comedy night took in a record-breaking \$1 million, thanks to the efforts of honoree Meryl Witmer, the CBTPF Board of Directors, and the many others who organize this annual event.

The fundraising success was compounded by news of an NIH/NCI funded grant (R41/STTR) awarded to Dr. Nadia Dahmane, in partnership with Dr. Neil Goldstein at NightHawk Biosciences, Inc. The grant will allow Dr. Dahmane's lab team to study one of the most challenging pediatric brain tumors: atypical teratoid/rhabdoid tumors (AT/RT). These deadly tumors most often strike children under age 3, and the available treatments are harsh and often ineffective. Dr. Dahmane's team will investigate the use of powerful new peptide-drug conjugates (PDCs) produced by Dr. Goldstein's team to deliver tumorspecific therapy on AT/RT patient-derived preclinical models both in vitro and in vivo. The studies will help the team determine the effectiveness of the PDCs in reducing tumor growth as well as the maximum tolerated dose, and to determine any toxicity to other organs.

Open Medical Institute/Salzburg (cont'd from p. 1)

Knopman, "but it's also imperative for them to master communication and presentation skills. Presenting cases to colleagues is a critical developmental skill for neurosurgeons. Learning to provide the right information and ask the right questions during case reviews is extraordinarily helpful and leads directly to improvements in patient care."



Dr. Jared Knopman

A week after the brain seminar, international experts in spine surgery assembled for the second course. The spine course was co-directed by Dr. Roger Härtl and Dr. Claudius Thomé, who have led these OMI spine courses together for many years in both Salzburg and Mexico City. During the spine week, 34 fellows from 25 countries attended lectures followed by hands-on training in a cadaver lab. In addition to Dr. Härtl, Weill Cornell Medicine spine experts on hand included **Dr. Ibrahim** Hussain, Dr. Lynn McGrath, Dr. Michael S. Virk, and—via Zoom— Dr. K. Daniel Riew.



2023 OMI spine faculty included (L-R) Drs. Lynn McGrath, Michael Virk, Massimo Balsano, Roger Härtl, and Wolfgang Aulitzky

Over the course of the week, fellows attended 19 lectures on topics including Spinal Surgery and Evidence-Based Outcomes, Traumatic Spinal Injury Management, Spinal Metastases, Management of Cervical Radiculopathy and Myelopathy, 6 Ts of Minimally Invasive Spinal Surgery, Management of Idiopathic Scoliosis, Enabling Technologies in Spine Surgery, and more. Spine fellows also made case presentations for faculty feedback and advice on challenging cases they had faced in their home countries.

"This is one of my favorite courses of the year," says Dr. Härtl. "Not only does it bring me back to one of the loveliest places in the world, but it gives me the opportunity to teach—and learn fromspine surgeons from around the globe. As much as I am gratified by being able to teach here, I am also impressed, every time, by how much I have to



Dr. Ibrahim Hussain

learn from these fellows. These international seminars truly are unique opportunities for global learning."

The Open Medical Institute (OMI) was founded in 1993 by the American Austrian Foundation (AAF) and the Open Society Foundations (OSF) in collaboration with Weill Cornell Medicine for the purpose of training international fellows to improve healthcare in their home countries. Since its founding, the OMI has awarded more than 27,000 fellowships to physicians from 130 countries.

Visit weillcornellbrainandspine.org for more information.

IT'S A NO-BRAINER: EMPLOYEE RECOGNITION AWARD

he Neurosurgery Outstanding Service Award spotlights members of the department who exemplify the department's core values. The winner for Q3 2023 is Elaine M. Regacho, nurse practitioner who works with Dr. Philip Stieg and his patients.

"Elaine is an unfailingly professional, compassionate, and caring nurse practitioner," says Dr. Stieg. "The attention she provides is a big



Elaine Regacho, MSN, FNP-BC with Dr. Stieg

part of why our patients report feeling so well cared for here."

Elaine's colleagues add that she is a collegial and dedicated team player. "She is always positive, upbeat, and patient," says one, "and she has adapted very well for the concierge type of practice Dr. Stieg has."

Another noted that Elaine "is an eager learner and interfaces well with patients, families, and inpatient and outpatient teams."

Visit weillcornellbrainandspine.org/nominate to see previous winners and to nominate the next one. Congratulations, Elaine!

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. Rohan Ramakrishna 718-780-3070 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 Dr. Mark Souweidane 212-746-2363 (pediatric)

CSF Leak Repair

Multidisciplinary management of cranial and spinal CSF leaks

Dr. John Park 718-670-1837

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)

Stereotactic and Functional Neurosurgery

Parkinson's disease, essential tremor, and pain

Dr. Michael Kaplitt 212-746-4966

Stereotactic Radiosurgery

Noninvasive treatments for brain tumors and other conditions

Dr. Susan Pannullo 212-746-2438 Dr. Rohan Ramakrishna 718-780-3070 Dr. Babacar Cisse 646-962-3389

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Director of Spinal Surgery Dr. Galal Elsayed Dr. Kai-Ming Fu Dr. Ibrahim Hussain Dr. Lvnn McGrath, Jr. Dr. Paul Park Dr. Daniel Riew Dr. Robert Snow Dr. Michael Virk

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. Galal Elsayed, spine surgery Dr. Lynn McGrath, Jr., spine surgery Dr. Caitlin Hoffman 212-746-2363 (pediatric)

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. Paul Park, minimally invasive and complex spine Dr. Justin Schwarz, cerebrovascular surgery Dr. Caitlin Hoffman (pediatric) 212-746-2363

