



A MESSAGE FROM THE CHAIR

Philip E. Stieg, PhD, MD

Those who know me best know that Thanksgiving is my favorite holiday of the year. It's so important to me to take time to reflect on what's truly important, and feel gratitude for all the good things in life. I try to do that more than once a year, of course, but when the fall air is crisp and Thanksgiving symbols are everywhere, I take extra satisfaction in thinking about how much there is to be grateful for.

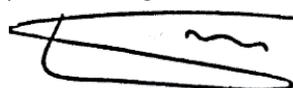


That's been difficult for the past two years now. So many people have faced struggles—physical, financial, and emotional—and at times it can be hard to feel gratitude. I believe that makes it all the more important to dig deep to find it. I look at the patients whose quality of life has improved thanks to modern surgical techniques, and think about the future patients whose lives will be saved thanks to ground-breaking research happening today, and I am grateful indeed.

This issue of our department newsletter is focused on what we have to be thankful for in neurosurgery—research grants that will help us find new solutions for difficult neurosurgical conditions; fellowship programs that will allow us to train the neurosurgeons of the future; and even our newfound ability to reach patients, students, and colleagues alike via remote videoconferencing and telemedicine. I would not have guessed back in March 2020 that I would one day be grateful for that! Remembering the difficulties in making that swift pivot, I am truly grateful today to have the tools available that allow us to consult with patients and confer with colleagues nearly anywhere in the world.

So as you sit down to your turkeys and other delectable dishes this Thanksgiving, please join me in finding the many reasons to be filled with gratitude. I try to focus on my loved ones, near and far, and remember with deep affection those who have passed on. I am also grateful to all of you—the patients who come to us for their care, the doctors who entrust us with their patients, and the colleagues and team members who make our days fulfilling—for all you do. Thanks for reading these periodic updates from our department, attending our webinars and CME events, listening to my podcast, and following us on social media. We love to hear from you, and we are grateful to count you all among our friends.

Yours in good health,



Grants Open Doors to New Research

Michael Kaplitt, MD, PhD, will lead an international team that has been awarded a three-year, \$8.9 million grant from the Aligning Science Across Parkinson's (ASAP) initiative. The grant, administered by the Michael J. Fox Foundation, will fund an ambitious and innovative multi-institutional collaborative effort to study how abnormal protein aggregates may spread from the gut to the brain to drive the early stages of Parkinson's disease.



This generous grant is just the latest in a series of funding awards that are fueling innovation at Weill Cornell Medicine Neurological Surgery. It comes on the heels of the renewal of a three-year, \$2.25 million grant from the JPB Foundation to fund Dr. Kaplitt's investigational use of gene therapy for Parkinson's disease. Dr. Kaplitt, a longtime leader in developing cutting-edge surgical therapies for movement disorders, was the first in the world to test gene therapy for Parkinson's disease in 2003 and continues to pursue innovative approaches to treating the disorder.

Other recent grants will fund ground-breaking work across a wide spectrum of neurosurgical disorders, including:

Dr. Roberta Marongiu, assistant professor of neuroscience in neurological surgery, is part of the team of principal investigators awarded the ASAP initiative grant and lead by Dr. Kaplitt. Her group will study the menopausal effects on the gut-brain connection in Parkinson's disease. Independently, Dr. Marongiu has been awarded a \$400,000 grant from the National Institute of Aging to study the influence of perimenopause as a neurological transition state that triggers Alzheimer's disease onset and accelerates disease progression.



Dr. Nadia Dahmane, whose work is focused on mechanisms controlling embryonic development and brain tumors, was awarded an R01 research grant from the National Institute of Health/National Institute for Neurological Disorders and Stroke to investigate the genetic and epigenetic mechanisms con-

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Fellowship News

New Surgical Neuro-Oncology Fellowship Available in Manhattan and Brooklyn

A new one-year post-residency fellowship position entails the evaluation and treatment of patients with brain and spine tumors. The fellow will be appointed at the instructor level and treat patients at our campuses in Manhattan and Brooklyn. The fellow will gain operative and clinical experience in intrinsic brain tumor surgery, awake and asleep brain mapping, microsurgery, open skull base surgery, orbital surgery, keyhole surgery, and endonasal endoscopic surgery. In addition, the fellow will gain experience in LINAC and Gamma Knife radiosurgery platforms.

This position is operated under the direction of Dr. Rohan Ramakrishna, co-director of the Rhodes Center for Glioblastoma and chief of neurological surgery at NewYork Presbyterian Brooklyn Methodist Hospital. In addition to Dr. Ramakrishna, the fellow will have operative exposure with Drs. Stieg, Schwartz, and Souweidane, among others.

Candidates must be fully trained in North America and/or be fully licensed to practice in the United States. For more information and application instructions, visit the Education section of our web site at neurosurgery.weill.cornell.edu

Clinical Fellowship in Minimally Invasive Spinal Surgery and Navigation Now Available on SF Match

We are proud to note that our Clinical Fellowship in Minimally Invasive Spinal Surgery and Navigation, established in 2015, is now available on the SF Match web site. The fellowship, which offered as a collaboration between NewYork-Presbyterian and Weill Cornell Medicine, complements residency training to promote further expertise in the growing fields of minimally invasive spinal surgery, navigation, and complex spinal surgery.

The successful incorporation of minimally invasive surgery (MIS) techniques and navigation requires specialized training and preparation rarely offered during regular neurosurgical or orthopedic residency. We train the future leaders of spinal surgery to advance the field and expand our horizon based on the principles of technical excellence, sound clinical judgment, and compassion for our patients.

Surgeons who complete our program are able to apply the principles and techniques of minimally invasive surgery and navigation to all types of surgery—including degeneration, trauma, tumor and deformity surgery in all regions of adult and pediatric patients—facilitating career paths in either academic or private practice.

The fellowship, under the direction of Dr. Roger Härtl, is open to orthopedic and neurosurgery trainees. Interested candidates can apply through the SF Match website at sfmatch.org (application closes March 1, 2022, for the 2023-2024 academic year).

Reaching Out 24/7

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.

Email Subscriptions

We send tens of thousands of emails each month to interested subscribers on a wide range of topics. We know how many emails you already get (so do we!) and we'll send you only the emails you want. Sign up today to indicate your preferences. You may select from topics as varied as Chiari malformation, epilepsy, pediatric conditions, back pain, neuropsychology news, CME events, and many more. Update your preferences any time.

Patients, families and caregivers can browse our topics here: <https://bit.ly/30kaqTP>

Physicians and other health care providers can browse our available CME and other professional topics here: <https://bit.ly/3087dEP>

Social Media

We have had active accounts on Facebook and Twitter for many years, and we recently added a new Instagram channel. Look for us on your favorite platform and follow us for all our latest news, updates, and inspiring patient stories. If you're a patient willing to share your story, please contact us at neurosurgery-feedback@med.cornell.edu



This Is Your Brain with Dr. Phil Stieg

This innovative podcast 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 developed our webinar series out of necessity to stay in touch during the pandemic, and they've become a favorite of our colleagues and patients alike. We now offer several popular webinars, including:

Spine Time from the multidisciplinary team at the WCM Center for Comprehensive Spine Care

This Is Your Brain from Dr. Phil Stieg and the brain experts at Weill Cornell Medicine

House Calls from the pediatric neurosurgeons of Weill Cornell Medicine and Columbia University.

Visit weillcornellbrainandspine.org/webinars for more information.

Grants Open Doors to New Research

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trolling neuronal identity. Dr. Dahmane and colleagues Dr. Benjamin Garcia at the University of Pennsylvania and Dr. Christopher Mason at Weill Cornell Medicine received \$2.5 million over five years to leverage high-throughput approaches to uncover the mechanisms controlling cellular identity in the developing brain in hopes that this knowledge will one day translate to a cure for brain tumors.

Dr. Babacar Cisse, whose research focuses on adult brain tumors, received a three-year, \$700,000 grant from the Department of Defense to study the role of transcription factors in glioma-associated microglia as well as a three-year, \$400,000 award to support his novel work; he will investigate the normal development and function of microglia from embryonic to adult stages, followed by the use of mouse models to investigate the disruptions in their function known to exist in gliomas.



Dr. Michael Virk will be the site PI at Weill Cornell Medicine on a multi-center investigation into how epidural electrical stimulation (EES) may be used to restore or improve hand and arm function in those with cervical myelopathy or traumatic spinal cord injuries. Jason Carmel, MD, PhD, of Columbia University and Noam Harel, MD, PhD, of Mount Sinai Hospital received this \$2.5 million, three-year NIH/NINDS RO1 grant. Trauma and cervical myelopathy are the most common causes of acute and chronic spinal cord injury, and EES holds the promise of restoring hand function after these devastating injuries.



These new research initiatives offer new hope for future patients as these investigations are translated into new treatment options.

Now Recruiting Neuropsychology Externs

This is not only residency interview season, when senior medical students meet with the faculty of specialty programs to determine mutual interest in a match, it's also recruitment season for neuropsychology externships. Weill Cornell Medicine, which is in the top 1 percent of neurosurgical training programs in the country, is now seeking candidates for neuropsychology externs to work with our faculty on both clinical and research projects.

Externs are doctoral-level students who are enrolled in a Ph.D. or Psy.D. program in psychology, assigned to a clinical placement for advanced training. At Weill Cornell Medicine they work under the direct supervision of our neuropsychology faculty to gain practical experience with patients who have a variety of neuromedical and neuropsychiatric challenges (including Parkinson's disease and movement-related disorders, epilepsy, brain tumors, cerebrovascular disorders, dementia, paraneoplastic syndromes, neuromuscular and genetic disorders, ADHD, specific learning disorders, and traumatic brain injury).

Our externs work with diverse populations across the lifespan (from four-year-olds through geriatric patients). They may take part in evaluating patients who require elective neurosurgery (tumor resection, epilepsy surgery, deep brain stimulator implantation, VP shunt) and

Our faculty's commitment to training is evident in their mentorship and supervision of the future generation neuropsychologists.

CME Courses and Other Events

We are delighted at the global reach of our virtual courses, and excited to be coming back with hands-on courses in 2022. Visit neurosurgery.weill.cornell.edu/education for more information.

Global Neurosurgery Education Summit 2021 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 evaluate fellowship positions around the world and produce a consensus statement on the requirements of successful, productive fellowships.

NYC-MISS 2021

15th New York City Minimally Invasive Spine and Enabling Technologies Symposium Dec. 9-11, 2021

Directed by Dr. Roger Härtl and Dr. Luiz Pimenta

This innovative course provides a comprehensive overview of minimally invasive techniques (with and without navigation) for the operative treatment of spinal disorders. This annual course will feature real-time surgical demonstrations in 2021, with a return to hands-on lab component in 2022.



1st NORTH AMERICAN

International Hands-on Transorbital

Skull Base Dissection Course JUNE 2-3, 2022

Directed by Dr. Theodore Schwartz and Dr. Kris Moe

Transorbital neuroendoscopic surgery (TONES) is a fast-emerging technique that allows minimally invasive access to the orbit and the intracranial compartment. Directed by two of the pioneers of the technique, this new course, the first of its kind in North America, will be the must-attend event of the year for neurosurgeons, otolaryngologists, and oculoplastic surgeons.



Wada testing, as well as intra-and extra-operative functional language mappings. Students have the opportunity to take an active part in neuropsychological consultation services as part of the comprehensive Craniofacial Clinic. Bilingual students who would like experience administering Spanish-language measures can receive supervision by a Spanish-speaking neuropsychologist.

Externs may participate in both individual and group cognitive remediation therapy with patients experiencing cognitive and emotional difficulties following treatment and intervention for neurological and neurosurgical disorders. Modified virtual experiences will be available.

Academically, externs participate in a number of didactic programs that include: Neurosurgery Grand Rounds, Neurology Grand Rounds, Epilepsy Conference, Interventional Neuroradiology/Cerebrovascular Rounds, Pediatric Fellow Case Conference, and Tumor Board, among others. Neuropsychology and Cognitive Remediation Seminars will be provided. Additionally, there are opportunities to be involved in multiple research studies that are currently being conducted, which is ideal for potential dissertation research. **Selected candidates will be interviewed in February, with offers made in March. For details, visit neurosurgery.weill.cornell.edu/education**

IT'S A NO-BRAINER: DESTINIE TROSA WINS QUARTERLY EMPLOYEE RECOGNITION AWARD

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 Destinie Trosa, pictured at right with Dr. Stieg. Destinie is a surgical coordinator, working with patients of Dr. Stieg, Dr. Kaplitt, and Dr. Cisse. It's an intense job that requires painstaking attention to detail and endless followup, making sure that all pre-operative testing has been done, all insurance issues resolved, and—most importantly—patient worries calmed.

"Destinie is one of the best patient advocates I have ever come across," said



one nominator. "The patients adore her, and our team is grateful to work with her." Another nominator described her as "a problem solver who goes the extra mile for patients."

The advanced practice providers (APPs) who work with Destinie are especially appreciative of her work. "Whatever our patients need, I know I can rely on Destinie to go above and beyond to get it done," said one nurse practitioner. "Our patients have nothing but wonderful things to say about her, and I am grateful to have the opportunity to work as closely with her as I do."

Destinie wins this quarter's employee recognition for her dedication to delivering outstanding patient experiences, her commitment to working as a team player, and her good humor in the workplace. As one colleague noted, "Destinie helps keep the wheels turning for her surgeons and APPs, and she does it with a smile."

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. Eric Elowitz 212-746-2870

Dr. Kai-Ming Fu 212-746-2260

Dr. Daniel Riew 212-746-1164

Dr. Robert Snow 212-717-0256

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

NEWYORK-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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