

Icahn School of Medicine at **Mount Sinai** 2018-2019 **Neurology Training at The Mount Sinai Hospital**

"The moment

I stepped into the sun and tree-filled atrium of Mount Sinai Hospital, I knew I wanted to train here. The architectural thoughtfulness provides a respite for patients, families, and staff. In a similar way, the importance of emotional well-being is recognized by our program leaders. While residency is inherently challenging, our faculty cultivate a culture of support. During my Mount Sinai interview dinner, I remember overhearing several residents offer to cover an overnight shift for another resident so she could attend a family wedding. The kindness of my fellow residents and the beauty of our hospital inspire me every day."

- Bridget Mueller, Class of 2019



2018-2019 Neurology Training at The Mount Sinai Hospital "I loved how just within the first 2 weeks of starting PGY2, I felt as though I was already a part of the Mount Sinai Neurology family. Everyone I met has been so collegial, open, and friendly. Whether it was sharing stories during morning report or bonding while responding to stroke codes in the middle of the night, I couldn't *imagine a better start* working with my coresidents and mentors. - Kenneth Leung, Class of 2020



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Welcome from the Chair

A warm welcome to Mount Sinai Neurology and to New York!



Barbara G. Vickrey, MD, MPH System Chair, Department of Neurology Henry P. and Georgette Goldschmidt Professor of Neurology Icahn School of Medicine at Mount Sinai

Three years ago, I made a major career decision to move from the institution at which I had built a 25-year career, to come to New York City to take on a leadership position as Chair of Neurology here at the Icahn School of Medicine at Mount Sinai. I made the decision to make this change because of the enormous opportunities afforded by:

- Mount Sinai's investments and commitments in research infrastructure and creative scientists in population health care and research, global health, personalized medicine, digital health, experimental therapeutics, and other cutting-edge areas;
- The health system's expansion and Mount Sinai's preparation and plans for implementation of value-based healthcare models, including opportunities for building innovative care models for neurological populations; and
- The collegial and progressive-thinking faculty and staff from across the institution.

It continues to be incredibly energizing to be collaborating with colleagues here at Mount Sinai. All of us are continuously working to further build and expand the department in its core academic missions of (1) education and training future generations of neurologists and others who are part of our care teams, (2) nurturing scientists who will generate new knowledge to advance us toward cures and amelioration of neurologic disorders and elimination of disparities in neurologic care, and (3) delivering ever higher quality care for the expanded populations embraced within our Mount Sinai system. We have recruited over 30 new faculty in the last 2 years and have added new divisions, including a Division of Health Outcomes and Knowledge Translation Research and a Division of Neuro-Otology and Neurogenetics, as well as a new Center for Advanced Circuit Therapeutics. Our recruitments have also expanded our expertise to now include global neurology, medical informatics, pain, Alzheimer's disease biomarker research, autoimmune encephalitis, and quality improvement, among others.

Mount Sinai is ranked #17 in the *US News & World Report* Best Hospitals ranking (Neurology/Neurosurgery), and The Mount Sinai Hospital is #3 in the New York City hospital rankings.

My colleagues and I are deeply committed to providing a nurturing residency, both academically and emotionally. Residents choose to train here because they find a breadth and depth of clinical training experiences, a diversity of populations, opportunities for research, and individualized career mentoring and support. Our faculty - over 120! - teach, conduct research, and practice across Manhattan and the surrounding boroughs. Our goal is to provide the environment and mentorship for you to achieve your potential and your career aspirations, whether as a clinician-researcher or a master clinician-educator in academic neurology, a neurologist engaged in promoting innovation and high quality care as a health system administrator, a clinician-scientist in industry or in the not-for-profit world, a neurologist engaged in global health, or an outstanding and admired practitioner.

Thank you so much for coming to learn about the people here and our program. If you have any questions after your visit, please feel welcome to contact me (Barbara.Vickrey@mssm.edu).

Sincerely,

Subara Vichrey

Barbara G. Vickrey, MD, MPH System Chair, Department of Neurology Henry P. and Georgette Goldschmidt Professor of Neurology Icahn School of Medicine at Mount Sinai

The Department of Neurology

$More \ than \ 100 \ years \ of service$



Icahn School of Medicine at Mount Sinai One Gustave L. Levy Place Box 1137 Annenberg Building, Rm 14-94 New York, NY 10029

The Estelle and Daniel Maggin Department of Neurology at The Mount Sinai Hospital has been providing world-class patient care and pioneering neurological research for more than a hundred years. New York City's oldest Department of Neurology, we opened our inpatient service in 1900.

For more than a century, we have contributed to clinical and scientific research, trained generations of neurologists, and held prominent positions on the national and international neurological stage. With interdisciplinary centers focused on the most common and most complex neurological disorders, the Department provides patients with a unique blend of personalized care powered by our groundbreaking research teams and technology.

This integrated approach is instrumental in our pursuit of improving outcomes in the treatment of Parkinson's disease, epilepsy, multiple sclerosis, stroke, Alzheimer's disease, and other neurological disorders. areas. Mount Sinai also provides opportunities for advanced degrees in fields including master's degrees in Biomedical Informatics and in Clinical Research, among others.

The department offers a variety of educational programs to impart a broad base of knowledge in neuroscience and the clinical ability to recognize and treat the full spectrum of neurologic diseases. Multiple fellowship opportunities enable you to specialize within your ideal clinical or research focus, with investigative opportunities funded by the National Institutes of Health.

Neurology is the nexus of an institution-wide neuroscience and

A study of 125 US neurology residency programs found that Mount Sinai had produced the 3rd highest number of graduates holding academic neurology faculty positions.

(Campbell, et al, Archives of Neurology, 2011;68:999-1004.)

The Mount Sinai Health System's expansion to include faculty and medical facilities across Manhattan (Mount Sinai West, Mount Sinai St. Luke's, Mount Sinai Beth Israel, and New York Eye and Ear Infirmary of Mount Sinai) affords extensive opportunities for elective rotations in diverse populations and healthcare settings and additional subspecialty neurological research effort. In 2017, the Icahn School of Medicine at Mount Sinai received over \$16 million in National Institutes of Health (NIH) funding – an amount nearly double its 2014 funding level. Over the past 3 years, the Icahn School of Medicine at Mount Sinai has ranked #11, #12, and #15 among all Departments of Neurology in the amount of NIH funding.

Neurology Facts at a Glance

Mount Sinai Neurology Overview

1851 Hospital founded

- **1887** Bernard Sachs, MD names "Tay Sachs Disease"
- 1890 Neurology clinic opens on 67th Street
- 1900 Neurology in-patient service established
- 1913 First neurology ward dedicated
- 1920 Neuropathology laboratory created
- 1923 Residency Program Established
- 1939 EEG unit established
- 1958 Division of Neurophysiology established
- 1961 Neurochemistry lab opened
- 1964 Parkinson's disease clinic opened
- 1978 First US ALS clinic opened
- 1988 Stroke unit opened
- 2001 Corinne Goldsmith Dickinson Center for Multiple Sclerosis established
- 2008 Established Robert and John M. Bendheim Parkinson and Movement Disorders Center
- 2008 Friedman Brain Institute established
- 2009 Center for Headache and Pain Medicine established
- 2013 First hospital in New York state to receive Joint Commission Comprehensive Stroke Center designation
- 2015 Barbara G. Vickrey, MD, MPH, most recent faculty member named President of the American Neurological Association
- 2017 Division of Health Outcomes and Knowledge Translation Research established

Divisions & Centers

Center for Cognitive Health

Center for Headache and Facial Pain

Corinne Goldsmith Dickinson Center for Multiple Sclerosis

Division of General Neurology

Division of Health Outcomes and Knowledge Translation Research

Division of Neuromuscular Diseases

Division of Neuro-Otology and Neurogenetics

Division of Vascular Neurology

Epilepsy Program

NeuroAIDS Program

Neurocritical Care Unit

- Neuroendovascular Surgery
- Neuro-Oncology Program

Neuro-Opthalmology Servce

Pediatric Neurology

Robert and John M. Bendheim Parkinson and Movement Disorders Center

The Mount Sinai Hospital Neurology Faculty

Academic and Clinical Faculty 98

Voluntary and Affiliated Faculty 28

Research Faculty 23

Fellows 12

Neurology Residents 27

Interns 5

US News & World Report 2018 Ranking



17th Neurology/Neurosurgery

Neurology Divisions and Programs

The Department of Neurology includes the full range of subspecialty divisions and programs offering comprehensive care to children and adults. In addition, most of the divisions and programs offer fellowship opportunities (see pages 38-47).



Center for Cognitive Health

The Center for Cognitive Health (CCH) provides expert care for patients struggling with memory and other cognitive impairments, across a full range of ages and disorders — from a young adult with attentional difficulties to a grandparent with memory dysfunction. Mount Sinai was one of five medical centers in the country selected to be part of the Neurological Care Program for retired NFL players.

The Center features a multi-disciplinary team of neurologists, psychiatrists, neuropsychologists, neuroscientists, and patient care managers. Using a fully integrated approach to brain and behavior, the CCH offers comprehensive diagnosis and treatment for a wide range of cognitive disorders, including Alzheimer's disease, dementia with Lewy bodies, fronto-temporal dementia, mild cognitive impairment, epilepsy-related cognitive dysfunction, traumatic brain injury, stroke-, epilepsy-, and Parkinson's disease-related cognitive dysfunction, and other neurologic disorder-related cognitive impairments (e.g., multiple sclerosis). Patients have access to cutting-edge treatments via clinical trials.

Center for Headache and Facial Pain

The Mount Sinai Center for Headache and Facial Pain is a multidisciplinary center for the diagnosis and treatment of chronic and acute headaches and other painful disorders of the skull, brain, or face in children and adults. A dedicated team of physicians have specialties beyond neurology and work to find the best treatment and preventative strategies for migraine and headache sufferers of all types. Menstrual migraines, cluster headaches, basilar migraines, and tension-type headaches all can be debilitating, painful and difficult to diagnose, but the Center is especially equipped with the latest technology and experience to provide diagnosis and treatment in even the most complicated cases. Treatment options include biofeedback, botulinum toxin injections, infusion therapies, and other interventional procedures.



Epilepsy Program

The Epilepsy Program offers compassionate and comprehensive care for people with epilepsy and related disorders. The Program's team of outstanding specialists provides a state-of-the-art approach to the diagnosis and management of epilepsy and works closely with primary care doctors, neurosurgeons, psychiatrists, rehabilitation specialists, and neuropsychologists to take care of the whole person with epilepsy. The Epilepsy Program features state-of-the-art inpatient epilepsy monitoring units, plus full outpatient electroencephalography (EEG) and diagnostic capabilities. Services include outpatient consultation, medication management, screening for depression and anxiety, and timely follow-up care. The Program advocates for an orderly and systematic approach to treatment options, including lifestyle modifications, medications, and surgical interventions.

Corinne Goldsmith Dickinson Center for Multiple Sclerosis

The CGD Center's tripartite mission is to provide exceptional comprehensive care to patients with multiple sclerosis and related demyelinating and neuroinflammatory disorders (including neuromyelitis optica); engage in high quality cutting edge clinical, basic, and translational research studies; and provide educational services to patients and family members, students, residents, fellows, and practicing physicians. The CGD Center's broad base of physicians, scientists, and related medical specialists offers state-of-theart programs in disease management, including diagnostics, experimental therapeutics, basic and clinical research, psychiatric care, support services, and access to the latest clinical trials.

All levels of multiple sclerosis research from basic science to imaging to translation research are critical to the CGD Center's work and accomplishments. Close collaboration among researchers and clinicians results in the rapid translation of new discoveries into more effective treatments, giving patients the widest possible range of options.

Division of General Neurology

The mission of the Division of General Neurology is to provide high level neurologic consultation and management for the full spectrum of neurological disorders in both outpatient and inpatient settings, and to provide teaching for students and residents as well as for our patients and colleagues in the context of ongoing clinical practice.

The Neurology Consult service evaluates and assists in the management of such inpatients and those in the Emergency Department. Consultations are performed in a timely manner, first by residents then through twice-daily teaching rounds in which students also participate; all cases are seen and reviewed by an attending neurologist.

NeuroAIDS Program

The mission of the NeuroAIDS program is to integrate clinical research with patient care, education, and community outreach in order to improve the lives of people living with neurologic complications of HIV. The team's expertise includes neurology, neuropsychology, and health psychology, and is closely allied with the Manhattan HIV Brain Bank research program and the Clark Neuropsychology Laboratory, which add additional expertise in neuropathology and neuroimaging.

Neuro-Oncology Program

The Neuro-Oncology Program provides a multidisciplinary approach to the care and treatment of patients with brain tumors, metastases to the nervous system, spinal cord tumors, and the neurological complications of cancer and its treatment. Diagnostic services include advanced imaging technologies and pathology analysis of tumor samples.



Our neuro-oncologists design and oversee the appropriate chemotherapy, target therapy, angiogenesis inhibitors, and immunotherapy for each patient, as well as coordinate personalized patient care with members of other departments including Neurosurgery, Medical Oncology, Radiology, Neuropathology, Rehabilitation Medicine, and Palliative Care.

Neuromuscular Disease Division

The Neuromuscular Disease Division offers personalized, state-of-the-art care for disorders in neuromuscular transmission, muscle diseases, and peripheral nerve problems. Specialists are highly experienced in diagnosing and managing these disorders, providing a complete range of diagnostic testing services including nerve conduction studies and needle electromyography; musculoskeletal radiology; and nerve muscle and nerve pathology skin biopsies using the most advanced techniques and technologies. The Neuromuscular Disease Division has led seminal studies in the use of botulinum toxin in spasticity and novel agents in neuropathic pain.

Neurocritical Care

The Neurocritical Care team cares for critically ill, neurological and neurosurgical patients. The team of neuro-intensivist physicians, neuro-ICU nurses, and other allied health professionals, are equipped to care for brain- and spinal cord-injured patients who have unique physiologic considerations in relation to other critically-ill patients. Neurocritical care research focuses on uncovering new ways to treat the brain in crisis.

Division of Pediatric Neurology

The Division of Pediatric Neurology provides an unparalleled patientcentered, compassionate, and proactive approach to care. Pediatric patients and their families have unique needs, which our team of specialists addresses through coordinated, comprehensive care that encompasses all facets of a child's neurological diagnosis. The team has expertise in caring for a variety of disorders that affect the child's brain, spinal cord, and peripheral nerves.

The Pediatric Neurology program has full access to state-of-the-art diagnostic modalities that are childfriendly and the expertise to use them in seeking accurate diagnoses. Comprehensive diagnostic systems help to evaluate developmental disability, determine mental retardation, language and learning disorders, and autism and sensory impairments, such as vision and hearing loss.

All methods of treating pediatric neurological conditions are available at Mount Sinai and include an unmatched Pediatric Cerebrovascular Program that provides evaluation and treatment of children with vein of Galen malformations, aneurysms, and a variety of cerebrovascular disorders. Comprehensive care for children with epilepsy and seizure disorders is provided at our pediatric epilepsy monitoring unit (EMU) at Kravis Children's Hospital at Mount Sinai.

Robert and John M. Bendheim Parkinson and Movement Disorders Center

At the Robert and John M. Bendheim Parkinson and Movement Disorders Center, physicians are experts in diagnosing and treating hyper- and hypokinetic movement disorders including Parkinson's disease and parkinsonism; tremor; dystonia; Huntington's disease; myoclonus; and others. Treatment programs are complemented by robust research efforts designed to uncover the causes of movement disorders as well as more effective treatments for these often debilitating disorders. State-of-the-art diagnostic and treatment services include inpatient and outpatient consultation, chemodenervation and medication management, and screening and follow-up care for deep brain stimulation (DBS) in collaboration with the neurosurgeons in the Center for Neuromodulation at Mount Sinai. A wide range of complementary social and educational services are available for patients and their families.

Division of Vascular Neurology

The Mount Sinai Stroke Center is a New York State Department of Healthdesignated primary stroke center and the first Joint Commission certified primary stroke center in Manhattan. The Center features 24/7 availability for emergency consultation and treatment, a specialized neurointensive care unit, a state-ofthe- art stroke unit, and access to some of the latest clinical trials. The Center is recognized as a leader in stroke research and treatment having pioneered major advances in medical therapies for treating and preventing stroke, neurosurgical techniques for stroke prevention, and innovative interventional neuroradiologic procedures for stroke patients. The Center includes both a patient care and a research component, bringing together the expertise of specialists in many different areas to provide patients with the benefit of a collaborative team approach.

Division of Neuro-Otology and Neurogenetics

The Department of Neurology has had a distinguished history in making seminal contributions to the functional anatomic and neurophysiologic basis of eye movement control and translating these mechanistic insights to innovative treatment for vestibular disorders, most notably motion sickness and Mal de Debarquement Syndrome, both led by Dr. Bernard Cohen, who joined the faculty at Mount Sinai in 1962 and remains actively engaged in research and education.

Neuro-otology focuses on the inner ear and its connections to the brain in the control of eye movement, coordination, balance, and hearing. Genetic predispositions are increasingly recognized in many neuro-otological disorders particularly the development and degeneration of the cerebellum. The division offers clinical and research opportunities for students and residents in neurootology and/or neurogenetics.

Neuro-Ophthalmology Service

Mount Sinai's experts in neuroophthalmology specialize in the evaluation, diagnosis, and treatment of visual problems that affect the optic nerve, eye movement, or the pupil's reflexes. They collaborate with

neurologists and neurosurgeons to diagnose and treat these disorders. using sophisticated techniques including neuroimaging of the brain and orbits, magnetic resonance imaging (MRI), and computed tomography (CT) scans. Mount Sinai's neuro-ophthalmologists have expertise in diagnosing and treating a wide range of neurological and systemic conditions that include optic neuritis and other inflammatory optic nerve diseases; double vision; papilledema or idiopathic intracranial hypertension; droopy eyelid and double vision; meningioma, pituitary tumor, aneurysm, and craniopharyngioma; unexplained visual loss; untreated neurovascular disorders; and acute optic nerve injury. In addition to offering advanced treatments of these conditions, the Mount Sinai Neuro-Ophthalmology Service is also a leading site for research in many of these disorders.

Division of Health Outcomes and Knowledge Translation Research

The Division of Health Outcomes and Knowledge Translation Research was established in September 2017, led by internationally renowned clinician-investigator, Nathalie Jetté. The division's mission is to foster scientific discoveries and develop a world-class program that supports the development of expertise and a strong, collaborative environment for clinical research across multiple divisions.

As neurologists and neurology trainees, one of our most important roles is to ensure we provide highquality, patient-centered care to our patients in order to improve outcomes and quality-of-life. In order to do this effectively, we need to be familiar with best practices. Health technologies, e-health, and big data are playing more and more of a role in facilitating the collection of patient-reported outcomes and the implementation of knowledge into practice.

Health services research is the study of how to make healthcare more effective, more equitable, and/or more efficient. Knowledge Translation is a dynamic process that incorporates the synthesis, dissemination, exchange, and application of knowledge to improve the health of individuals, health services, and health systems. It is important that the research we do be aligned with the triple aim of improving the patient experience, improving the health of populations, and reducing health care costs.

A major aspect of our research includes outcomes research to evaluate the effect of health care processes and interventions on the health of individuals and populations. It is imperative that we identify pioneering new approaches to fill the knowledge-to-action gap at all levels of neurological care to address a broad range of patient-related outcomes; ensure that patients are correctly diagnosed using the best and most accurate technologies and that they are referred in a timely manner; and that they receive evidence-based, cost-effective treatment and quality of care. Neurological care gaps (including disparities in care) also need to be considered to ensure the right patient gets the right treatment at the right time.

"One of the reasons

I chose Neurology for residency is that there is so much potential for discovering new diagnoses and treatments. Rotating through the subspecialty clinics at Mount Sinai is a true privilege because I'm learning from Neurologists who are giants in their respective fields, running studies that will eventually help to rewrite textbooks." - Ling Pan, Class of 2019

Message from the Residency Program Directors

Stephen Krieger, MD and Shanna Patterson, MD

Faye Francisco Residency Program Manager

Neurology residency provides a perpetually exciting challenge: you are about to delve into the field of neurology, where you'll encounter all the captivating and profound issues of clinical neuroscience that drew you to this career. At the Mount Sinai Hospital Neurology Residency at the Icahn School of Medicine, we fundamentally believe residency should be exciting and challenging, but it should also be fun. The legendary Professor of Neurology and Neurosurgery, Wilder Penfield, once referred to the brain as the organ of destiny. As you embark upon the process of selecting a residency in neurology, we invite you to consider your potential destiny at the Mount Sinai Hospital Neurology Residency.

Our objective is to provide the most supportive environment and the best training available to launch an academic career in neurology. We provide the tools necessary for you to flourish throughout your career, both academically and personally. And of course, an additional advantage to training here is the opportunity to work and live in New York City, arguably the most culturally diverse and exciting city in the world.

As a graduate of our residency program, Dr. Krieger can attest to the quality of the people and the experience of training in the Mount Sinai Health System. Every one of our residents plays a vital role as a clinician, teacher, and collaborator. Many of the fellows and faculty whom our residents work with also completed their training here, and have built their careers in neurology in our department. Our diverse faculty members guide our residents through the same process they went through, be it a few years or a few decades before them. Our department also prides itself on recruiting top academic, clinical, and research faculty from around the country and world, whose expertise powerfully enriches the education of our residents.

We believe mentorship is crucial during residency, and we have a wellestablished mentoring program whereby we assign a faculty mentor to each resident to offer guidance and assistance in adjusting to the new environment as a neurology resident, and to infuse your entire residency experience with an inspired momentum. We assign additional mentors in specific subspecialty areas (clinical, education, and research) as go-to faculty as your individual interests develop, and opportunities for publications and other conference presentations routinely result from these intellectual partnerships.

We encourage you to participate in research during your elective time to prepare you for careers in academic neurology, and have a highly successful R25 Research Residency track for those looking for researchfocused careers. Opportunities for academic engagement also exist in other crucial areas of medicine such as education scholarship, quality improvement, and resident wellness.

Mount Sinai Hospital neurology residents demonstrate dedication, professionalism, intellectual inquisitiveness, and personal responsibility. We look for physicians who will bring warmth, compassion, and team spirit to the residency and to the care of our patients. Our residents advocate for their patients, work closely with one another, and provide care that is humanistic and grounded in the fundamentals of medical ethics.

Some recent enhancements to our program include the expansion of our program to 10 residents per year and the creation of a categorical track; the hiring of a team of PAs to assist the residents in the care of stroke and epilepsy patients; the development of a rich wellness initiative with lectures, special events, and guests such as yoga and physical fitness professionals; and an enhanced neurology consult service with both inpatient consults and neurologic emergencies teams.

Mount Sinai offers a vibrant, busy neurology residency, from which you will emerge as a seasoned, confident clinical neurologist; critical thinker; and future leader in whatever niche of our expanding field you choose. Upon graduation, our residents place into competitive clinical and research-focused subspecialty fellowships in top tier programs around the country, including epilepsy, multiple sclerosis, movement disorders, neuromuscular, neurophysiology, stroke, neurocritical care, headache, neuro-oncology, behavioral neurology, and sleep medicine. From our program, you will take with you lifelong lessons, and lifelong friendships. The legacy of our graduating residents each year endures through their lasting influence on our educational program and a dynamism that suffuses their junior trainees. We invite you now to envision what your experience and legacy as a Mount Sinai Neurology resident could be, and we welcome your questions.

Sincerely,

Stephen Krieger, MD Director Neurology Residency Program

Shanna Patterson, MD Associate Director Neurology Residency Program

"I went to Medical School

at Mount Sinai and while many programs seemed great on the interview day, I knew from first-hand experience that Sinai had wonderful, fun residents who were passionate about learning and teaching neurology. I knew that I would work hard but that I would come out of the program an extremely well-trained neurologist with a bunch of different experiences making me a more well-rounded physician (from working at Sinai, Elmhurst, and the Bronx VA). Another huge pull to stay at Sinai was our program director Dr. Krieger who really is as caring and concerned with the residents' well-being as he seems. It was important that I knew if I ever had an issue (personal or work-related) I could go to Dr. Krieger and he would be there to help in whatever way he could. I'm so glad I chose to stay at Sinai. The camaraderie within the program and with the other residents who rotate on neurology is outstanding and what makes you excited to go to work."

- Elizabeth Pedowitz, Class of 2019 "My decision to choose Mount Sinai was an easy one. It became very clear to me that the neurology department was deeply invested in their residents. They have created a warm and welcoming environment that prioritizes resident education and development. I knew that whatever challenges I faced ahead and whatever path I would choose to take my future career, there would be always be support from the attendings and my fellow residents." - Helen Cheung, Class of 2020

Neurology Residency Program at Mount Sinai

Overview of the Residency Schedule: PGY1-4

Every PGY-2 receives our Neurology Resident Handbook.

PGY1: For those residents joining us for the prelim year, the PGY1 consists of 8 four-week blocks on an array of medicine services; 4 four-week blocks of elective that can be spent on neurology specialties, neuroscience or neuro-education research, or other fields of interest; and 4 weeks of vacation.

PGY2: The first year of residency is spent on the general neurology, stroke and consult services, as well as in the neurosurgical ICU and ambulatory clinic at Mount Sinai Hospital. Residents attend daily morning report, weekly grand rounds, chief of service rounds, and daily didactic conferences at noon, as well as a year-long neuroscience curriculum series covering all neurologic specialties. The majority of the year is spent at Mount Sinai Hospital, with the exception of 6 weeks at the James J. Peters Veterans Administration Hospital in the Bronx.

PGY3: Residents spend

approximately 20 weeks in 2- or 4-week rotations at Elmhurst Hospital in Queens, acting as senior resident on the general neurology and consult services, as well as in the outpatient clinic program. Elmhurst comprises one of the most culturally diverse populations in the US, and the rotations at Elmhurst Hospital offer exposure to an extraordinary array of different cultures, languages and neurological disorders. The faculty members are deeply rooted in the local community, and are committed to helping the neurology residents develop their own cultural competence through modeling and case-based teaching. Residents work in a team with medicine interns and students, where the role includes supervision of patient care and teaching. The remainder of the year is spent at the Bronx VA, supervising PGY2 residents on the consult service, as well as in pediatric neurology and neurophysiology. The larger class size and expanded consult service at Mount Sinai Hospital has allowed PGY3s the opportunity to run the consult team at the main hospital, integrating all three years of our program on the consult service throughout the year.

PGY4: Residents serve as senior residents on the general neurology, stroke, and consult services at Mount Sinai Hospital, with additional months spent in electives, pediatric neurology, and psychiatry. The expanded consult service allows PGY4s to work with the PGY3s, dividing the Neurologic Emergencies ("fast neurology") from the Inpatient Consult service ("slow neurology") to provide a coherent clinical experience for residents on both teams. Two weeks in the early part of the year are also spent on night float as part of our 'buddy call' system, in order to teach and mentor the new PGY2s.

We take duty hours seriously and prioritize resident wellness, and our schedules comply with the ACGME work-hours limitations and New York State Bell Commission rules limiting work hours. Residents have one short call every three days until 8pm. The Bronx VA has home pager call after 5pm on weekdays and weekends. All residents have four weeks of vacation time each year.

We offer clinical electives in all of our neurological subspecialties, as well as multiple opportunities to arrange electives at outside institutions or devote elective time to research.

The warm rapport among residents, close communication with faculty, diversity of our patient population and emphasis on outstanding patient care lie at the heart of our program.

Summer Schedule

The first two months of training is a time for PGY-2 residents to gain confidence in their abilities as new neurologists. As part of the summer schedule and to ease the transition from medicine intern to neurology resident, the program ensures that there will be a 'buddy call' senior resident in the hospital at all times during July and August. There is also a summer lecture series with daily noon conference topics prepared especially for the PGY-2 class, including simulations and hands-on training in running codes and performing LPs.

Mentor Program

Each resident is paired with a faculty member who will be available as a mentor throughout all three years of residency. The mentor's responsibility is to act as a guide for career development, as a resource for research and elective opportunities, and as an advocate for issues that arise both inside and outside of the hospital. The goal is for each resident to develop a strong personal and professional connection with a dedicated faculty member who will support them and guide them through the program. There are also designated faculty members representing a broad range of neurological and neuroscience subspecialties to help individual residents with career interests, fellowship applications and research projects. In addition, all residents meet with the program director semi-annually to discuss short- and long-term goals and to review personal accomplishments.

"The most striking

part of Mount Sinai's neurology residency program is the culture of unrelenting academic curiosity. *My* favorite example of Mount Sinai's dynamic learning style is our structured, close-theloop morning reports. Every morning, all the residents participate in discussing a new consult or admission from overnight, as well as following up on previously presented cases with an attending facilitator. I always come away from each session having learned at least 3 or 4 completely new facts about diagnostic workup or clinical exam findings or treatment options. More *importantly, the more* structured morning report style trickles down into the daily workflow, where residents are constantly discussing new, interesting cases with each other."

– Ling Pan, Class of 2019

Residency Program Curriculum and Conferences

Curriculum Topics

Neuroanatomy
Movement Disorders
Neuromuscular
• Epilepsy
• Headache
Critical Care Neurology
Pediatric Neurology
Vascular Neurology
Behavioral Neurology
Neuro-Immunology
Neuro-Oncology
CNS infections
Neuro-Otology
Neuropathology
Neuroradiology
Practice and Contemporary Issues
Wellness Strategies

The core curriculum is supplemented by a series of conferences and special sessions all designed to deepen the residents' knowledge and ability as a clinician and teacher, while enhancing communication, collaboration, and coping skills.

Neurology Residency Curriculum and Lecture Series

The goals of the curriculum run in parallel with that of the program: to train well-rounded clinicians, nurture their humanistic values, and prepare them for leadership roles in their selected fields. Our dynamic learner-focused curriculum capitalizes on residents' experiences. clinical relevance of education material, and practicality, in addition to the expertise of the lecturer. The curriculum has been comprehensively refined through resident leadership to maximize resident engagement and learning, and our curriculum itself has been a focus of resident scholarship resulting in presentations at local and national meetings.

The core conferences take place weekdays at noon, and lunch is provided. The course is divided into four consecutive (seasonal) courses with advancing levels of academic complexity. In the summer, we begin with the basics of neurology practice and management of neurological emergencies. Orientation to research and development of research interests are also discussed. In the winter, the focus shifts to more complicated neurological conditions and management, integrated with advanced pathophysiology, neuroradiology and neuroanatomy. Finally, the spring course places a deeper emphasis on research, with an eye towards emerging and future trends in the field.

Each noon conference session includes both a lecture and a residentled boards-style question and answer session, meant to further engage residents and students in the material and offer teaching opportunities for the senior residents on the Teaching Resident block.

Throughout the year, many sessions are also dedicated to quality improvement initiatives, 'resident as teacher' modules, and a special emphasis on resident wellness. The well-being of our residents is paramount, and the goal of these sessions – as well as extracurricular events – is to help establish work-life balance, nourish healthy approaches, prevent burnout and reduce stress.

All conferences are video broadcasted to our affiliated sites (Elmhurst and the VA) and then stored in a digital AV library accessible via shared media storage.

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Outcomes from Mount Sinai's Neurology Residency Curriculum published in *Neurology*

"Choosing Mount Sinai was easy for me.

After completing a neurology subinternship here during my fourth year of medical school, I was struck by the passionate camaraderie and fierce curiosity shared by the residents, as well as by the extraordinarily competent and compassionate program leadership. What spoke to me most, however, was the program's perfect balance of high clinical *volume -- these residents* work hard, and really get to see everything --and robust culture of learning, to the point that Sinai's neurology curriculum is a model for programs nationwide. *I* know that by the end of residency I'll be prepared for any practice environment I wish to pursue."

- Mark Barber, Class of 2021

"In choosing a residency,

I was looking for a strong academic program that would also provide opportunities to care for underserved populations. While Mount Sinai is an world-renowned tertiary provider and neuroscience research institution, we care for the entire socioeconomic spectrum at clinical sites in some of the most diverse zip codes in the country, and the intersection between the Upper East Side and East Harlem. Just as importantly, Dr. Krieger's warmth and insight was apparent from the first meeting - we know he'll always be on our side!"

Veronica Peschansky, MD, PhD, Class of 2021

Residency Program Curriculum and Conferences (continued)

Conferences and Special Sessions

These conferences and special sessions complement the neurology residency curriculum. They are designed to provide residents ample opportunity to explore the subspecialties of neurology, hone their presentation and teaching skills, and establish a healthy work-life balance.

Division conferences:

With a focus on a subspecialty, these periodic events include neuromuscular rounds, stroke conference, stroke/ ED conference, neurocritical/ED conference, neurology/psychiatry conference, and stroke case conference.

Resident-focused Clinical Conferences: Include a twice-monthly Chief of Service Rounds and a monthly Continuum session.

Quality-improvement Conferences: Monthly quality assurance meetings and a quarterly outcomes conference.

Residents as Teachers: These modules teach the principles of adult learning, teaching skills, needs assessment and gap analysis, and delivering feedback.

Resident Wellness Days and Wellness Conferences: These events encourage practices that may assist in preventing burnout and promote discussion about emotional reactions to patient care and outcomes. Also – Yoga and exercise. "Many minds have come together to create this curriculum. They were motivated by the core belief that our medical education is a life-long process that should equally inspire and transform the learner as well as the teacher."

- Hazem Shoirah, MD, Chief Resident for Curriculum and Academic Affairs, 2014-2015

"The curriculum is meant to deliver and present the principles of neurology in an informative and enjoyable way, and allow the residents to take a proactive role in their education as well as in their professional development." - Anna Pace, MD, Chief Resident for Curriculum and Academic Affairs, 2016-2017

"The neurology curriculum has evolved to reflect advances in knowledge and practice in the field. Recent enhancements to the curriculum, particularly in the subspecialty areas of neurointervention, neuro-oncology, neuro-otology, and neurocritical care, are exciting new learning opportunities. Throughout this growth in academics, the program has also made resident health and wellness a priority, which helps further a culture of learning, development, and teamwork."

- Rory Abrams, MD, Chief Resident for Curriculum and Academic Affairs, 2018-2019

Affiliate Training Sites:

Elmhurst Hospital

Faculty

Director: Joseph Farraye, MD Mount Sinai Neurology Residency Alum

Michael Ng, MD Mount Sinai Neurology Residency Alum

Beth Rapaport-Pass, MD Mount Sinai Neurology Residency Alum

Hazem Shoirah, MD

Mount Sinai Neurology Residency and Endovascular Fellowship Alum

About the Hospital

Elmhurst Hospital is a 545-bed facility that serves an area of nearly one million people in the most ethnically diverse community in New York City. The neurology inpatient unit (B4) consists of 34 available medical beds on the fourth floor. There is also a 34-bed stepdown unit, shared by multiple specialties, available to the neurology service on the same floor (A4). Neurology patients who require intensive care are transferred to the closed 9-bed Medical Intensive Care Unit or 13 bed Surgical ICU. The Mount Sinai shuttle service provides convenient transportation to and from Elmhurst Hospital all day, every day. The hospital is also accessible by subway. Outpatient neurology faculty clinics are located in the faculty practice building where there are shared consultationexamination rooms.

The Elmhurst Clinic Resident rotates through the general neurology clinic and is supervised by the attendings covering those sessions. The neurophysiology suite on the second floor of the main hospital building houses an EEG procedure and reading room as well as a procedure room for NCS/EMG and autonomic studies.

In addition to the clinic rotation, residents rotate through the inpatient and consultation services at Elmhurst Hospital Center (two month-long rotations through each service, for a total of 6 months) during the PGY-3 year, exposing the resident to extraordinary cultural diversity as well as neurological disorders. Elmhurst, Queens, comprises one of the most culturally diverse populations in the United States, and the patients at Elmhurst Hospital Center come from across the globe, speaking a multitude of languages and dialects, and bringing with them their particular beliefs and customs. The neurology faculty members at Elmhurst Hospital have made a lifetime study of communicating effectively with these patients and are vested in helping the neurology residents develop their own cultural competence through modeling as well as informal and case-based teaching. To assist in language translation, Elmhurst Hospital employs a team of in-house interpreters trained in medical interpretation. The hospital offers a contracted phone medical translation service in 140 languages, including Swahili, Tagalog, Hmong, Basque, and Navajo. The neurology rotations at Elmhurst Hospital provide a uniquely immersive education not just in managing, but in communicating effectively about, complex and acute neurological ailments to this diverse patient population.

The hospital's mission is to provide care of the highest quality regardless of ability to pay. The neurology residents develop their skills in working with the underinsured, uninsured, and often undocumented patients at Elmhurst Hospital by collaborating closely with the social services and outreach offered to the surrounding community. Residents learn how to navigate the healthcare system to put in place the best plans for discharge, rehabilitation, and follow-up for patients, including working to obtain emergency Medicaid for patients who otherwise could not obtain the ongoing treatment they require.

"The diversity of the patient population and models for care *delivery are unmatched* through the experience at Sinai, Elmhurst, and the VA. Through the Mount Sinai Health System, we receive tertiary referrals for the most complex Neurologic cases. After *learning the foundations* of neurology in the most resource rich environment at Mount Sinai during the junior year, the opportunity to practice in a resource poor city hospital for a PGY-3 year *is exceedingly rewarding* and valuable."

- Laura Stein, Class of 2017 Stroke Fellow, 2018

Affiliate Training Sites:

The Bronx VA Hospital

Faculty

Director: Gregory Elder, MD

Dongming Cai, MD, PhD

Martin Gluck, MD Mount Sinai Neurology Residency Alum

Noam Harel, MD, PhD

Maria Muxfeldt, MD

Ruth Walker, MB, ChB, PhD Mount Sinai Movement Disorders Fellowship Alum

Mark Sivak, MD Mount Sinai Neurology Residency Alum

Jill Wiener, MD Mount Sinai Neurology Residency Alum

Allison Navis, MD Mount Sinai NeuroAIDS Fellowship Alum

Meet our friendly VA robot, TUG.

About the Hospital

The James J. Peters VA Medical Center in the Bronx contains 311 hospital and 120 nursing home beds. There is no neurology inpatient unit at the Bronx VA, but the neurology team consults on patients in every part of the hospital. The outpatient clinic space, home to the neurology resident clinic and the faculty general and subspecialty neurology clinics, is located on the third floor of the main hospital. It consists of faculty, house staff, and support staff offices; six shared consultation-examination rooms; a conference room, and two EEG procedure rooms. The Mount Sinai shuttle service provides convenient transportation to and from the Bronx VA all day, every day. The hospital is also accessible by subway.

Within the VA Department of Neurology, there is an EEG laboratory with one procedure room. Nerve conduction studies and EMG are available through the Department of Rehabilitation Medicine. Radiographic facilities include MRI, CT and PET scanners, as well as ultrasonography. The general clinical laboratory is comprehensive. Angiographic and neuropathological services are offered through the Manhattan VA Hospital. The VA electronic medical system is an integrated medical record and ordering platform, and radiographic and laboratory results are available in real-time via this system. The Bronx VA uses the same comprehensive, integrated electronic medical recordordering system in use throughout the United States VA system, allowing access to patient information from

other VA hospitals across the country. This paperless system is utilized in both the inpatient and outpatient setting.

The Bronx VA Hospital has a 5-story facility dedicated solely to research attached to the main hospital. Neurological research at this facility includes both basic science and clinical studies into spinal cord injury, movement disorders, Alzheimer's disease, alcoholism, and traumatic brain injury. Residents are welcomed and encouraged to work with investigators at the Bronx VA during their elective, and several faculty members at the Bronx VA have active joint-appointments at Mount Sinai.

"I have nothing but consistent praise from other services for our resident run consult service...working with the Mount Sinai residents is the best part of my job".

- Gregory Elder, MD, Director, Bronx VA, Neurology

Patient Advocacy

Patient advocacy is paramount at every training site. At Mount Sinai, residents advocate to obtain appropriate care and follow-up for patients, including Emergency Medicaid when necessary. At Elmhurst Hospital, working with a predominantly immigrant patient population allows residents to collaborate closely with the social services and outreach offered to the community. Residents learn how to navigate the healthcare system to bring about the best plans for discharge, rehabilitation, and follow-up for patients, including obtaining emergency services. At the Bronx VA, the residents are trained to guide the veterans in obtaining the care they need within the VA system, especially in war and trauma-related physical and psychiatric injuries.

Neurology Research Residency

If you have outstanding bench, computational or clinical research background and are looking to further develop these skills, our NIH-supported R25 research residency program is a good fit.

We can individualize the program to meet your needs. The program meets all Accreditation Council for Graduate Medical Education-Residency Review Committee (ACGME-RRC) requirements for clinical training and for Flexible Training in Neurology. Those requirements are a minimum of 18 months full-time equivalent of clinical adult neurology, including:

- six months of inpatient experience in adult neurology
- six months (full-time equivalent) of outpatient experience in clinical adult neurology, including a resident longitudinal/continuity clinic
- three months of elective time
- three months in clinical child neurology
- one month in clinical psychiatry

Director: **Stuart Sealfon, MD** Email: stuart.sealfon@mssm.edu

Curriculum

A typical program would be:

PGY-2 Year

You follow the standard PGY-2 clinical rotations. At the same time, you meet with the Research Resident Advisory Committee (RRAC) quarterly to choose a mentor and develop your research education and career plan. In addition, you begin a directedreading tutorial, working with your mentor, to familiarize yourself with your research area. You can switch mentors if need be.

PGY3 Year

Your clinical rotations follow the same PGY-3 curriculum as residents not considering the research track. You continue to meet with your mentor for the reading tutorial and with the Research Residency Requirement Committee to review your progress and refine your plans. Most residents apply to attend the American Neurological Association's Translational and Clinical Research Course

PGY4 Year

This year, you spend six months doing clinical rotations, fulfilling ACGME requirements, and six months with research to generate the data you'll need to apply for a National Institutes of Health K Award. In addition to meeting with your mentor regularly, you attend grant-writing workshops, a postdoctoral office career development seminar series, and a National Institute of Neurological Disorders and Stroke research program. We anticipate that you will make a presentation at a scientific meeting and draft specific aims for a K Award application.

"When I was interviewing for residency, I had just finished a difficult MD, PhD and was pregnant with my first child. At Mount Sinai, I found faculty and residents *committed to rigorous* clinical training in *Neurology, cutting edge* research, as well as humanistic practice towards patients and each other, including a commitment to resident wellness. I am grateful to be part of this wonderful program!"

Helaina Lehrer, MD, PhD Class of 2021

Physician Scholars Residency Plus PhD Program

In 2017, the Icahn School of Medicine at Mount Sinai received over \$16 million in National Institutes of Health (NIH) funding – an amount nearly double its 2014 funding level. Over the past 3 years, the Icahn School of Medicine at Mount Sinai has ranked #11, #12, and #15 among all Departments of Neurology in the amount of NIH funding.

The Friedman Brain Institute

is an interdisciplinary clinical and research hub that is defining the mechanisms behind brain and spinal cord disorders and translating those findings into preventative or restorative interventions.

In 2017, the Department of Neurology's NIH funding was over \$16 million, nearly doubling since 2014. The Physician Scholars PhD Program trains Medical Doctorates to become translational researchers. You also have the possibility of receiving substantial financial advantages through the National Institute of Health (NIH) Loan Repayment Program.

The program meets the needs of residents interested in pursuing a PhD in bench, computational, or clinical neuroscience research, and we can easily individualize the program. If you wish to join the Physician Scholars Residency plus PhD Program, you must match for a regular residency slot, and then apply for the graduate program during your first year of neurology (PGY-2).

We work with the Icahn School of Medicine at Mount Sinai's Graduate School of Biomedical Sciences to manage all PhD-related aspects of the program, including academic training, research mentoring, and career development. We register you as a neurology resident and pay you through a combination of The Mount Sinai Hospital house staff salaries and National Institute of Mental Health stipends. In years five through eight, when you are involved primarily in research, you are eligible to apply for the NIH Loan Repayment Program.

The program offers extensive research opportunities within the department and throughout the institution. Typically, our incoming residents have a strong background in scholarship and publications, many in high-impact journals including the *Proceedings of the National Academy of Science*, the *Journal of Neuroscience*, and the *New England Journal of Medicine*.

Curriculum

The Physician Scholars Residency Plus PhD Program satisfies all of the Accreditation Council for Graduate Medical Education Residency Review Committee curricular requirements for clinical training and for flexible training in neurology. We individualize the program to meet your specific needs.

Students already accepted into the Neurology Residency program apply in their first year of the residency (PGY-2) to the Physician Scholars Residency Plus PhD Program. There is no separate application.

We offer faculty mentorship by luminaries in the fields of neuroscience, neurology, and computational systems biology as well as contact with developing research institutes and facilities across the medical center.

Director: **Stuart Sealfon, MD** Email: stuart.sealfon@mssm.edu

Patrick R. Hof, MD Regenstreif Professor and Vice-Chair Fishberg Department of Neuroscience Email: patrick.hof@mssm.edu

Resident Life in New York City

What We Do When We're Not at Work...

Nature

We live in one of the most populated cities in the US, but finding fresh air is easy. Some examples: Central Park comprises more than 800 acres of lawns, athletic fields and forests, and the Jacqueline Kennedy Onassis Reservoir (pictured below) and the spectacular Conservatory Garden are just steps from the hospital's doors. Rockaway Beach and its newly rebuilt boardwalk are a 45 minute, \$3 ferry ride from Manhattan, and the Jersey Palisades just a short bike ride over the George Washington Bridge.

Food

We could make a whole separate brochure for this topic. A few of our favorites: Smorgasburg, an outdoor food market with over 100 vendors that's open April through October in multiple locations throughout the city; Rabbithole, a Williamsburg favorite with great drinks and pancakes worth waking up for; Pio Pio, a tiny hole-inthe-wall Peruvian place a few blocks from the hospital; Earl's Beer and Cheese, a local bar where you'll run into half of the hospital on any given night and enjoy one of the best grilled cheese sandwiches in the city. For those with a sweet tooth, you can find cronuts, cookie dough served by the

scoop, and at least 20 different flavors of frozen yogurt within a 10-minute walk from the hospital. Many local food vendors offer discounts for Sinai employees.

Sports

Mets fans? How about the Yankees? Knicks? Jets? Rangers? We also have access to discounted tickets to the US Open (staffed by Mount Sinai doctors), and have a blast supporting our friends and colleagues in the New York City Marathon each fall. Mount Sinai offers free membership to the gym and pool at the nearby 92nd Street Y, which is also host to weekly concerts, lectures, and readings.

Entertainment

There are concerts nearly every night of the week, from free NYC Philharmonic concerts in the park, to the Red Hot Chili Peppers at Madison Square Garden, to Taylor Swift at Jones Beach. Broadway goes without saying (we can get discounted tickets to shows, too). The city is also home to some of the best jazz clubs in the world, comedy clubs that cost next to nothing and often host some of the biggest names in the business, the NYC Ballet, and live tapings of shows like The Daily Show and Saturday Night Live. (continued)

"I left the warmth

and familiarity of the south because I found a different warmth and familial atmosphere reflected in the Mount Sinai neuro group. Here is a rare community that balances the tension between personal commitments, patient care in a high volume environment, and uncompromising academics with grace, humor, and an eagerness to embrace necessary changes. In other words - it's really fun, everyone is super nice, we learn a lot directly from some of the Great Minds of Neuro, and when legitimate complaints arise it seems *like change actually* happens."

- Noona Leavell, Class of 2019

Resident Life in New York City

Everything Else

A never-ending list, including: Museum Mile, with world-renowned museums such as the Guggenheim, the Metropolitan Museum of Art, the Jewish Museum, the Museum of the City of New York, Museo del Barrio, the Neue Galerie, the Cooper Hewitt, and the Africa Center. Plus the MoMA, the Whitney, and the Rockefeller Center Christmas Tree. Walking the Brooklyn Bridge and the High Line. Shopping and eating at Chelsea Market. Pastrami at Katz's Delicatessen. Studying in the Rose Reading Room at the New York Public Library. Ice skating in Bryant Park.

You won't be bored, we promise.

"I found genuine happiness

in the residents in the pre-interview dinner and interview day residents vigorously shared interesting clinical cases, life in New York City, and their growth by learning from mentors and each other, which made me deeply believe this program had already successfully created an environment that makes residents thrive. I started PGY-2 in July of 2016 and feel the training environment is even more collegial, supportive, and highly resident-oriented than I imagined." - Roy Lin, Class of 2019

Resident Interests

Academic Interests

Clinical Research

Roy Lin Liz Pedowitz Kenneth Leung Brian Kim Ali Thaler Gabriela Tantillo Nishant K. Mishra Veronica Peschansky Mark Barber

Bench Research

Veronica Peschansky Bridget Mueller Brian Kim

Opportunities for MD/PHDs

Bridget Mueller Nishant K. Mishra Veronica Peschansky Helaina Lehrer

QI/Patient Safety Liz Pedowitz

Kenneth Leung Mallory Roberts Gabriela Tantillo Rory Abrams Bridget Mueller Rory Abrams Bridget Mueller Amy Postelnik Veronica Peschansky Marianna Atiya Helaina Lehrer Mark Barber Helen Han

Global Health

Noona Leavell Nishant K. Mishra Veronica Peschansky Helen Han

Entrepreneurship in

Medicine Ben Brush Brian Kim

Clinical Interests & Fellowships

Stroke Brian Kim Ali Thaler Gabriela Tantillo Nishant K. Mishra

Epilepsy

Gabriela Tantillo Amy Postelnik

Neuromuscular

Liz Pedowitz Rory Abrams Kenneth Leung Helen Cheung Mallory Roberts

Neuro-Critical

Care/Neuro ICU Ben Brush Brian Kim Veronica Peschansky

Movement Disorders Ling Pan Roy Lin

Neuroimmunology/MS

Ling Pan Kenneth Leung Brian Kim Amy Postelnik Helen Han

Headache

Bridget Mueller Ali Thaler Noona Leavell Amy Postelnik Mark Barber

Cognitive/Behavioral

Noona Leavell Roy Lin Nishant K. Mishra

Neuro-Oncology

Josh Friedman Marianna Atiya

Neuro-Hospitalist

Ling Pan Mallory Roberts Gabriela Tantillo Ben Brush Rory Abrams Amy Postelnik Marianna Atiya Helen Han

Visiting Doctors/

Home Visits Liz Pedowitz Mallory Roberts Amy Postelnik Marianna Atiya

Personal Interests

Running

Mallory Roberts Ben Brush Ali Thaler Bridget Mueller Liz Pedowitz Gabriela Tantillo Nishant K. Mishra Veronica Peschansky Mark Barber

Biking/Spinning

Ben Brush Liz Pedowitz Ali Thaler Marianna Atiya

Tennis

Liz Pedowitz Kenneth Leung Brian Kim Veronica Peschansky Marianna Atiya

Hiking

Ben Brush Brian Kim Mallory Roberts Amy Postelnik Veronica Peschansky Marianna Atiya Helaina Lehrer

Swimming

Roy Lin Ali Thaler Brian Kim Nishant K. Mishra Helaina Lehrer

Music

Noona Leavell Bridget Mueller Ling Pan Mallory Roberts Gabriela Tantillo Ben Brush Marianna Atiya Mark Barber Helen Han

Yoga

Liz Pedowitz Mallory Roberts Helaina Lehrer

Skiing/Snowboarding/ Ice Skating

Liz Pedowitz Brian Kim Helen Cheung Veronica Peschansky Marianna Atiya

Dance

Ben Brush Veronica Peschansky

Opportunities for Clinician Educators Helen Cheung Kenneth Leung Ali Thaler Ben Brush

Art

Noona Leavell Bridget Mueller Roy Lin Mallory Roberts Nishant K. Mishra Marianna Atiya Helen Han

Cooking

Ali Thaler Gabriela Tantillo Ben Brush Helen Cheung Amy Postelnik Mark Barber

Wine Tasting

Gabriela Tantillo Liz Pedowitz Amy Postelnik Mallory Roberts

Reading/Book Clubs

Noona Leavell Ali Thaler Gabriela Tantillo Liz Pedowitz Nishant K. Mishra Marianna Atiya Helaina Lehrer Mark Barber Helen Han Weight lifting Rory Abrams

Life in New York City

Discovering Restaurants/Bars

Ben Brush Ling Pan Liz Pedowitz Noona Leavell Roy Lin Kenneth Leung Ali Thaler Gabriela Tantillo Ben Brush Helen Cheung Amy Postelnik Marianna Atiya Mark Barber

Exploring NYC Parks

Bridget Mueller Liz Pedowitz Noona Leavell Roy Lin Kenneth Leung Brian Kim Ali Thaler Mallory Roberts Gabriela Tantillo Ben Brush Helen Cheung Marianna Atiya Helaina Lehrer Mark Barber

Museums

Bridget Mueller Ling Pan Noona Leavell Rory Abrams Roy Lin Mallory Roberts Kenneth Leung Brian Kim Gabriela Tantillo Ben Brush Marianna Atiya Helaina Lehrer Mark Barber Helen Han

Sporting Events

Liz Pedowitz Kenneth Leung Brian Kim Ali Thaler Helen Han

Concerts

Noona Leavell Roy Lin Ali Thaler Mallory Roberts Gabriela Tantillo Ben Brush Amy Postelnik Helen Han

Theater

Mark Barber Helen Han

Finding Free

arks Events

Brian Kim Gabriela Tantillo Ben Brush Amy Postelnik Veronica Peschansky Helen Han

Trivia

Liz Pedowitz Veronica Peschansky

Personal/Life Expertise

Balancing Residency

and Family Life Bridget Mueller Helaina Lehrer Rory Abrams Ling Pan Amy Postelnik

Maintaining Work/Life Balance

Bridget Mueller Noona Leavell Ling Pan Liz Pedowitz Rory Abrams Brian Kim Ali Thaler Ben Brush Amy Postelnik Mark Barber

Being an International

Resident Farinaz Safavi Roy Lin Nishant K. Mishra

Moving to NYC for the Non-New Yorker

Noona Leavell Mallory Roberts Kenneth Leung Helen Cheung Veronica Peschansky

LGBTQ at Sinai

Roy Lin Mark Barber

Having a Pet During Residency

Bridget Mueller Mallory Roberts Helen Cheung Gabriela Tantillo Amy Postelnik

Prelim Year at Mount Sinai

Ali Thaler Josh Friedman Bridget Mueller Liz Pedowitz Helaina Lehrer

Prelim Year in NYC

(but not at Mount Sinai) Rory Abrams Roy Lin Ling Pan Gabriela Tantillo Helen Cheung Amy Postelnik Marianna Atiya Mark Barber

Prelim Year Outside of NYC

Ben Brush Kenneth Leung Brian Kim Mallory Roberts Nishant K. Mishra Veronica Peschansky Helen Han

Religious Life in NYC

Helaina Lehrer - Jewish Helen Han

Mount Sinai Neurology Residency Graduates

Class of 2018

Nisali Gunawardane Clinical Neurophysiology/EEG Fellow at Mount Sinai

Jonathan Gursky Clinical Neurophysiology Fellow at Montefiore

Peter Jin Neuromuscular Disorders Fellow at Mount Sinai

Leila Montaser Kouhsari Movement Disorders Research Fellow at Columbia University

Kimberly Kwei Movement Disorders Fellow at Columbia University

Christopher Langston Multiple Sclerosis Fellow at Mount Sinai

Kyle Rossi Epilepsy Fellow at Beth Israel Deaconess

Christine Stahl Movement Disorders Fellow at NYU

Class of 2017

Rebecca Brown: Neuro-Oncology Fellow at Memorial Sloan Kettering

Noreen Bukhari: Movement Disorder Fellow at Duke University School of Medicine

Benjamin Cunningham: Epilepsy Fellow at NYU

Svetlana Faktorovich: Clinical Neurophysiology Fellow at Mount Sinai (MSH)

Achillefs Ntranos: Multiple Sclerosis Fellow at Mount Sinai (MSH)

Anna Pace: Headache Medicine Fellow at Mount Sinai (MSH)

Laura Stein: Stroke Fellow at Mount Sinai (MSH)

Elina Zakin: Neuromuscular Fellow at Mount Sinai (MSH)

Class of 2016 Edward Bahou:

Neurophysiology Fellowship at Mount Sinai

Rachel Brandstadter: Multiple Sclerosis Fellowship at Mount Sinai

Roger Cheng: Neurocritical Care Fellowship at University of California San Francisco (UCSF) Itay Keshet: Neurocritical Care Fellowship at Northwell Health

Jillian Rosengard: Epilepsy Fellowship at Einstein/Montefiore

Yaojie (Jen) Wu: Neuromuscular Disorders Fellowship at Mount Sinai

James (Jake) Young: Epilepsy R25 Fellowship at Mount Sinai; Instructor at Mount Sinai

Pengfei (Phil) Zhang: Headache Fellowship at Mount Sinai West

Class of 2015 Arash Fazl: Movement Disorders Fellowship at NYU

Asaff Harel: Multiple Sclerosis Clinical Fellowship at Mount Sinai

Sam Horng: Multiple Sclerosis R25 Research Fellowship at Mount Sinai; Instructor at Mount Sinai

Michelle Kaku: Neurophysiology Fellowship at Mount Sinai

Chelsea Meskunas: Headache Medicine Fellowship at University of California Los Angeles (UCLA)

Sirisha Nandipati: Movement Disorders Fellowship at University of California San Diego (UCSD)

Anil Ramineni: Neurocritical Care Fellowship at Mount Sinai

Hazem Shoirah: Stroke Fellowship at University of Pittsburgh; Interventional Neuroradiology at Mount Sinai

Class of 2014

Alexandra Brown: EMG/Clinical Neurophysiology Fellowship at Mount Sinai

Jennifer Chen: Movement Disorders Fellowship at University of California San Francisco (UCSF)

Sara Hefton: Neurocritical Care Fellowship at University of Maryland

Patrick Kwon: Headache Fellowship at Einstein/Montefiore; Neurophysiology Fellowship at Mount Sinai

Jose Montes-Rivera: Epilepsy Fellowship at Mount Sinai

Kim Musleh: Sleep Neurology Fellowship at University of Chicago

Kara Stavros: Neuromuscular Disorders Fellowship at Mount Sinai

Jessica Walter: Epilepsy Fellowship at Rush University Medical Center

Class of 2013

Wamda Ahmed: Neurocritical Care Fellowship at Emory

Rebecca Farber: Multiple Sclerosis Fellowship at Mount Sinai

Erin Manning: Neuromuscular Disorders Fellowship/Sports Neurology at Hospital for Special Surgery

Douglas Mayson: Vascular Neurology/ Stroke Fellowship at Mount Sinai

Amar Patel: Movement Disorders Fellowship at Mount Sinai

Sonja Schuetz: Neurophysiology/ Research Fellowship at Mount Sinai

Sarah Zubkov: Epilepsy Fellowship at Mount Sinai

Class of 2012

Clara Boyd: Neurobehavior Fellowship at Columbia University; Stroke Fellowship at Mount Sinai

Daniela Guilliam: Sleep Neurology Fellowship at University of Miami

Ramit Panara: EMG/Clinical Neurophysiology Fellowship at The Ohio State University

Ritesh Ramdhani: Movement Disorders Fellowship at Mount Sinai

Jag Shetty: Sleep Neurology Fellowship at University of Michigan

Noa Sheikin: Epilepsy Fellowship at New York University (NYU)

Class of 2011 Adelene Jann: Headache Fellowship at Roosevelt Hospital

Maya Katz: Movement Disorders Fellowship at University of California San Francisco (UCSF)

Beth Rapaport: Epilepsy Fellowship at Cornell; on faculty at Elmhurst Hospital Center

Susan Shin: Neurophysiology Fellowship at Mount Sinai; on faculty at Mount Sinai

Ji-Yeoun (Jenna) Yoo: Epilepsy Fellowship at Yale University; on faculty at Mount Sinai

Svetlana Zhovtis: Multiple Sclerosis Fellowship at NYU/Hospital for Joint Diseases

Class of 2010

Camilla Kilbane: Fellowship in Movement Disorders at University of California San Francisco (UCSF)

Nils Petersen: Fellowship in Stroke/ Critical Care Neurology at Columbia Presbyterian

Alexander Shtilbans: Fellowship in Movement Disorders at Columbia Presbyterian

Perry Stevens: General Neurology Practice

Anila Thomas: Neurophysiology Fellowship at Mount Sinai

Class of 2009

Megan Alcauskas: Instructor in Neurology at Mount Sinai; Headache and IOM

Nora Chan: Fellowship in Movement Disorders; University of California Los Angeles (UCLA)

Jennifer Elbaum: Fellowship in Sleep Medicine; University of Pennsylvania

Michelle Fabian: Fellowship in Multiple Sclerosis at Mount Sinai; on faculty at Mount Sinai

Ellen Kotwas: Fellowship in Neurophysiology at NYU

Julie Robinson: Fellowship in Epilepsy at Albert Einstein

Class of 2008 Snigdha Bollampally: Fellowship in Neurophysiology at NYU

Kathryn Kirchoff: Fellowship in Stroke at Mount Sinai

Suzee Lee: Fellowship in Behavioral Neurology at University of California San Francisco (UCSF)

Jignasa Patel: Fellowship in Epilepsy at NYU

Alina Rabinovich: MS Fellowship at UMDNJ

Igor Zilberman: Fellowship in Neurophysiology at SUNY Stonybrook Class of 2007

Colum Amory: Fellowship in Stroke at Mount Sinai

Madeline Fields: Fellowship in Epilepsy at NYU; on faculty at Mount Sinai

Danielle Geraldi-Samara: Fellowship in Neurophysiology at Mount Sinai

Halinder Mangat: Fellowship in Critical Care Neurology at Florida

Izabella Rozenfeld: Fellowship in Neurophysiology at NYU

Jonathan Vogel: Fellowship in Interventional Pain Management at Mount Sinai

Class of 2006

Herbert Gregg: Headache Fellowship at Ohio

Stephen Krieger: Fellowship in Multiple Sclerosis at Mount Sinai; on faculty at Mount Sinai

Michael Ng: Fellowship in Epilepsy in California, on faculty at Elmhurst Hospital Center

Jessica Robinson: Fellowship in Neurophysiology/Neuro-AIDS at Mount Sinai; on faculty at Mount Sinai

Laurence Ufford: General Neurology Practice

Emma Weiskopf: Fellowship in Epilepsy at NYU

Class of 2005

Ezra Cohen: Fellowship in Neurophysiology at NYU

Tracy DeAngelis: Fellowship in Multiple Sclerosis at Mount Sinai

Adam DiDio: Fellowship in Neurophysiology at Mount Sinai

Leslie Goldfein: Fellowship in Neurophysiology at NYU and Specialty training in MS at Columbia University

Gena Romanow: Fellowship in Epilepsy at Maryland

Norika Malhado: Fellowship in Movement Disorders at Mount Sinai

Neurology Fellowship Training Programs

Vice Chair of Education Aaron Miller, MD

Mount Sinai offers a competitive array of oneand two-year Fellowship Training Programs.

In the last few years, new subspecialty fellowships have been added in neuromuscular disease, epilepsy, headache, behavioral neurology and neuropsychiatry, and neurogenetics to complement outstanding fellowships in multiple sclerosis, movement disorders, cerebrovascular disease, neurocritical care, and neurophysiology.

Graduates of these fellowship programs typically have many employment offers, including academic, private practice, and other research opportunities.

Behavioral Neurology and Neuropsychiatry Fellowship

The Division of Cognitive Health offers a one- or two-year fellowship in behavioral neurology. The program is ACGME-accredited and provides training in the management of patients with neurobehavioral disorders in the Department of Neurology. The curriculum is flexible and is based on a fellow's background and interests.

The program offers a rich clinical exposure to a variety of cognitive and neurodegenerative disorders including but not limited to Alzheimer's disease, mild cognitive impairment, vascular dementia, frontotemporal dementia, primary progressive aphasia, Lewy body disease, normal pressure hydrocephalus, attention deficit hyperactivity disorder, and traumatic brain injury. Fellows also have exposure to cognitive disorders common in other neurological disorders, including amyotrophic lateral sclerosis, Parkinson's disease, and epilepsy.

Under one-to-one supervision with the Center for Cognitive Health faculty, fellows actively participate in the evaluation, diagnosis, and management of patients. Fellows have the opportunity to follow patients over the course of their illness and collaborate with other neurology subspecialties, psychiatry, neurosurgery, social work, neuropsychology, diagnostic neuroradiology, nuclear medicine, and the National Institute on Aging-**Designated Alzheimer Disease** Research Center based in the Department of Psychiatry. In addition, fellows are responsible for inpatient

consultations, home visits, education of residents and medical students, and will participate in clinical trials and research projects.

Following completion of the program, fellows are eligible to sit for the board certification examination in Behavioral Neurology by the United Council of Neurologic Subspecialties (UCNS) in Behavioral Neurology & Neuropsychiatry.

Director:

Sam E. Gandy, MD, PhD Email: samuel.gandy@mssm.edu

Cerebrovascular Disease-Stroke Fellowship

We offer a one- or two-year fellowship in cerebrovascular disease. The first year of training is an Accreditation Council for Graduate Medical Education-approved vascular neurology program. Fellows develop expertise in the management of acute cerebrovascular disease while assisting in directing the care of patients on the stroke service, including those patients in the eightbed Gustave L. Levy Acute Stroke Unit and the Neuroscience Intensive Care Unit. In addition, fellows obtain training in transcranial and carotid Dopplers and spend time in neuroradiology.

Fellows lead a weekly stroke clinic under the direction of Dr. Horowitz and spend two or three months each year as the stroke fellow at Mount Sinai Beth Israel, Mount Sinai St Luke's, or Mount Sinai West in the stroke division.

Mount Sinai is a New York State Department of Health-designated and Joint Commission-certified stroke center. Fellows also attend a weekly vascular neurology conference in conjunction with the Departments of Neurosurgery and Neuroradiology. Fellows participate in ongoing federally funded neuroepidemiologic and clinical research, including acute interventional trials. Fellows have the opportunity to conduct research in the department's noninvasive vascular laboratory and elsewhere. During the optional second year of the program, fellows can focus more heavily on research activities. Fellows may obtain additional research experience in the StrokeNet Research Training Program, which includes regular educational webinars, mentorship from national leaders in stroke research, and focused local research projects with local mentorship and assistance.

Program Director:

Mandip Dhamoon, MD, DrPH Email: mandip.dhamoon@mssm.edu

" I have been continually impressed by the quality and

dedication of our Fellows in Clinical Neurophysiology and Neuromuscular Diseases, including their transformation from Neurology Residency Graduates to accomplished Neuromuscular Specialist clinicians. Not infrequently, their digging into a complex history, hard work, and insights have led to the determination of a diagnosis

that had eluded me."

- David M. Simpson, MD, Director of the Division of Neuromuscular Diseases

Movement Disorders Fellowship

The Mount Sinai Medical Center Department of Neurology offers a fellowship in movement disorders that is a one- to two-year program (non-ACGME accredited). It focuses on training fellows to become academic movement disorder specialists with expertise in diagnosing and managing Parkinson's disease, the atypical parkinsonian syndromes, dystonia, tremors, tics and Tourette's syndrome, chorea, ataxia, and other rare movement disorders. Fellows receive comprehensive training in deep brain stimulation (DBS) at the largest DBS center in the northeast as well as significant exposure to the clinical applications of botulinum toxin injections. The Center collaborates with the Fishberg Department of Neuroscience, as well as the Departments of Neuropathology, Functional Neurosurgery, the Center for Vertigo and Balance, and Genetics.

Fellows work directly with clinical attendings during the first year of the program. During that time, fellows are immersed clinically, evaluating and managing a wide variety of patients. Fellows also learn to identify and evaluate prospective candidates for DBS as well as actively participate in stimulation programming. Fellows see patients with the faculty in the Movement Disorders Center, attend the bi-monthly movement disorder clinic, and make monthly visits to the James J. Peters Veterans Affairs Medical Center in the Bronx. The second year of the program is optional and is decided upon with the faculty midway through the first year. It is tailored towards expanding research experience (e.g., basic science, translational research, clinical trials) initiated during the first year of fellowship. Fellows with particular interest in neuromodulation will gain exposure to intraoperative assistance during DBS surgery in their second year.

Fellows are expected to read widely in the movement disorder literature, take a proactive role in our clinical and research activities, help mentor our residents and students, and prepare and present the results of their work at national meetings such as the American Academy of Neurology Annual Meeting and the annual conference of the International Parkinson and Movement Disorders Society. During the first year of the program, fellows attend the **Comprehensive Review of Movement** Disorders for the Clinical Practitioner in Aspen, Colorado, which offers educational opportunities as well as the chance to meet fellows and attendings from around the country. During both years of the program, fellows regularly attend conferences within the division including weekly video rounds where videos of patients are discussed, bi-weekly research meetings, monthly interdisciplinary neurosurgery conferences with Mount Sinai Beth Israel, monthly journal clubs, and weekly neurology Grand Rounds.

Paul E. Greene, MD Email: paul.e.greene@mssm.edu

Multiple Sclerosis Fellowship

The two- or three-year fellowship program trains fellows to become clinicians with expertise in the diagnosis and management of patients with demyelinating disease. Fellows learn about designing clinical trials, analyzing the results, and implementing the studies. Fellows gain exposure to a large number of multiple sclerosis (MS) patients of varying ages, disease courses, and severity. Currently, we see approximately 6,000 followup patients and 500 new patients each year. Typically, fellows follow patients over the course of their illness, monitoring their response to treatments for acute exacerbations and to disease-modifying therapies.

In addition to doing the initial workup and following patients, fellows are the principal physician for these patients, under the supervision of the attending faculty, with fellows taking on increasing independence as appropriate. Fellows are also responsible for educating other house staff including neurology residents, interns, and medical students.

Fellows work with an interdisciplinary team of neuroradiologists, advance practice MS nurse practitioners, social workers, a clinical trial coordinating team, senior MS fellows, and a neuroimaging group. We have affiliations with members of the Neuroradiology, Rehabilitation, Urology, Psychiatry, Oncology, Neurophysiology, and Neuroophthalmology Departments as well. We also enjoy state-of-the

art magnetic resonance imaging facilities, including a 7T research magnetic resonance imaging scanner.

The fellowship has a strong research component. The Center participates in many clinical trials of new agents or new approaches to multiple sclerosis, including trials of disease-modifying agents for various forms of MS and clinically isolated syndrome, as well as trials of symptomatic therapies and treatment of acute exacerbations. Not only do we take part in multi-center clinical trials, but we also design and implement major studies and serve as the coordinating center for several more. By working on a clinical trial, fellows learn all aspects of clinical trial design, implementation, and analysis. They gain an understanding of the regulatory requirements of clinical trials (e.g., interactions with the Institutional Review Board, obtaining an investigational new drug exemption from the U.S. Food and Drug Administration) and have direct experience using the Kurtzke Expanded Disability Status Scale, the Multiple Sclerosis Functional Composite, and other scales often required by various protocols. Fellows

can expect to work with the clinical trial coordinators and clinical trial monitors who comprise our clinical research team. While this is a clinical fellowship,

fellows do have access to neuroimmunology and glial cell basic science laboratories, including those of Drs. Sam Horng and Patrizia Casaccia, both of whom have appointments within the Corinne Goldsmith Dickinson Center. Fellows acquire a thorough grounding in the basic neuroscience of demyelinating disease and a framework for translating basic science insights into clinical paradigms. In addition, a more MS basic research focused fellowship is available, as is a program leading to a Master's Degree in Clinical Research as part of the Clinical Curriculum Research Training Grant.

Fred Lublin, MD Email: fred.lublin@mssm.edu

"I completed medical school

and residency at Mount Sinai and have now embarked on my fellowship training at the CGD Center for Multiple Sclerosis at Mount Sinai. Mount Sinai provides a top-notch academic *experience for trainees* while also providing a friendly environment in which to learn and care for patients. This unique combination of characteristics, located in NYC, has made *me a long-standing* and proud member of the Mount Sinai community!"

 Rachel Brandstadter, Class of 2016 Multiple Sclerosis Fellow, 2018

Headache Medicine Fellowship

The Division of Headache Medicine has one of first UCNS-certified headache fellowships. Our oneyear fellowship is one of very few in the country that is approved by United Council for Neurological Subspecialties. We have integrated the study and treatment of headache medicine and pain medicine, which is also highly unusual. We have 3 headache sites, and the fellow rotates to all of these which increases exposure to a variety of conditions.

We offer comprehensive clinical training in a broad range of headache disorders including secondary headache syndromes, migraine and its multiple subtypes, tension headache, medication-overuse headache and other chronic headache forms, trigeminal autonomic cephalgias, and various facial pain syndromes. When you complete our program, you are board-eligible in headache medicine.

As a fellow, you explore a variety of services, including acupuncture, biofeedback, and intravenous infusions for acute headaches. In addition to providing performing inpatient, emergency room, and outpatient consultations, you also have the opportunity to train neurology residents, pain medicine fellows, and medical students and to help manage the headache clinic staffed by the neurology residents.

Research is also a key component of the fellowship. We anticipate that you will contribute to ongoing research in headache and development of new treatment protocols and participate in clinical trials. You may be able to author and coauthor research articles and to present at conferences.

Program Directors:

Mark W. Green, MD, FAAN Email: mark.green@mssm.edu

Neuromuscular Medicine Fellowship

Our one-year Accreditation Council for Graduate Medical Educationapproved fellowship qualifies fellows to take the American Board of Psychiatry and Neurology examination for Neuromuscular Medicine. We emphasize clinical neuromuscular diseases, nerve conduction studies/ electromyogram (NCS/EMG), and neuromuscular pathology, and offer ample opportunities to participate in clinical research.

During this fellowship, fellows assist our neuromuscular specialists in diagnosing and treating a variety of neuromuscular diseases, including motor neuron diseases, radiculopathies, plexopathies, neuropathies, myopathies, myasthenia gravis, and neuromuscular complications associated with AIDS. Fellows gain experience with comprehensive diagnostic testing, including NCS/EMG, skin biopsies with intraepidermal nerve fiber density evaluation, autonomic testing, and peripheral nerve ultrasound. Fellows participate in inpatient neuromuscular consultations.

The fellowship has a strong didactic component. We offer weekly neuromuscular pathology teaching conferences, biweekly neurophysiology lectures, monthly neuromuscular case conferences, and monthly journal clubs. We also assume that our fellow will participate in some of the many research projects going on in the center, some of which are funded by the National Institutes of Health. We strongly encourage Fellows to participate in clinical research projects as well.

Susan Shin, MD Email: susan.shin@mssm.edu

Neurophysiology (EEG/EMG Tracks) Fellowship

The program faculty includes neurologists and anesthesiologists trained in pain management, and faculty from the departments of psychiatry, otolaryngology, neurosurgery, neuropsychology, and facial pain dentistry. Our Accreditation Council for Graduate Medical Educationaccredited fellowship qualifies fellows to take the American Board of Psychiatry and Neurology examination for the subspecialty in Clinical Neurophysiology. Two tracks are offered: electromyography and electroencephalograms.

Electromyography (EMG) Track

This track emphasizes clinical electromyography and neuromuscular diseases, exposing fellows to the principles and practice of electroencephalography, evoked potentials, sleep medicine, autonomic physiology, intraoperative monitoring, central motor physiology, and electronystagmography. At our clinical neurophysiology laboratories, approximately 1,200 EMG examinations are performed. This breadth of exams enables fellows to observe and participate in a broad spectrum of procedures including neuromuscular ultrasound. botulinum toxin injections, motor unit analysis, and single fiber EMG. Electrodiagnosis is emphasized as an adjunct to clinical examination.

Fellows participate in outpatient and inpatient neuromuscular consultations and share responsibility for teaching the neurology residents and medical students who are rotating through the laboratories. An extensive teaching conference schedule, covering electrophysiology and nerve/muscle/ skin biopsy review, is offered.

Electroencephalograms (EEG) Track

The EEG track, which takes place at the Epilepsy Center, emphasizes interpreting electroencephalograms and managing patients with epilepsy, both medically and surgically. Fellows learn the principles and practice of clinical electromyography, neuromuscular diseases, evoked potentials, sleep medicine, autonomic physiology, and intraoperative monitoring.

Fellows participate in the outpatient epilepsy clinic and multidisciplinary surgical conferences and help teach neurology residents and medical students rotating through the laboratories. The program offers an extensive teaching conference schedule.

Program Director:

Madeline Fields, MD Email: madeline.fields@mssm.edu

Neurocritical Care Fellowship

The Mount Sinai Neurocritical Care Fellowship is a two-year training program accredited by the United Council of Neurological Subspecialties (UCNS). Fellows are trained in the direct management of subarachnoid hemorrhage, acute subdural hematoma, large ischemic stroke, and intracerebral hemorrhage, placing a strong emphasis on multimodality neuromonitoring. Fellows also provide care for patients with neuromuscular conditions requiring ventilator support, status epilepticus, complicated postoperative neurosurgical and ENT patients, meningitis, and patients with encephalitis.

Fellows gain proficiency in ultrasoundguided central venous and arterial line placement, pulmonary artery (PA) catheter placement, lumbar puncture, endotracheal intubation, ventilator management, electroencephalogram (EEG) interpretation, and bronchoscopy. By the end of training, fellows are expected to be competent in central line and arterial line placement, echocardiogram, ultrasound, endotracheal intubation, advanced airway management, bronchoscopy, and transcranial Dopplers. Fellows can elect to have 6 months of critical care EEG training under the supervision of epilepsy/EEG attendings during their Neurocritical Care Fellowship training. With another 6 months of supervised EEG experience after the fellowship, fellows are eligible to obtain the critical care EEG board by the American Board of Clinical Neurophysiology. Also offered are weekly critical care conferences, a statistics course, and research-oriented didactics. Fellows spend time on the Mount Sinai vascular service and elective time is available to pursue research interests or to rotate through other services such as neuroanesthesia, stroke, the medical ICU or Surgical Intensive Care Unit (ICU) with its line service.

Neha S. Dangayach, MD Email: neha.dangayach@mountsinai.org

Neuroendovascular Surgery Fellowship

The Neuroendovascular Surgery Fellowship Program aims to advance neuroendovascular medicine by training the next generation of physicians in neurological diseases, with a focus on neurovascular pathology. Candidates should be trained in either neurosurgery residency; neurology residency plus either stroke or critical care fellowship; or radiology residency plus neuroradiology fellowship.

The fellowship provides an exceptionally broad exposure to all aspects of adult and pediatric neuroendovascular surgery procedures, including the treatment of aneurysms, brain arteriovenous malformations, arteriovenous fistulas of the brain, tumors of the central nervous system, strokes, occlusive vascular diseases, revascularization, traumatic injury, maxillofacial vascular malformations, spinal compression fractures, and tumors.

Faculty and fellows are currently participating in numerous multicenter clinical trials related to acute stroke, aneurysms, and arteriovenous malformations. Fellows are subinvestigators on the clinical trials, trained on all protocols. Fellows have access to patient databases, allowing for both independent prospective and retrospective studies.

Basic science opportunities are also available within laboratories at The Mount Sinai Hospital and the Icahn School of Medicine at Mount Sinai.

Program Co-Directors:

Johanna T. Fifi, MD Email: johanna.fifi@mountsinai.org

J Mocco, MD Email: j.mocco@mountsinai.org

Epilepsy Fellowship

The Icahn School of Medicine at Mount Sinai offers an ACGMEaccredited one-year fellowship in Epilepsy. During the fellowship year, fellows are expected to achieve expertise in EEG interpretation and the clinical evaluation and management of epilepsy. Across the New York City campuses of the Mount Sinai Health System, epilepsy training exposure encompasses pediatric and adult inpatient and outpatient care.

In addition to video monitoring of adult seizure patients, the fellowship includes rotation through a dedicated pediatric epilepsy monitoring unit at the Kravis Children's Hospital. Fellows participate in the pre-surgical and surgical evaluation of pharmacoresistant epilepsy patients and have extensive exposure to stereo-EEG, cortical mapping procedures, and intracarotid amobarbital (Wada) tests. Fellows will gain expertise in advanced and minimally invasive therapeutic strategies such as the Responsive Neurostimulator implant and Laser Interstitial Thermal Therapy.

The fellow is expected to carry out and publish a research project with the support and guidance of the multidisciplinary epilepsy team of neurologists, neurosurgeons, neuropsychologists, neuroradiologists, and neuroscientists in the Friedman Brain Institute.

Jiyeoun Yoo, MD Email: jiyeoun.yoo@mssm.edu

Neuro-Otology and Neurogenetics Fellowship

The Neuro-Otology and Neurogenetics Division of the Neurology Department continues its long prominence in the vestibulocerebellar field.

The division seeks outstanding trainees for a one-year clinical fellowship training in neuro-otology and/or neurogenetics. Fellows rotate with faculty in the division, with opportunities to work with collaborators in neurology and other departments, including otolaryngology, neurosurgery, medical genetics, and others, tailored according to the interests and goals of the trainees.

Joanna Jen, MD, PhD Email: joanna.jen@mssm.edu

The Mount Sinai Hospital Neurology Teaching Faculty

H. Allison Bender, PhD, ABPP-CN

Assistant Professor of Neurology, and Psychiatry Director of Neuropsychological Services Epilepsy Program

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Assistant Professor of Neurology Center for Cognitive Health

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Harry Ramos, MD

Assistant Professor of Geriatrics and Palliative Care Center for Cognitive Health

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Jiyeoun Yoo, MD

Director of the Epilepsy Fellowship Program Assistant Professor of Neurology Epilepsy Program Mount Sinai Neurology Residency Alum

About the Mount Sinai Health System

The Icahn School of Medicine at

Mount Sinai is an integral component of the Mount Sinai Health System, a top-tier, fully-integrated network of physicians and professional staff who provide education, research, and medicine across the full range of specialties. We translate discoveries and inventions into advanced patient care, serving one of the most diverse cultural and socioeconomic populations in the world, as we blaze new trails in our global community. The Mount Sinai Health System includes seven New York City hospitals, along with a robust network of surgical facilities, ambulatory centers, primary and specialty care throughout the five boroughs, Westchester, and Long Island. We engage thousands of physicians, both employed and affiliated, offering you a tremendous range of clinical and research opportunity as a medical or graduate student.

Mount Sinai Residency Alumni Reunion at AAN 2018

The Bronx

Mount Sinai St. Luke's

The Mount Sinai Hospital The Icahn School of Medicine at Mount Sinai

Mount Sinai West

Manhattan

Mount Sinai Beth Israel

New York Eye and Ear Infirmary of Mount Sinai (NYEE)

Queens

Elmhurst Hospital

Brooklyn

"Josh and I

went to medical school together. He decided he wanted to be at Mount Sinai it took me a little bit of time to decide - there are so many amazing programs, and I wanted to be absolutely sure. were due, to tell him that I'd made up my mind. His *response (word-for-word):* "I think it'll be absolutely amazing. To be at the most rapidly expanding hospital system in NYC, to have such without question at my side, with the world's best program director and his residents leading our way. beat that."

– Alison Thaler and Josh Friedman, Class of 2020

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The Mount Sinai Hospital Department of Neurology Residency and Fellowship Programs

Icahn School of Medicine at Mount Sinai

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