

2024-2025
**Neurology Training at
The Mount Sinai Hospital**



Icahn School
of Medicine at
Mount
Sinai



“Choosing Mount Sinai

as my residency program was a very easy decision to make. It was my first interview of the season, and I have been completely enamored with the program since that day. Throughout my interview day, I was told by several faculty that everyone at Sinai has the opportunity to carve their own path. Though I didn't know what my path was at that time, I trusted that Sinai would mold me into a compassionate, caring, and inquisitive physician and educator in a nurturing and stimulating environment. What makes Sinai unique to me is the camaraderie among hospital faculty and staff. I know I have made lifelong friends in my co-residents.”

**- Destiny Marquez, MD, Class of 2024, Mount Sinai
NeuroCritical Care Fellow Class of 2026**

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2024-2025
**Neurology
Training at
The Mount Sinai
Hospital**



“I’ll always remember my interview at Mount Sinai and the first time I walked into Yahr Library. By that point, I had already been to several interviews, and I felt like I knew what to expect. I vividly remember feeling like this program was different. Interacting with the residents, it became clear that, despite the inherently challenging nature of medical training, they all seemed genuinely happy to be here, felt supported by the faculty, and were deeply invested in the program. I can say that Mount Sinai has lived up to all of my expectations and was one of the best decisions I’ve ever made.”

– David Daniel, MD, Class of 2024
Chief Resident

**Top Rankings for Mount Sinai for
National Institutes of Health Funding
among U.S. Medical Schools**

No. 2 Neurosciences

\$32.6 million for Basic Science

No. 6 Psychiatry

\$49.9 million for Clinical Science

No. 24 Neurology

\$13.2 million for Clinical Science

Data compiled and released in September 2023 by Blue Ridge Institute for Medical Research. These figures represent awards received by the Icahn School of Medicine at Mount Sinai during the National Institutes of Health 2023 fiscal year.

Contents

2	Message from the Residency Program Directors
4	Welcome from the Chair and Vice Chair of Education
6	Department of Neurology
8	Neurology Residency Program at Mount Sinai Hospital
10	Residency Program Curriculum and Conferences
12	Clinics
13	Resident Opportunities and Engagement in Career Development and
14	Leadership Resident Wellness Initiatives
16	Affiliate Training Sites
20	Neurology Elective Tracks
24	Research Opportunities in Neurology
26	Neuroscience and Clinical Research Resources
28	Resident Life at Mount Sinai in New York City
32	Mount Sinai Neurology Resident Graduates and Where They Went
34	Neurology Fellowship Training Programs
36	Neurology Division and Centers
36	Corinne Goldsmith Dickinson Center for Multiple Sclerosis
37	Vascular Neurology Division
38	Robert and John M. Bendheim Parkinson and Movement Disorders Center
39	Neuromuscular Disease Division
40	Epilepsy Program
41	David S. and Ruth L. Gottesman Center for Headache Treatment and Translational Research
42	Neuro-Oncology Division
42	Behavioral Neurology and Neuropsychiatry
43	Pediatric Neurology Division
44	Neuro-Ophthalmology Division
45	Neuro-Otology Division
45	Neurogenetics Division
46	Neuro-Infectious Diseases Division
47	Neuro-Palliative Medicine
48	General Neurology Division
48	Inpatient General Neurology, Quality and Safety
49	Neurocritical Care Division
50	Neuro-Informatics
53	Mount Sinai Neurology Historic Milestones

Message from the Residency Program Directors



Michelle Fabian, MD
Director
MSH Neurology Residency
Program



Laura Stein, MD, MPH
Associate Director
MSH Neurology Residency
Program



Allison P Navis, MD
*Associate Program Director
for Continuity Care
Education*

Welcome to the Mount Sinai Department of Neurology!

We hope to offer you a glimpse of the rich learning environment, cutting-edge research, and world-class patient care that make the Mount Sinai Neurology Residency an exceptional experience for each resident who graduates from our program.

We share a deep commitment to providing an extraordinary educational experience to every resident in our program. We know that every one of our residents has the potential to make meaningful, unique contributions to the field; it is our responsibility to provide the support and guidance that will enable them to reach their highest aspirations.

From the first day, we consider our residents to be colleagues. Each resident plays a vital role as a clinician, teacher, and collaborator. We also consider every resident as an accomplished physician in the context of a full, balanced life; resident wellness is a chief focus of our program.

We believe mentorship is crucial during residency, and we have a well-established mentoring program. Many of the faculty with whom our residents work also completed their training here and have built their careers in our department. At the same time, our diverse department prides itself on recruiting top academic, clinical, and research faculty from around the country and world whose expertise powerfully enhances the education of our residents. We expect our residents' interests to expand or evolve as they progress through the program; thus, their mentorship team needs to evolve, as well. We work to identify additional mentors to support each resident's chosen path throughout.

We expect all residents to participate in some form of research during their training. For those planning research-focused careers, the Friedman Brain Institute provides unsurpassed opportunities for academic engagement. A myriad of research opportunities also exists in other areas such as education scholarship, quality improvement, health equity/DEI, global health and resident wellness. Our residents are highly productive, and they regularly present and publish their impactful work.

We are looking for residents who demonstrate professionalism, intellectual inquisitiveness, and a real passion for neurology. Most important, we are seeking those who desire to give the very best in evidence-based, compassionate care to every patient they encounter.

Thank you for your interest in our program.

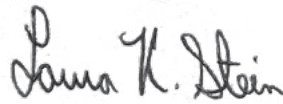
Sincerely,



Michelle Fabian, MD

Director

MSH Neurology Residency Program



Laura Stein, MD, MPH

Associate Director

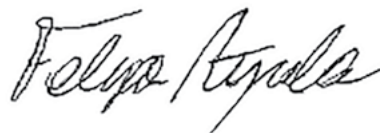
MSH Neurology Residency Program



Allison P Navis, MD

Associate Program Director for

Continuity Care Education



Felipe Ayala, MD

Associate Program Director

Elmhurst Hospital



Robin Ulep, MBBS

Associate Program Director for

Diversity, Equity, and Inclusion



Robin Ulep, MBBS

*Associate Program Director for
Diversity, Equity, and Inclusion*



Felipe Ayala, MD

*Associate Program Director
Elmhurst Hospital*



Faye Francisco, (center)

Residency Program Manager

Mary Swai, (right)

*Senior Residency
Program Coordinator*

Welcome from the Chair and Vice Chair



**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



Michelle Kaku, MD
Vice Chair of Education
Department of Neurology

On behalf of our faculty, staff, and entire team, we offer you a warm and sincere welcome to learn about the Mount Sinai Hospital Neurology Residency Program! We are delighted to share with you our accomplishments and vision for building a strong, diverse, and comprehensive academic neurology department.

Mount Sinai is unique and has an enormous advantage in that all of the education resources of the institution are focused exclusively on our School of Medicine and our Graduate School of Biomedical Sciences. Furthermore, these schools and all of the hospitals report to one Chief Executive Officer, himself an academic researcher. Thus, our culture has the ideal blend of a deep belief in the value of discovery and translational research, while simultaneously creating a path to thrive in an ever-changing health care environment. Our foundational missions include training the next generation of clinicians, clinician-educators, clinician-investigators, and future leaders in medicine, as well as providing high-quality patient care to all our New York City communities, including those that are under-resourced. This mission has been ingrained from the founding of the original hospital – the Jews’ Hospital – as a charitable institution, nearly 170 years ago.

Our residency benefits from the resources of the Icahn School of Medicine at Mount Sinai, and three teaching hospitals: The Mount Sinai Hospital, Elmhurst, and the Bronx VA Hospital. Neurology faculty at all sites are committed to contributing to the training, mentorship and wellness of our residents. With substantial investment and support from the School and Health System, the Department has grown dramatically in education, research, and clinical care in the last decade. We currently have 40 residents, and as of 2022 are a categorical program. In the last decade, we have expanded our array of fellowship training programs to 11 different fellowship programs, have had year-over-year growth in sponsored research funding to over \$45 million dollars in 2024, and recruited over 100 new faculty, who sought to join our thriving, growing department and

who have been recruited both internally from our talented Mount Sinai graduates, and from major academic institutions around the U.S.

As examples, among the new areas in which we have built programs are neuro-informatics including application of machine learning and AI methods, neuro-palliative medicine, quality and safety research, outcomes research and neuro-infectious diseases. We continue to recruit talented and well-trained faculty who hold the highest standards of professionalism and high-quality scholarship, and who put the patient at the center of all that we do. This is reflected in our national reputation, with hospitals within the System consistently appearing on U.S. News & World Report's 'Best Hospitals' list and being named to its Honor Roll.

Please know that all of us are genuinely and deeply committed to providing a nurturing residency, both academically and emotionally. Our goal is to provide the environment and mentorship for you to achieve your potential and your career aspirations.



Barbara G. Vickrey, MD, MPH
System Chair



Michelle Kaku, MD
Vice Chair of Education

The Department of Neurology

More than 100 years of service

Founded as a charitable hospital in 1855, with the mission to provide medical care for indigent Jews in New York City, the Mount Sinai Health System is now the largest private hospital system in New York City. The oldest Department of Neurology in New York City, we opened our inpatient service in 1900.

For well over a century, Department faculty have made significant contributions to medical knowledge through clinical and scientific research, trained many 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 many other neurological disorders, referred from within our expansive health system, as well as from throughout the world.



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

choices for sub specialization after residency, as well as in-depth research opportunities funded by the National Institutes of Health. Mount Sinai also provides opportunities for advanced degrees in fields including master's degrees in Epidemiology, Biomedical Informatics, and Clinical Research, among others.

The Department is at the nexus of an institution wide neuroscience and neurological research effort at Mount Sinai, and it has achieved an enormous growth in research funding over the past six years. In 2023, the Department of Neurology at the Icahn School of Medicine received 13.2 million in National Institutes of Health (NIH) funding, which was a top 24 Department of Neurology in the U.S. in

NIH funding. In 2024 our total sponsored research funding from all sources exceeded \$45 million.

A study of 125 U.S. neurology residency programs found that Mount Sinai had produced the third-highest number of graduates holding academic neurology faculty positions.

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

The Department offers a variety of educational programs that provide a broad foundation in neuroscience and the clinical skills to diagnose and treat the full spectrum of neurological diseases. The Health System's span of facilities across Manhattan, Queens, and Brooklyn affords opportunities for elective rotations in diverse populations and settings. Multiple fellowship opportunities enable many

Department of Neurology Faculty – Mount Sinai Health System, 2024

Full- and part-time Career Faculty (all campuses) **149**

Affiliated Faculty **19**

Clinical Fellows **22**

Post-doctoral fellows **21**

MSH Neurology Residents **40**

2023 MSH Inpatient Encounters **14,745**

2023 MSH Outpatient Visits **47,309**

Neurology Residency Program at Mount Sinai Hospital

Our Residency Program is designed to provide comprehensive neuroscience education and clinical training. As a result, upon graduation, our residents can treat the full spectrum of neurologic diseases. A warm rapport among residents, strong commitment of faculty to resident learning, diversity of our patient population, and emphasis on outstanding patient care lie at the heart of our program. We work with each resident individually to develop their skills across the full range of ACGME core competencies, including professionalism and interpersonal communication, and we support each resident as they develop maturity, responsibility, and empathy critical to the modern practice of neurology.

Program Highlights:

- 10 Categorical positions per year
- A night float system with no 24-hour calls
- An inpatient/outpatient Block Schedule format
- More than 6 months of electives across years 2-4
- 4 wellness days and 4 weeks of vacation time each year

Our PGY-1 Residents spend most of their year in our highly regarded Department of Medicine to fulfill ACGME requirements. In addition, they rotate for 4 weeks on our neurology service. This rotation offers our interns the opportunity to review the fundamentals of the neurological examination and to connect with senior neurology colleagues. 6 weeks of elective time is also available during the PGY-1 year.

Resident Rotations by Year

PGY-1	
Rotation	Number of Weeks
MSH General Medicine	4
MSH Neuro Floor Service	4
MSH Specialty Medicine	6
MSH Night Medicine	8
MSH Medical Intensive Care Unit	2
Elmhurst Inpatient Floor Service	6
Bronx VA Medicine	6
Bronx VA Night Medicine	4
Elective	8
Vacation	4

Electives: Behavioral Neurology, Epilepsy, Headache, Movement Disorders, HIV Neurology, Multiple Sclerosis, Neurocritical Care, Neuro-Interventional Radiology, Neuromuscular Disease, Neuroradiology, Neuro-Oncology and Neuro Otology

PGY-2	
Rotation	Number of Weeks
MSH Inpatient Stroke Service	4
MSH Inpatient Floor Service	2
MSH Inpatient Consult Service	10
MSH Night Float	6
MSH Neurosciences ICU	4
MSH Neuro-Oncology	2
MSH Epilepsy	2
MSH EEG Clinic	2
Bronx VA	4
Elective + MSH Continuity Clinic	8
MS + MSH Continuity Clinic	2
Elective	2
Vacation	4

PGY-3	
Rotation	Number of Weeks
MSH ER Consult	4
MSH Peds Neuro	6
MSH Neuromuscular	2
Elmhurst Stroke	6
Elmhurst General Neurology	6
Elmhurst Continuity Clinic	6
Elmhurst Night Float	6
Bronx VA	6
Elective + MSH Continuity Clinic	4
Elective	2
Vacation	4

PGY-4	
Rotation	Number of Weeks
MSH Outpatient Stroke Service	6
MSH Inpatient Floor Service	4
MSH Consult Service	6
MSH Epilepsy	2
MSH Night Float	2
MSH Psychiatry	4
MSH Pediatric Neurology	6
MSH Neuromuscular	2
Elective + MSH Continuity Clinic	10
Elective	6
Vacation	4

Our schedule is designed so that our PGY2-PGY4 Residents spend 4 to 6 weeks completing successive 2-week inpatient rotations followed by 2 weeks on an outpatient rotation or vacation block. We have found that this block schedule system enables our residents to be more fully present in their roles versus the traditional approach of combining inpatient and outpatient responsibilities in each rotation. During the outpatient blocks, residents work in their general neurology clinic and participate in electives (with select blocks including jeopardy call responsibility to ensure a sick call pool). We offer clinical electives in all our neurological subspecialties. Additionally, there is an option to devote elective time to research.

PGY-2 residents rotate through all the inpatient neurology services at The Mount Sinai Hospital, and work on the consultation service at the Bronx VA. There is an in-house backup from PGY-4 residents 24 hours per day from July through November, and Senior Residents are available on call 24/7 thereafter. PGY-3 Residents take on team leadership roles on the Elmhurst inpatient Stroke and General Neurology services. PGY-4 residents assume a leadership role at The Mount Sinai Hospital, working as the Senior Resident on the inpatient neurology teams.

We take duty hours seriously and prioritize resident wellness. Our schedules comply with the ACGME work-hours limitations and New York State Bell Commission in rules limiting work hours.

What MSH Neurology Residents Can Expect to Receive

- Guaranteed, affordable hospital housing options available near to the hospital. For more details, please visit the web page: <https://icahn.mssm.edu/education/residenciesfellowships/life/housing>
- Competitive salary and excellent benefit package
- Lunch is provided during noon conference at all training sites
- One Wellness Day each quarter
- Travel funds for presenting at professional meetings
- Opportunity to moonlight
- Neurology Resident Handbook App
- Convenient Shuttle between hospitals during normal working hours
- After-hours transportation reimbursement for Uber



services between hospitals

- Discounts on activities and events through the Mount Sinai Health System Recreation office, including fitness memberships, Broadway show tickets, sporting event tickets, and city attractions

Mentor Program

Each resident is paired with a faculty member who will be available as a mentor. 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.

Categorical

We are pleased to offer ten categorical track positions for each year in The Mount Sinai Hospital Neurology Residency Program. A resident who matches into a Categorical position will spend all four (4) years at Mount Sinai, including a PGY-1 year in the Department of Medicine.

Residency Program Curriculum and Conferences

Neurology Residency Curriculum and Lecture Series

Our dynamic, learner-focused curriculum is clinically relevant, interactive and enhanced by the incomparable expertise of our world-renowned faculty. The curriculum has been comprehensively curated to maximize resident engagement and learning. Core conferences are protected from clinical duties. They take place every weekday during the noon hour (lunch provided). In the summer, the curriculum begins with the basics of neuroanatomy, introductions to core clinical topics, and management of neurological emergencies. Starting in September, 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 toward emerging and future trends in the field. Throughout the year, sessions are also dedicated to health disparities, case presentations, preparation for in-service examinations, quality improvement initiatives, “resident as teacher” modules, and resident wellness. All conferences are broadcast to our affiliated sites (Elmhurst and the Bronx VA), and then stored in a digital library accessible via shared media storage.



“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, Currently, Director of Headache Medicine Fellowship Program and Assistant Professor of Neurology, ISMMS

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
- Neuro-Ophthalmology
- Neuropathology
- Neuroradiology
- Practice and Contemporary Issues
- Health Disparities and Structural Racism
- Wellness Strategies

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



Conferences and Special Sessions

Morning Report:

Every morning from 8 to 9 am (excluding Friday Grand Rounds), one of our esteemed faculty members including Drs. Kaku, Fabian, Miller, Kreiger and Fara – guide presentation and analysis of new cases from the prior day, as well as “close -the-loop” follow-up of outcomes of cases discussed the prior week. Residents commonly cite our morning report as one of the most impactful educational experiences of the program. Our daily morning report sessions provide the perfect opportunity for our residents to strengthen their clinical reasoning and management skills.

Division conferences:

These conferences are case-based. Cases are chosen either to highlight key neurological conditions, or to present unique, thought-provoking clinical scenarios. Bedside teaching is incorporated at times. These conferences include epilepsy case conference, neuro-ophthalmology case conference, neuromuscular rounds, stroke conference, movement disorders conference, stroke/ED conference and neurocritical care/ED conference.

Journal Club:

Led by Dr. Lublin, this monthly conference teaches residents how to critically read and review the literature. Articles are chosen to highlight different study methods as well as to review foundational studies in neurology.

Quality-improvement Conferences:

Monthly quality-assurance meetings and a quarterly outcomes conference ensure that residents are aware of ongoing quality initiatives and important topics in QI/QA.

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:

Our Wellness sessions encourage practices that may assist in preventing burnout and promote discussion about emotional reactions to patient care and outcomes. Other topics pertinent to wellness are covered including career exploration and financial planning. Additionally, sometimes the Wellness conference consists of pure fun, such as lunch and a Zumba session!

Senior Conference:

This conference is a new addition to our curricular offerings and has been very well received. At the beginning of the academic year, each PGY-4 Resident is asked to invite a faculty member to give an advanced level lecture on a particular topic. The conference offers each of our PGY-4 residents the opportunity to gain specific knowledge in an area of their choosing, and it has also proven to be enjoyable for the entire class to be able to spend time together.

“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, Currently, Assistant Professor of Neurology, ISMMS



“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, Currently, Associate Professor of Neurology, Neurosurgery, and Radiology, ISMMS

Clinics

Continuity Clinic Director: Allison Navis, MD

Each neurology resident has a continuity clinic consisting of a panel of new and established patients for whom they act as the primary neurologist. They are responsible for interviewing and examining each patient, deciding on the diagnostic and treatment plan, discussing and seeing every case with a clinic attending (who cosigns every note), arranging all necessary studies, consultations, and referrals, communicating the plan effectively to the patient (being sensitive to barriers of language and culture), writing prescriptions, and determining necessary neurological follow-up. The number of patients seen during each clinic session increases as the resident becomes more efficient, but ranges from two to five patients a session. The resident's continuity clinic sessions occur exclusively during the outpatient rotation block.

Lumbar Puncture Program Director: Sophia Ryan, MD, MPH

Outpatient clinic sessions dedicated to lumbar puncture procedures enable neurology residents to develop expertise in performing lumbar punctures, in a controlled setting and under the direct supervision of a faculty attending. Residents rotate through the lumbar puncture program during their outpatient clinic blocks in the PGY-2 and PGY-3 years. The neurology resident performs the lumbar puncture, after obtaining consent and reviewing aftercare instructions with the patient. The faculty attending oversees and is present throughout the lumbar puncture procedure, providing educational tips and assisting the resident as needed. Skills in documentation of time-out and appropriate procedure note documentation are also obtained by residents during this experience.



Subspecialty Clinics

Our subspecialty teaching clinics offer residents unique, front-line experience in treating patients across a wide variety of subspecialty areas. The clinics are staffed by our expert subspecialty attendings and include multiple sclerosis and related disorders, movement disorders, headache, cognitive neurology, and neuro-ophthalmology clinic. Through these experiences, residents are provided a chance to collaborate with attendings to provide their patients with the best evidence-based treatments available, along with truly compassionate care.

Resident Opportunities and Engagement in Career Development and Leadership

Chief Resident Leadership Opportunities

Every year in early spring, the faculty and senior residents select Chief Residents for the upcoming year from the rising PGY4 class. The Chief Residents work closely with program leadership to ensure the program runs smoothly and address any areas in need of improvement. Additionally, they are responsible for fulfilling the five Chief Resident roles.

Chief Resident for Curriculum

Maintains and improves the academic program of the residency with an emphasis on the year-long neurology noon conference core curriculum series, which aims to advance residents' role as adult learners and educators.

Chief Resident for Grand Rounds

Identifies and arranges appropriate speakers for weekly Neurology Grand Rounds in collaboration with faculty on the Grand Rounds Committee and the Mount Sinai West/Union Square Grand Rounds Chief Resident. Responsible for facilitating approximately 40 grand rounds programs each academic year, including 5 endowed lectures.

Chief Resident for Quality Outcomes

Serves as department representative for guiding and developing resident-led quality improvement/outcomes projects including methodology, feasibility assessments, outcome selection, and development of potential academic presentations of resident-led quality initiatives to foster resident scholarship. Manages Quality Assurance monthly meetings, collaborates with the faculty Chair of Quality Assurance and the Program Director to select relevant cases for quarterly Outcomes Conferences.

Chief Resident for Scheduling

Strategically arranges and reformulates residency block rotation schedule for the academic year, including offsite rotations, clinic and call, vacations, and moonlighting. Direct liaison between clinic staff, faculty, and residents regarding sick call coverage, outpatient referrals, and ongoing practice changes in the hospital system.

Chief Resident For Clinic

Schedules residents for General Neurology Clinic and Subspecialty Neurology Clinics. Works with the Clinic Director to ensure a smooth clinical workflow. Collaborates with program leadership to implement new subspecialty clinic rotations.



Chief Residents L to R: Luke Kiefer, MD, Emma Loebel, MD, Todd Rubin, MD, PhD, Claudia Zbrzeski, MD, and Sai Polineni, MD

“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 toward 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**

Resident Wellness Initiatives

Over the past several years, under the leadership of our Residency Wellness Champion, Rory Abrams, MD, our residency has continually advanced its wellness program. Resident Wellness is of critical importance to us. Our wellness approach is two-fold; we aim to mitigate workplace factors that may erode wellness as well as to support our residents in their individual wellness needs. The formal curriculum centers around the Noon Conference Wellness Series. Included are a mix of didactic presentations on the current knowledge about physician burnout and interactive sessions utilizing proven techniques to improve wellness. Featured guests have included faculty experts on mindfulness training, physical fitness professionals who have led in classroom yoga sessions, and mental health professionals who lead open debriefing discussions on stressful situations.

Wellness Program Highlights:

- Readily available, individualized mental health services
- PEERS Program - A GME-sponsored, resident-run initiative to support resident well-being
- Facilitated Discussions led by a clinical-licensed Mount Sinai Social Worker
- Financial Education Lectures
- Career Panels
- Fellowship Preparation and Job Search Lecture - Held every Spring by Wellness Champion Dr. Abrams
- 4 Wellness Days Per Year
- Wellness events including monthly happy hour, team building exercises, Resident/Fellow and Faculty mixers, Halloween candy distribution, and holiday cookie decorating





“Choosing Mount Sinai was easy for me.

After completing a neurology sub-internship 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 Mount Sinai’s neurology curriculum is a model for programs nationwide.”

- Mark Barber, Class of 2021 alum, currently Assistant Professor of Neurology, ISMMS

Affiliate Training Site: New York City Health and Hospitals/Elmhurst

Elmhurst Hospital in Queens, New York, is a high-volume, 545-bed public hospital within the New York City Health and Hospitals Corporation. The Hospital is a Primary Stroke Center, Thrombectomy Capable, a Level 1 Trauma Center, and a Cardiac Center in the Cardiovascular Patient Outcomes Research Team network.



Elmhurst serves an area of nearly 1 million people in the most ethnically diverse community in New York City and the most culturally diverse population in the U.S. Patients at Elmhurst come from across the globe, speaking a multitude of languages and dialects and bringing with them

their particular beliefs and customs. The neurology rotations at Elmhurst provide a uniquely immersive education not just in managing complex neurological diseases, but in communicating effectively about these diseases with an incredibly diverse patient population.

Elmhurst hospital's mission is to provide care of the highest quality regardless of ability to pay. The neurology residents collaborate closely with a highly skilled team of social workers and case managers, all of whom are dedicated to helping the residents learn how to best and most effectively navigate the health care system for these underinsured, uninsured, and undocumented patients.

During their PGY-3 year, neurology residents rotate through the inpatient, consultation, and outpatient clinic services at Elmhurst for a total of 6 months, interspersed among their other rotations at Mount Sinai. During this time, they are exposed to extraordinary cultural diversity, as well as diversity of neurological disorders. These months are consistently considered by our residents to be among the most transformative and educational of their residency.

To assist in language translation, Elmhurst 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.

Accessibility

The Mount Sinai shuttle service provides convenient transportation to and from Elmhurst all day, Monday through Friday. The hospital is also accessible by subway. Uber services are provided to residents for after-hours commuting.

Teaching Faculty

Director: Joseph Farraye, MD

Associate Professor of Neurology,
Mount Sinai Neurology Residency and Clinical Neurophysiology (EMG) Fellowship Alum

Felipe Ayala, MD

Associate Program Director, Elmhurst Hospital;
Assistant Professor of Neurology

Kevin Gurcharran, MD

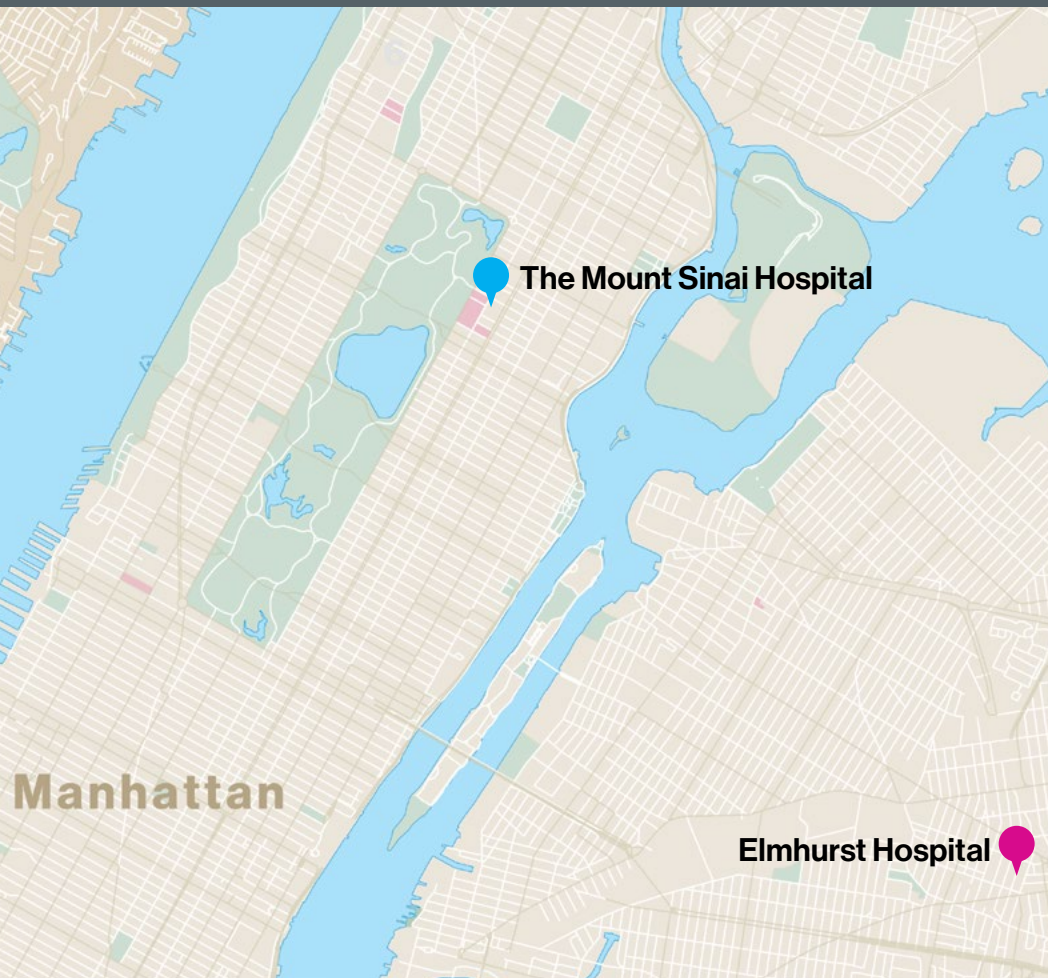
Assistant Professor
of Neurology and Pediatrics

Mallory Luckey, MD

Assistant Professor of Neurology,
Mount Sinai Neurology Residency and Vascular Neurology Fellowship Alum

Hazem Shoirah, MD

Associate Professor of Neurosurgery; Neurology; and
Diagnostic, Molecular and Interventional Radiology,
Mount Sinai Neurology Residency and Endovascular Fellowship Alum



“Working at Elmhurst is an absolute privilege!

Serving with patients and families with such a diverse ethnic and medical background has made me a more well-rounded neurologist. Coming back to the community that raised me is the highlight of my residency experience.

**– Sanket Aggarwal, MD
Class of 2026**



Affiliate Training Site: The Bronx VA Hospital

The James J. Peters VA Medical Center in the Bronx provides comprehensive inpatient and outpatient care to veterans. The inpatient wards include acute medical/surgical units, a mental health inpatient service, nursing home, and spinal cord injury unit. The facility provides a comprehensive range of medical subspecialty and surgical services on an inpatient and outpatient basis. There is a 24-hour emergency department, and the Bronx VA is designated as a VA Primary Stroke Center. The neurology service consults on patients in all parts of the medical center. The clinic is located in the main hospital and includes six shared consultation-examination rooms, as well as EEG procedure rooms. Comprehensive neuroradiology facilities are available, including MRI, CT, PET and ultrasound. The Bronx VA uses the same electronic medical record system used throughout the VA system nationally, allowing seamless access to medical records of patients seen at other VA hospitals, as well as health records from the Department of Defense.

Residents rotate through the VA for 4-6 weeks in their PGY-2 and PGY-3 years.

The VA experience provides a different patient population that is wonderful to work with and very grateful for residents' efforts. During this rotation, residents are exposed to the chronic neurological effects of common military exposures like traumatic brain injury and the frequent presence of co-morbid mental health disorders like post-traumatic stress disorder.

Residents cover the inpatient consult service and emergency department, as well as participate in one half day outpatient clinic per week. Hours are 9 am-5 pm, and there are no late call or night float requirements; on nights and weekends, residents take call from home.

The Bronx VA 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 Alzheimer's disease, traumatic brain injury, spinal cord injury, and movement disorders. Residents are welcomed and encouraged to work with investigators at the Bronx VA during their elective, and multiple faculty

members at the Bronx VA have active joint-appointments at Mount Sinai.

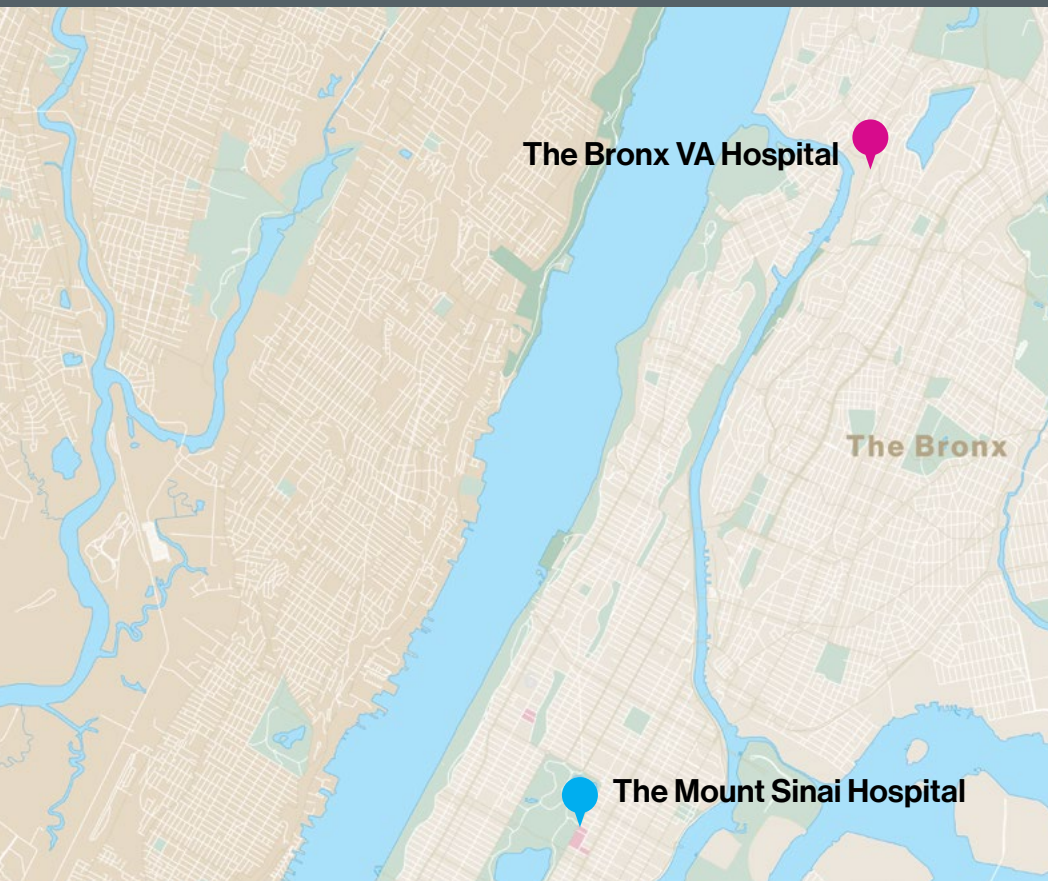
Accessibility

The Mount Sinai shuttle service provides convenient transportation to and from the Bronx VA all day, Monday through Friday. The hospital is also accessible by subway. Uber services are provided to residents for after-hours commuting.

“I hear 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**





“I had an excellent training experience

at the Bronx VA helping to take care of those who have given so much to our nation. I was able to learn a lot about the management of stroke, seizure, TBI, spinal injury and more in the veteran population.

The attendings there are always willing to teach and the patients are very appreciative of their care.”

**- Patrick Ebbert MD, Class of 2024
Chief Resident**

Teaching Faculty

Gregory Elder, MD

Director of Neurology at the Bronx VA, Professor of Psychiatry and Neurology

Fanny Elahi, MD, PhD

Associate Professor of Neurology, Neuroscience, and Pathology, Molecular, And Cell-Based Medicine

Sam Gandy, MD, PhD

Professor of Neurology and Psychiatry

Noam Harel, MD, PhD

Associate Professor of Neurology and Rehabilitation Medicine

Leif Havton, MD, PhD

Professor of Neurology and Neuroscience

Maria Muxfeldt, MD

Clinical Instructor, Neurology

Melissa Nirenberg, MD, PhD

Professor of Neurology

Ruth Walker, MB, ChB, PhD

Professor of Neurology
Mount Sinai Movement Disorders Fellowship Alum

Jill Wiener, MD

Assistant Clinical Professor of Neurology
Mount Sinai Neurology Residency Alum

Research Elective Track

The Mount Sinai Neurology Residency Program offers a Research Track option for residents who are interested in a career as a clinician-investigator in translational neuroscience. Interested candidates should have a PhD or advanced research training. Research residents are mentored by one of our outstanding clinician-scientists and have access to the plethora of resources that are available through The Friedman Brain Institute and the Department of Neuroscience at the Icahn School of Medicine at Mount Sinai, one of the world's premier neuroscience research institutions.

Research Track residents integrate research within their residency training. Residents in this track are prepared for a competitive academic faculty position as a neurologist-investigator. 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. There is not a separate ERAS application route for applicants interested in a research-

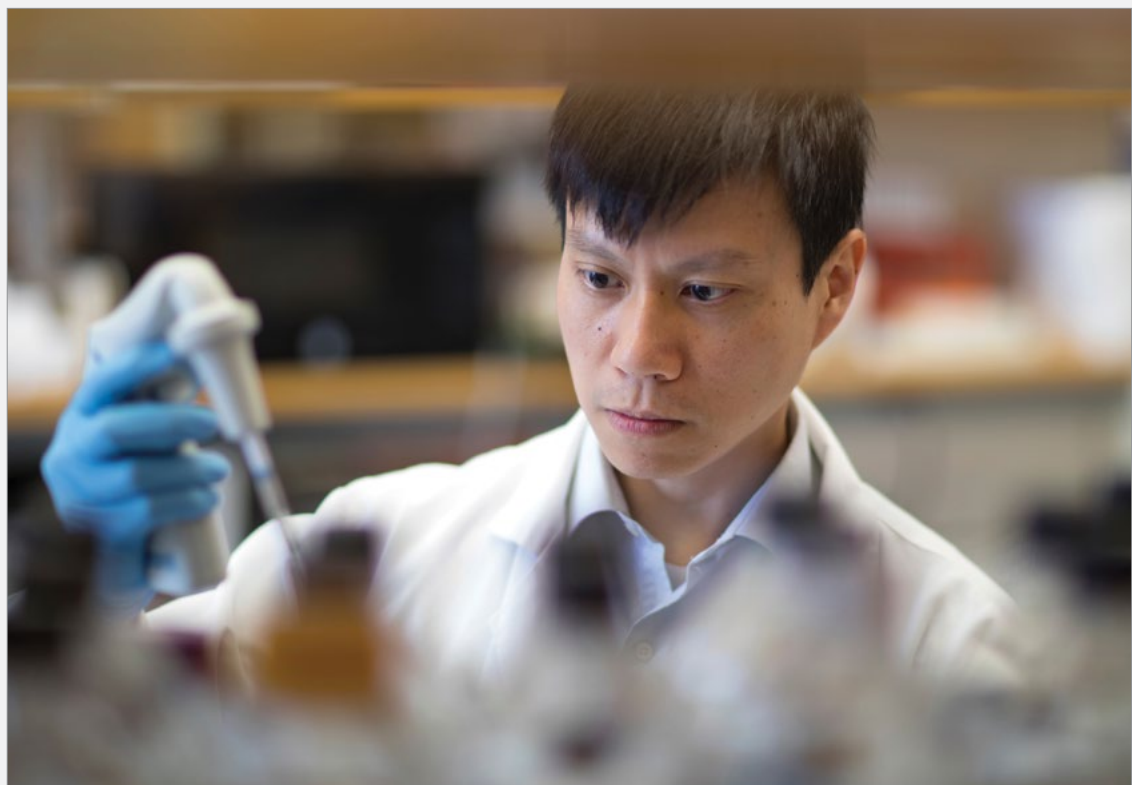
focused residency curriculum; interested applicants should apply through ERAS to the MSH Neurology Residency Categorical Track.

Research Elective Track Objectives

- Teach residents core topics in research scholarship
- Mentor residents in the design, implementation, and interpretation of a translational neuroscience research project
- Enhance residents' technical and analytical skills in translational neuroscience research
- Expose and promote residents to scholarship and career opportunities as a neurologist-investigator

Sam Horng, MD, PhD

MSH Neurology Research Residency Alum and current Assistant Professor of Neurology and Neuroscience identifying specific contact-mediated interactions between astrocytes and immune cells, in order to develop treatments for multiple sclerosis.



Global Health Elective Track

The global health track is designed to provide an overview of global health work in neurology and to prepare residents for global health electives in their PGY4 year and continued work during their careers. The track works in conjunction with the hospital global health program, and the main goal is to focus on topics most relevant to neurology including clinical practice in resource limited settings, barriers to access to neurological care in other countries, and cultural understanding/compassion. We will focus on neurological disorders such as stroke, epilepsy and dementia that can have devastating effects on people around the world, and ways to improve access to neurological care in these areas.

Participation in the global health track includes mandatory attendance at neurology meetings which are held every 3 months, the option to do a global health elective during their PGY4 year at one of our approved international sites, and a final project due before graduation. We also encourage attendance to the hospital global health lectures that occur

every 2 months and focus on a broader view of global health work among medical and surgical specialties, including participating in research. Residents will obtain a certificate upon completion of the global health track.

Global Health Elective Track Objectives

- Teach residents core topics in global neurological care in resource-limited settings
- Mentor residents in addressing barriers to neurological care and improving access globally
- Enhance residents' cultural sensitivity and compassion in global health practice
- Expose residents to global health electives and career-long involvement in international neurology



Michelle Fabian, MD
Dr. Fabian visited Nepal in March 2024 as part of the Ampath Nepal Partnership between Mount Sinai and Dhulikhel Hospital and Kathmandu University School of Medical Sciences. Our Global Health Track residents can complete a rotation in Nepal or at another approved international site during their PGY4 year.

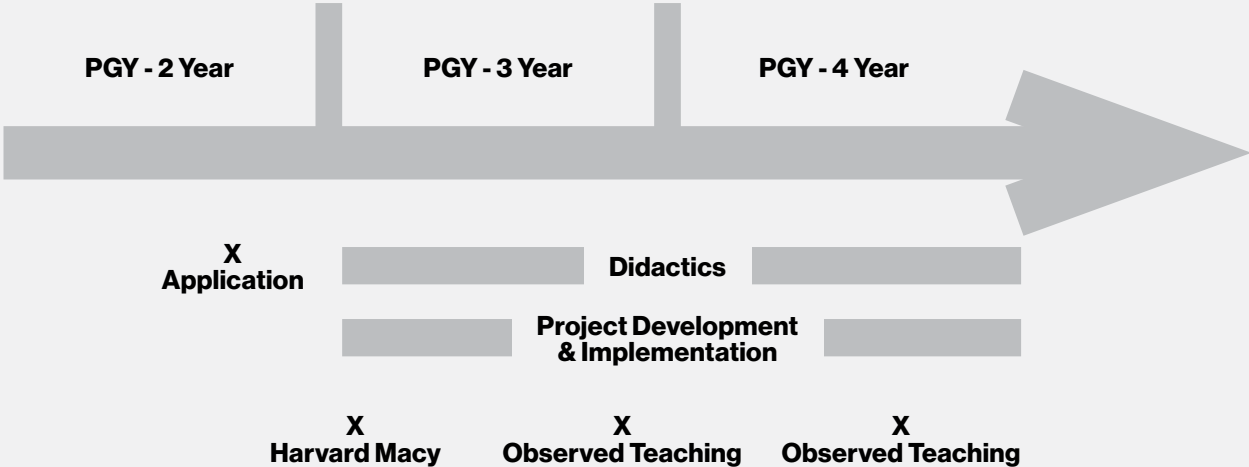
Medical Education Elective Track

The Mount Sinai Neurology Residency Program has a long-standing tradition of training medical educators, and we are proud that our alumni hold formal medical education roles in the Neurology departments of leading academic medical centers throughout the country. We are thrilled to offer residents interested in a career in Medical Education the opportunity to participate in our two-year Medical Education Track.

Residents apply at the end of the PGY-2 year and begin a two-year curriculum with the Mount Sinai Internal Medicine residents covering learning theory, curriculum design and implementation, feedback and evaluation, and medical education scholarship in the fall of the PGY-3 year. Didactics occur outside of clinical and elective time so that all

interested residents can participate. With the mentorship of Neurology education faculty, residents develop and implement a Neurology medical education project and apply to attend the Harvard Macy Program for Post-Graduate Trainees: Future Academic Clinician-Educators course. Additionally, participants participate in quarterly Neurology education journal club dinners with program leadership and develop their skills as medical educators by participating in formal teaching opportunities in the residency and medical school level.

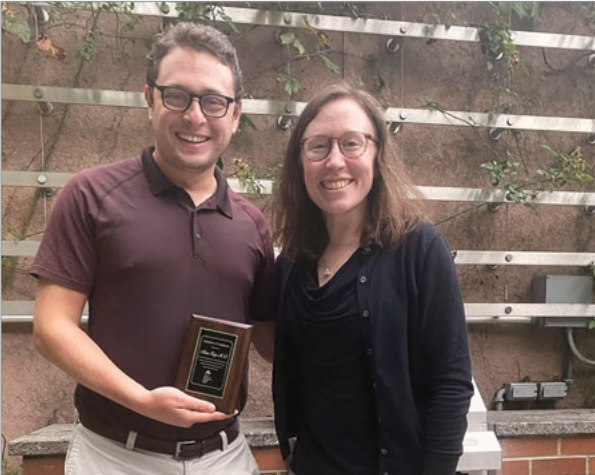
Residency applicants interested in participating will be provided with the opportunity to learn more about the track on their interview day and can reach out to track and program leadership with questions at any time.



Medical Education Track Objectives

- Teach residents core topics in medical education
- Mentor residents in the design, implementation, and assessment of a Neurology medical education project
- Enhance residents' medical education skillset
- Expose residents to scholarship and career opportunities in medical education

Medical Education Track Graduate Adam M Karp, MD, receives an award from Laura K Stein, MD, MPH at graduation.



Pediatric Neurology Residency Program

The Mount Sinai Pediatric Neurology Residency Program is an ACGME accredited 3-year program whose mission is to provide exceptional training in pediatric and adult neurology through broad exposure to general and subspecialty neurology disciplines in one of the most culturally diverse cities in the world. Residents enter our program typically after completing two years of General Pediatrics training at an approved ACGME program and train alongside their MSH adult neurology resident colleagues in both the adult neurology and pediatric neurology inpatient and outpatient settings. Our residents rotate through four hospitals in the Mount Sinai Health System, including the nationally-ranked Mount Sinai Kravis Children's Hospital, as well as our ambulatory practice in Union Square and Elmhurst Hospital

in Queens, part of New York City Health and Hospitals. Each setting provides a unique and meaningful learning experience. Residents are exposed to a diverse population in our hospitals and clinics and have the opportunity to encounter rare diseases and conditions as well as participate in clinical and translational research projects related to neurological disorders of childhood. We have experts in the subdivisions of Pediatric Epilepsy, Headache disorders, Neurometabolic disorders, neurodevelopmental disorders, and pediatric autoimmune disorders.

More information on this training program can be found at:

<https://icahn.mssm.edu/education/residencies-fellowships/list/msh-pediatric-neurology-residency>

Select Mount Sinai Neurology Residency Alumni in Education Leadership Positions

Alexandra Brown, MD - Assistant Program Director for the UCSF Neurology Residency

Michelle Fabian, MD - Neurology Residency Program Director, Icahn School of Medicine at Mount Sinai

Asaff Harel, MD - Program Director for the North Shore University/Long Island Jewish Neurology Residency Program

Adelene Jann, MD - Program Director, Headache Medicine Fellowship, New York University School of Medicine

Peter Jin, MD - Associate Program Director, University of Maryland Neurology Residency

Michelle Kaku, MD - Vice Chair of Education, Department of Neurology, Icahn School of Medicine at Mount Sinai

Anna Pace, MD - Director, Headache Medicine Fellowship Program, Icahn School of Medicine at Mount Sinai, Associate Director, Brain and Behavior, Icahn School of Medicine at Mount Sinai

Jillian Rosengard, MD - Neurology Clerkship Director, Albert Einstein College of Medicine

Susan Shin, MD - Director, Neuromuscular Medicine Fellowship Program, Icahn School of Medicine at Mount Sinai

Kara Stavros, MD - Neurology Clerkship Director, Warren Alpert Medical School of Brown University

Laura Stein, MD, MPH - Neurology Residency Associate Program Director, Icahn School of Medicine at Mount Sinai

Elina Zakin, MD - Program Director, Neuromuscular Medicine Fellowship, NYU Langone Health; Associate Program Director, Neurology Residency Program, NYU Langone Hospital Brooklyn

Research Opportunities in Neurology and Neuroscience

At Mount Sinai, neurology residents interact with a diverse array of experts in neurology and neuroscience research spanning the translational spectrum from bench to bedside and beyond. The Friedman Brain Institute is an interdisciplinary clinical and research hub that is defining the mechanisms of brain and spinal cord disorders and translating those findings into preventive or restorative interventions. The Institute is led by world-renowned neuroscientist Eric Nestler, MD, PhD; it coordinates all neuroscience research on campus, building translational bridges to clinical programs throughout the entire health system.

Pre-clinical Neuroscience

The Nash Family Department of Neuroscience

investigates the nervous system at the molecular, cellular, systems, and behavioral levels using a variety of model systems, from flies and worms, to transgenic mice and rats, to nonhuman primates, as well as the human brain itself. Department faculty conduct collaborative research in nationally- and globally-recognized laboratories. It is currently ranked second in research funding from the National Institutes of Health. Forty-three primary faculty scientists in the department perform groundbreaking research, and mentor and train tomorrow's leaders, providing critical contributions to our graduate and medical education programs. Many Department of Neurology faculty hold secondary appointments in the Department of Neuroscience.

Department of Neurology Translational Research Faculty and Labs

Erin Beck, MD, PhD

Mechanisms and clinical implications of lesion formation, tissue damage, and repair in multiple sclerosis and other autoimmune CNS disorders using advanced MRI techniques, CSF transcriptomics, and histopathology.

Emmanuel During, MD

Scalable procedures for diagnosing and monitoring Lewy body disease in the general population, which could enable early and impactful neuroprotective interventions.

Michelle Ehrlich, MD

Common pathophysiologic mechanisms of genetic dystonias; Neonatal Opioid Withdrawal Syndrome.



Lab of Stephanie Tankou, MD, PhD

Research on gut-derived bacteria that regulate inflammation in the central nervous system, with the goal of identifying those that are biomarkers as well as targets of future disease modifying therapies for multiple sclerosis and other central nervous system autoimmune diseases.



Lab of Ana Pereira, MD, MS

Research on selective vulnerability of glutamatergic neural circuits to synaptic changes in aging and neuronal loss in Alzheimer's disease, using modern quantitative cell biology methods in conjunction with molecular tools and functional assays, and translating basic science findings into clinical studies with Alzheimer's disease novel treatment trials.



Lab of Helen Mayberg, MD

Cross-disciplinary, collaborative translational research of neurologists, neurosurgeons, and psychiatrists with experts from neuroscience, imaging, engineering, bioinformatics, neuro-engineering, and computational neuroscience, with the aim of developing new circuit-based strategies and state-of-the-art individualized treatments for patients with advanced neuropsychiatric disorders.



Lab of Trey Hedden, PhD

Research focuses on integrating multiple brain markers from neuroimaging to build a comprehensive picture of how aging and neurodegenerative disease affect the relationship between brain function and cognition at an individual level. Methods employed include multiple MRI brain markers, PET markers of amyloid and tau accumulation, PET markers of dopamine transmission, and cognitive testing.

Department of Neurology Translational Research Faculty and Labs (continued)

Fanny Elahi, MD, PhD

Vascular contributions to cognitive impairment and dementia, and development of new therapeutics.

Sam Gandy, MD, PhD

Biomarkers for the antemortem diagnosis of CTE in athletes and veterans; testing new classes of drugs aimed at relieving brain trauma-related neuropsychiatric syndromes.

Gay Holstein, PhD

Neuronanatomical studies of functionally defined central and peripheral vestibular system structures.

Joanna Jen, MD, PhD

Elucidation of the genetic and physiological bases of disorders affecting balance and eye movement control in neurodevelopment and neurodegeneration, through cellular and animal studies, and clinical trials.

Isaac Marin-Valencia, MD

Elucidation of how inherited metabolic derangements disrupt the development and maintenance of the nervous system, and designing new treatments to improve lives.

Susan Morgello, MD

Diverse clinical neuro-HIV research; leads NIH-funded HIV Brain Bank.

James Sumowski, PhD

Cognitive reserve and identifying risk and protective factors for cognitive decline in multiple sclerosis.

Zhenyu Yue, PhD

Mechanisms underlying the pathophysiology of Parkinson's disease and other movement disorders.

Department of Neurology Clinical Research Resources

Under the leadership of the Vice Chair for Clinical Research, Dr. Jessica Robinson-Papp, the Department of Neurology is enthusiastically committed to nurturing the next generation of neurologist-scientists. Residents pursuing human subjects research projects have access to expert guidance on study design, data collection, and statistical analysis. In addition to Dr. Robinson-Papp, the Department of Neurology core research support team includes:

- Dr. Lidia Ivic, Administrative Director for Research. Dr. Ivic manages a team of Grants Managers who assist Neurology Department faculty and trainees with grant submissions and post-award grant management.
- Dr. Mary Catherine George, Clinical Research Program Director. Dr. George has an unparalleled understanding of the regulatory navigation for clinical studies, ranging from study conceptualization to the final process of closing out regulatory documents and contracts.
- Biostatistics Team. Led by Dr. Parul Agarwal, the Neurology Biostatistics Clinic occurs twice each month to answer statistical questions about current and future research projects. Dr. Agarwal is supported by a master's degree-level statistical programmer with expertise in major statistical software programs.
- Clinical Research Coordination. The Department of Neurology employs over 50 clinical research coordinators and managers to support our studies.

Health Equity Research

We are strongly committed to promoting neurologic health equity through research. Dr. Monica Rivera Mindt's lab leads several NIH-funded projects focused on disparities in cognitive health and increasing diversity in clinical research through community engagement. The PAIRED Project, led by Dr. Robinson-Papp, collaborates closely with the Rivera Mindt Lab, and also maintains clinical trial recruitment infrastructure designed to support fair and diverse access to research participation. Dr. Uraina Clark's NIH-funded lab studies the impact of exposure to racial stereotypes on brain function and behavior.

Health Services Research

Health technologies, e-health, and big data have an ever-expanding role in facilitating the collection of patient-reported outcomes and the implementation of knowledge into practice. Knowledge translation research is aligned with the triple aim of improving the patient experience, improving population health, and reducing health care costs. Major research areas are evaluating the effect of health care processes and interventions on the health of individuals and populations, as well as pioneering new approaches to fill the knowledge to action gap at all levels of neurological care. Goals are to address a broad range of patient-related outcomes, ensuring that patients are correctly diagnosed using the best and most accurate technologies, so they are referred in a timely manner, and patients receive evidence-based, cost-effective treatment and quality of care. Neurological care gaps (including disparities in care) are also considered to ensure the right patient gets the right treatment at the right time. Numerous neurology faculty are engaged in Health Services Research across a broad variety of neurology subspecialties including, Dr. Leah J. Blank (epilepsy), Dr. Caroline Crooms (neuro-palliative care), Drs. Mandip Dhmoon, Benjamin R. Kummer, and Laura K. Stein, (stroke) and our System Chair, Dr. Barbara G. Vickrey.

Department of Neurology Clinical Research in Neurology Subspecialties

Autonomic dysfunction. The Mount Sinai autonomic lab, directed by Dr. Robinson-Papp, conducts interdisciplinary research investigating the role of autonomic dysfunction in a variety of disorders including peripheral neuropathy, migraine, and neuropsychiatric disorders.

Behavioral neurology. Clinical research in Alzheimer's disease and other dementias at Mount Sinai is interdisciplinary and involves exciting collaboration between neurology faculty and other departments and institutes including psychiatry and neuroscience. Numerous neurology faculty members participate in clinical research within

Examples of Resident Scholarship and Faculty Mentorship

the Ronald M. Loeb Center for Alzheimer's Disease, the Alzheimer's Disease Research Center, and the Barbara and Maurice Deane Healthy Brain Initiative.

Headache, chronic pain and fatigue. In addition to the EPPIC-Net consortium as described above, the recently established David S. and Ruth L. Gottesman Center for Headache Treatment and Translational Research, led by Bridget Mueller, MD, PhD, conducts NIH-funded research and industry sponsored clinical trials in migraine and other headache disorders. Dr. Benjamin Natelson's lab studies the overlap of chronic pain and fatigue, with a recent focus on the effects of COVID-19 infection.

Movement disorders. Faculty members in the movement disorders division actively participate in clinical trials and cross-disciplinary translational research. Additional clinical research includes the work of Dr. Rachel Saunders-Pullman who studies biomarkers and the gut-brain axis in Parkinson Disease.

Multiple sclerosis. Under the direction of Drs. Fred Lublin and Ilana Katz Sand, multiple faculty in the Corinne Goldsmith Dickinson Center for Multiple Sclerosis have active clinical research including industry-sponsored and investigator-initiated clinical trials and NIH-funded work examining racial disparities in MS outcomes.

Neuro-rehabilitation. Dr. Noam Harel's laboratory, located at the Bronx VA is working to discover novel approaches to restore movement to parts of the body weakened by neurologic diseases including spinal cord injury and amyotrophic lateral sclerosis (ALS).

Every year, MSH neurology residents, students, and fellows, with the mentorship of Department faculty, present research at meetings such as the American Academy of Neurology, the American Neurological Association, and the International Stroke Conference, among others.



> *Circ Cardiovasc Qual Outcomes.* 2024 Apr;17(4):e010388. doi: 10.1161/CIRCOUTCOMES.123.010388. Epub 2024 Apr 10.

National Institutes of Health Stroke Scale Reporting in Medicare Claims Data: Reporting in the First 3 Years

Laura K Stein¹, Edwin Ortiz¹, Jaan Nandwani², Mandip S Dhamoon³

Affiliations + expand

PMID: 38597090 DOI: 10.1161/CIRCOUTCOMES.123.010388

> *Neurohospitalist.* 2022 Jan;12(1):24-30. doi: 10.1177/19418744211027746. Epub 2021 Jul 14.

High Risk Features Contributing to 30-Day Readmission After Acute Ischemic Stroke: A Single Center Retrospective Case-Control Study

Emma M Loebel¹, Mary Rojas¹, Danielle Wheelwright¹, Connor Mensching¹, Laura K Stein¹

Affiliations + expand

PMID: 34950383 PMCID: PMC8689545 DOI: 10.1177/19418744211027746

> *Neurology.* 2024 Mar 12;102(5):e209195. doi: 10.1212/WNL.0000000000209195. Epub 2024 Feb 6.

Teaching NeuroImage: Recognizing the Artery of Adamkiewicz: Hairpin for Safety

Cameron Yi¹, Joseph Y Yoon¹

Affiliations + expand

PMID: 38546179 DOI: 10.1212/WNL.0000000000209195

> *Stroke Vasc Neurol.* 2024 May 21:svn-2023-003051. doi: 10.1136/svn-2023-003051. Online ahead of print.

Racial disparities in access to, and outcomes of, acute ischaemic stroke treatments in the USA

Luke Kiefer¹, David Daniel¹, Sai Polineni¹, Mandip Dhamoon²

Affiliations + expand

PMID: 38777349 DOI: 10.1136/svn-2023-003051

Resident Life at Mount Sinai 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, \$4 ferry ride from Manhattan, and the Jersey Palisades is 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 more than 100 vendors that's open April through October in multiple locations throughout the city; Pio Pio, a tiny hole-in-the-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. Elmhurst, home to one of the most diverse populations in the U.S., offers an incredible array of international food options, making it the perfect spot to grab a bite when you're on call at Elmhurst Hospital.

For those with a sweet tooth, you can find bubble tea, French pastries, gourmet cookies, and at least 20 different flavors of frozen yogurt within a 10-minute walk from the hospital. Many local food vendors offer discounts for Mount 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 memberships 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 the NYC Philharmonic to the free Summer Stage and the Global Citizen Festival in Central Park, to Taylor Swift at Met Life Stadium. 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 such as *The Daily Show* and *Saturday Night Live*.



Jacqueline Kennedy Onassis Reservoir
in Central Park





“My interview for Mount Sinai felt like a return to home. I have the best support system in my co-residents, fellows, attendings, nursing staff, etc., which makes coming to work a joy every day. They are like my family and there is no place I would rather be.”

**Claudia Zbrzeski, MD,
Class of 2025**



Mount Sinai Hospital Neurology Residency Graduates and Where They Went

Class of 2024

Michael Allen, MD, MHPE

Epilepsy Medicine Fellowship, The University of Pennsylvania

Philip Avigan, MD, PhD

Movement Disorders Fellowship, Beth Israel Deaconess Medical Center

David Daniel, MD

Internal Medicine Resident, Icahn School of Medicine at Mount Sinai

Patrick Ebbert, MD

Headache Medicine Fellowship, Mass General Brigham and Harvard Medicine

Ilana Green, MD

Vascular Neurology Fellowship, NYU Grossman School of Medicine

Bryan Green, MD

Movement Disorders Fellowship, Mount Sinai West/ Mount Sinai Union Square

Rafique Haynes, MD

Vascular Neurology & Critical Care EEG Fellowship, Yale University

Destiny Marquez, MD

Neurocritical Care Fellowship, Icahn School of Medicine at Mount Sinai

Carly Ray, MD

Headache Fellowship, Icahn School of Medicine at Mount Sinai

Madeline Stecy, MD

Epilepsy Medicine Fellowship, Hospital of the University of Pennsylvania



Class of 2023

HoWing “Andy” Chan, MD

Epilepsy Medicine Fellowship, Icahn School of Medicine at Mount Sinai

Eveline M. Gutzwiller, MD

Neurocritical Care Fellowship, Northwell Health, Northshore University Hospital

Leslie Higueta, MD

Clinical Neurophysiology EMG Track Fellowship, Icahn School of Medicine at Mount Sinai

Adam M. Karp, MD

Vascular Neurology Fellowship, Icahn School of Medicine at Mount Sinai

Kate Kerpen, MD

Vascular Neurology Fellowship, Icahn School of Medicine at Mount Sinai

Saritha Kosarussavadi, MD, MS

Neuromuscular Fellowship, Icahn School of Medicine at Mount Sinai

Philip Maynard, MD

Headache Fellowship, Icahn School of Medicine at Mount Sinai

Sathiji Kathiresu Nageshwaran, MBBS, PhD

Postdoctoral Associate of Neuroscience, Weill Cornell Medical Center

Daniel Schwartz, MD, MA, Msc

Neuro-Ophthalmology Fellowship, Massachusetts Eye and Ear

Class of 2022

David Aharonoff, MD

Epilepsy Fellowship, Icahn School of Medicine at Mount Sinai

Daniel Chiu, MD

Neuro-Oncology Fellowship, The Massachusetts General Hospital/Dana-Farber Cancer Institute

Kapil Gururangan, MD

Epilepsy & Clinical Neurophysiology Fellowship, The University of California, Los Angeles

Mary Hahn, MD, MS

Vascular Neurology Fellowship, The University of Chicago

Amit Kohli, MD

Multiple Sclerosis Fellowship, Icahn School of Medicine at Mount Sinai

Philip Laquer, MD

Epilepsy Fellowship, Yale School of Medicine

Sarah Levy, MD

Epilepsy Fellowship, NYU Langone School of Medicine

Megan Longenberger, MD

Vascular Neurology Fellowship, Icahn School of Medicine at Mount Sinai

Desiree Markantone, MD

Epilepsy Fellowship, Cleveland Clinic

Daniella Carolina Sisniega, MD

Neurocritical Care Fellowship, The University of Pennsylvania

Neurology Fellowship Training Programs

The Icahn School of Medicine at Mount Sinai (ISMMS) offers a competitive and comprehensive array of one- and two-year Fellowship Training Programs. All fellowships governed by ACGME or the United Council for Neurologic Subspecialties (UCNS) are accredited by those bodies.

In the last few years, new subspecialty fellowships have

been added in epilepsy, headache, neuro-oncology, and neuro-otology.

Graduates of our fellowship programs are prepared for and have secured positions in academic neurology primarily, and also in private practice or employment in health systems.

ISMMS Fellowships	Duration (Years)	Accrediting Body	Total Number of Fellows	Director
Behavioral Neurology and Neuropsychiatry	1 - 2	UCNS	2	Georges Naasan, MD
Clinical Neurophysiology (EEG/EMG Tracks)	1	ACGME	2 (one in EEG track; one in EMG track)	Stephen Scelsa, MD
Epilepsy	1	ACGME	4	Ji Yeoun Yoo, MD
Headache Medicine	1	UCNS	3	Anna Pace, MD
Movement Disorders	2	Non-ACGME	1	Winona Tse, MD
Multiple Sclerosis	2 - 3	Non-ACGME	4	Fred Lublin, MD
Neurocritical Care	2	ACGME UCNS	7	Alexandra Reynolds, MD
Neuroendovascular Surgery	2	CAST	2	Johanna T. Fifi, MD; J Mocco, MD, MS; Reade A. De Leacy, MD
Neuro-infectious Disease	1 - 2	Non-ACGME	1	Jessica Robinson-Papp, MD, MS
Neuromuscular Medicine	1	ACGME	2	Susan Shin, MD
Neuro-Oncology	1 - 2	UCNS	1	Kevin Elmore, MD
Neuro-Otology	1 - 2	Non-ACGME	1	Joanna Jen, MD, PhD
Vascular Neurology	1 - 2	ACGME	4	Mandip Dhamoon, MD, DrPH



“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
Neurophysiology Lab**



Neurology Divisions and Centers

The Department of Neurology includes the full range of subspecialty divisions and programs offering comprehensive and compassionate care to children and adults. In addition, most of the divisions and programs offer fellowship opportunities. With the breadth of the Mount

Sinai Health System across Manhattan, Queens, Brooklyn, and South Nassau, our trainees learn from complex and rare cases transferred in from across the Health System, in addition to referrals to our comprehensive care centers and programs from across the U.S. and around the world.

Corinne Goldsmith Dickinson (CGD) Center for Multiple Sclerosis

The CGD Center's mission is to provide exceptional comprehensive care to patients with multiple sclerosis and other neuroinflammatory disorders, including neuromyelitis optica, anti-MOG antibody disease, autoimmune encephalitis, neurosarcoidosis, and CNS vasculitis. Faculty also engage in high-quality, cutting edge clinical, basic, and translational research studies, and they provide educational services to patients and family members, students, residents, fellows, and practicing physicians. The CGD Center's broad base of physicians, scientists, social workers, nurses, and related medical specialists offers state-of-the-art programs in disease management, including diagnostics, experimental therapeutics, basic and clinical research, psychiatric care, support services, and access to the latest clinical trials. The MS Center's new Patient Wellness Program encourages a holistic approach to truly provide comprehensive care to people living with MS. In addition to providing outstanding patient care, the Center's goals include the rapid translation of new discoveries into more effective treatments and training the next generation of clinician-scientists and clinician-educators in the care of multiple sclerosis.

- Long-running support from National Multiple Sclerosis Society Center-sponsored Physician Fellowships for post-residency clinical and research training
- Numerous opportunities for trainee participation in clinical care and research
- Multiple ongoing clinical trials of novel agents with co-localization of research staff and clinical care in the CGD Center
- Pre-clinical and clinical research on the microbiome in Multiple Sclerosis funded by the NIH
- Clinical research studying diet, exercise, sleep, and other modifiable lifestyle factors in Multiple Sclerosis funded by the National MS Society and NIH
- Dedicated neuropsychology research, clinical care, and training program in multiple sclerosis, with cutting-edge research on cognitive reserve in multiple sclerosis including NIH-funded research to identify modifiable risk and protective factors linked to cognitive decline
- Advanced imaging research focused on improving diagnostic and prognostic accuracy and developing new outcome metrics to detect MS disease progression funded by the NIH and Department of Defense
- Model for provision of Comprehensive MS Care through Patient Wellness Program launched in 2020
- One of a small number of Neuromyelitis Optica research and clinical care centers in the U.S.
- Recently recruited pediatric neuroimmunology specialist providing clinical care and participating in future pediatric clinical trials

• Neuroimmunology/Multiple Sclerosis Fellowship Program Available

MSH Teaching Faculty:

Fred D. Lublin, MD - Center Director; Director of the Multiple Sclerosis Fellowship Program, Saunders Family Professor of Neurology

Jordyn Anderson, PsyD - Assistant Professor of Neurology, Mount Sinai Postdoctoral Fellowship in Clinical Neuropsychology and Clinical Research Alum

Erin Beck, MD, PhD - Assistant Professor of Neurology

Michelle T. Fabian, MD - Director of Neurology Residency Program, Associate Professor of Neurology, Mount Sinai Neurology Residency and Multiple Sclerosis Fellowship Alum

Sam Horng, MD, PhD - Assistant Professor of Neurology and Neuroscience, Mount Sinai Neurology Resident-Researcher Training Program (R25) and Multiple Sclerosis Fellowship Alum

Ilana Katz-Sand, MD - Center Associate Director, Associate Professor of Neurology, Mount Sinai Multiple Sclerosis Fellowship Alum

Sylvia Klineova, MD, MS - Assistant Professor of Neurology, Mount Sinai Multiple Sclerosis Fellowship Alum

Stephen C. Krieger, MD - Professor of Neurology, Multiple Sclerosis Fellowship Alum

Sarah Levy, PhD - Instructor in Neurology, Mount Sinai Postdoctoral Fellowship in Clinical Neuropsychology and Clinical Research Alum

Aaron Miller, MD - Center Medical Director, Professor of Neurology

Sammita Satyanarayan, MD - Assistant Professor of Neurology, Mount Sinai Multiple Sclerosis Fellowship Alum

James F. Sumowski, PhD - Co-Director of the Postdoctoral Fellowship in Clinical Neuropsychology and Clinical Research, Associate Professor of Neurology and Psychiatry

Stephanie Tankou, MD, PhD - Assistant Professor of Neurology

Rachel Zolno, MD - Assistant Professor of Neurology and Pediatrics



Vascular Neurology Division

Collaborating as teams across disciplines of neurology, neurosurgery, radiology, and neurocritical care, the Mount Sinai Stroke Center features 24/7 availability for emergency consultation and treatment, a specialized neurointensive care unit, a state-of-the-art stroke unit, and access to some of the latest clinical trials. Center faculty are recognized as leaders 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.

- Stroke division faculty led successful application to become first hospital in New York City and second in New York State to receive Joint Commission Comprehensive Stroke Center designation
- Tele-neurology and neuroimaging applications facilitate acute stroke treatment that is coordinated throughout the Mount Sinai Health System
- Residents and fellows train with world-class neuro-interventional faculty from multiple disciplines: neurology, neurosurgery, and radiology
- Substantial resident mentorship in stroke epidemiology and outcomes research
- **ACGME Vascular Neurology Fellowship Program Available**
- **CAST-accredited Neuroendovascular Surgery Fellowship Program Available**

MSH Teaching Faculty:

Michael F Waters, MD, PhD
Systemwide Director, Neurovascular Division;
Professor of Neurology

Steven Rudolph, MD
Professor of Neurology, *Mount Sinai Neurology Residency Alum*

Mandip S. Dhamoon, MD, DrPH – Director of the Vascular Neurology Fellowship Program;
Professor of Neurology and Medical Education

Michael Fara, MD, PhD – Director, MSH Comprehensive Stroke Center, Assistant Professor of Neurology

Johanna T. Fifi, MD – Co-Director of the Neuro-endovascular Surgery Fellowship (Neurosurgery); Professor of Neurology, Neurosurgery, and Radiology

Qing Hao, MD, PhD – Assistant Professor of Neurology

Benjamin R. Kummer, MD – Director of Clinical Informatics, Department of Neurology, Associate Professor of Neurology

Andrea Lendaris, MD – Assistant Professor of Neurology and Associate Clerkship Director

Lili Velickovic Ostojic, MD – Assistant Professor of Neurology, *Mount Sinai Beth Israel Residency Alum*

Kara F. Sheinart, MD – Assistant Professor of Neurology, *Mount Sinai Neurology Residency Alum*

Laura K. Stein, MD, MPH – Associate Director of Mount Sinai Neurology Residency Program, Associate Professor of Neurology, *Mount Sinai Neurology Residency and Vascular Neurology Fellowship Alum*

Justin Tay, MD – MSH Emergency Department - Neurohospitalist Attending; Site Stroke Center Director for Neurology, Mount Sinai Queens; Assistant Professor of Neurology; *Mount Sinai Neurology Residency Alum and Vascular Neurology Fellowship Alum*

Alison Thaler, MD – Assistant Professor of Neurology, *Mount Sinai Neurology Residency Alum*

Stanley Tuhim, MD – Emeritus Professor of Neurology, and Geriatrics and Palliative Care *Mount Sinai Neurology Residency Alum*

Robin Ulep, MBBS – Associate Program Director for Diversity, Equity and Inclusion, Assistant Professor of Neurology

Jesse Weinberger, MD – Professor of Neurology, *Mount Sinai Neurology Residency Alum*

Robert and John M. Bendheim Parkinson and Movement Disorders Center

Center physicians, working in partnership with nurse practitioners and social workers, 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. State-of-the-art diagnostic and treatment services include inpatient and outpatient consultation, chemodeneration and medication management, and screening and follow-up care for deep brain stimulation (DBS) and FUS (focused ultrasound), in collaboration with research and care teams at Mount Sinai West, including neurosurgeon Brian Kopell, MD. Treatment programs are complemented by robust clinical trial engagement in order to contribute to the discovery of more effective treatments for these often debilitating disorders, as well as basic science research in Parkinson's disease.

- High-volume teaching clinic and movement disorder video teaching rounds and clinico-pathologic conferences
- Active in clinical trials in various movement disorders, including progressive supranuclear palsy, Parkinson's disease, deep-brain stimulation, essential tremor, and cervical dystonia
- Significant NIH and philanthropic funding for basic research into the mechanisms underlying the pathophysiology of Parkinson's disease and other movement disorders
- **Movement Disorders Fellowship Program Available.** Program includes training on the clinical evaluation and treatment of movement disorders, botulinum toxin injections for movement disorders and deep brain stimulation programming as well as research and clinical trials training across 4 campuses; Mount Sinai Hospital, Mount Sinai West hospital, Mount Sinai-Union Square, and the Bronx VA hospital

MSH Teaching Faculty:

Winona Tse, MD - Site Director, Associate Fellowship Director, and Movement Disorders Associate Professor of Neurology, *Mount Sinai Neurology Residency Alum*

Emmanuel During MD - Associate Professor of Neurology

Victoria Katsnelson MD - Assistant Professor of Neurology

Melissa J Nirenberg, MD, PhD - Professor of Neurology

Ruth H Walker, MD, PhD - Professor of Neurology

Miodrag Velickovic, MD - Assistant Professor of Neurology

Zhenyu Yue, PhD - Director of Basic and Translational Research of Movement Disorders Aidekman Family Professor of Neurology and Neuroscience



Neuromuscular Disease Division

The Neuromuscular Disease Division offers personalized, state-of-the-art care for disorders in neuromuscular transmission, muscle diseases, peripheral neuropathies, and neurogenetics. Faculty are highly experienced in diagnosing and managing these disorders, providing a complete range of diagnostic testing services, including nerve conduction studies and needle electromyography; neuromuscular ultrasound; MR neurography; autonomic testing; and skin, nerve, and muscle biopsies using the most advanced techniques and technologies.

- Referral hub for patients with peripheral neuropathies, myasthenia gravis, and other complex neuromuscular disorders
- Division faculty have led seminal studies in the use of botulinum toxin in spasticity and movement disorders, and novel agents in neuropathic pain
- Federally funded research on implementation of CDC opioid-prescribing guidelines for chronic pain in high-risk populations

• ACGME Fellowships in Neuromuscular Medicine and Clinical Neurophysiology (EMG specialization) Available

MSH Teaching Faculty:

David M. Simpson, MD - Director, Clinical Neurophysiology Laboratories at MSH
Professor of Neurology

Rory Abrams, MD - Assistant Professor of Neurology

Helen Badu, MD - Assistant Professor of Neurology

Ming Huang, MD - Associate Professor of Diagnostic, Molecular and Interventional Radiology

Michelle Kaku, MD - Vice Chair of Education, Associate Professor of Neurology

Daniel Macgowan, MD - Associate Professor of Neurology

Shanna Patterson, MD - Associate Professor of Neurology

Timothy Richardson, DO - Neuropathologist, Associate Professor of Pathology, Molecular and Cell Based Medicine

Jessica Robinson-Papp, MD, MS - Vice Chair of Clinical Research; Director, NeuroAIDS Program; Professor of Neurology, Mount Sinai Neurology Residency and Clinical Neurophysiology Fellowship Alum

Stephen Scelsa, MD - Director, ALS Center; Director, Clinical Neurophysiology Fellowship Program; Professor of Neurology

Michael Schecht, MD - Assistant Professor Diagnostic, Molecular and Interventional Radiology (MR neurography)

Susan Shin, MD - Director of Neuromuscular Fellowship Program, Associate Professor of Neurology



Epilepsy Program

The Epilepsy Program offers compassionate and comprehensive care for people with seizures and epilepsy. Our team includes pediatric and adult epilepsy doctors who work closely with nurse practitioners, social workers, recreational therapists, a nutritionist, epilepsy neurosurgeons and neuropsychologists to take care of the whole person. At The Mount Sinai Hospital campus, the program includes both an adult and pediatric NAEC level 4 inpatient epilepsy monitoring unit (EMU) and an ABRET certified outpatient and in-patient electroencephalography (EEG) lab. The program embraces a multidisciplinary approach to treatment options, including lifestyle and dietary modifications, medications, alternative therapies and surgical interventions. Residents have the opportunity to work closely with epilepsy faculty caring for patients admitted to the EMU and will learn both EEG reading as well as clinical management of this population. Residents will also be exposed to neurological emergencies related to status epilepticus and learn how to manage these conditions.

- No. 1 in the world in number of responsive neurostimulation implants
- Three level 4 epilepsy centers (the highest level of accreditation by the National Association of Epilepsy Centers) located at The Mount Sinai Hospital, Mount Sinai West, and Mount Sinai Kravis Children's Hospital
- Ongoing EEGs at affiliate hospitals (Mount Sinai Morningside, Mount Sinai Queens, Mount Sinai South Nassau) read by Mount Sinai Faculty with complex cases referred for care to the epilepsy faculty
- Renowned epilepsy basic science as well as health outcomes research
- **ACGME Fellowship Programs in Epilepsy and in Clinical Neurophysiology (EEG specialization) available**
- **Neurocritical Care Fellowship Program**

MSH Teaching Faculty:

Lara V. Marcuse, MD - Epilepsy Program Co-Director; Associate Professor of Neurology and Neurosurgery

Madeline C. Fields, MD - Epilepsy Program Co-Director; Associate Professor of Neurology and Neurosurgery, *Mount Sinai Neurology Residency Alum*

David Aharonoff, MD - Assistant Professor of Neurology

Leah Blank, MD, MPH - Assistant Professor of Neurology and Population Health Science and Policy

Shu-Wei Hsu, MD - Assistant Professor of Neurology

Kyusang Lee, MD - Professor of Neurology

Ji Yeoun ("Jenna") Yoo, MD - Epilepsy Fellowship Program Director; Associate Professor of Neurology, *Mount Sinai Neurology Residency Alum*

James ("Jake") Young, MD, PhD - Assistant Professor of Neurology and Neurosurgery, *Mount Sinai Neurology Resident-Researcher Training Program and Clinical Neurophysiology Fellowship Alum, Mount Sinai Neurology Residency Alum*

Calvin Yu, MD - Assistant Professor of Neurology

Maite La Vega-Talbot, MD - Assistant Professor of Neurology and Pediatrics

Sonam Verma, MD - Assistant Professor of Neurology and Pediatrics

Adam Saad, PsyD - Assistant Professor of Neurology; Neuropsychology Services for the Epilepsy Program

Sloane Sheldon, PhD - Assistant Professor of Neurology; Neuropsychology Services for the Epilepsy Program

Fedor Panov, MD - Director of Adult Epilepsy Surgery Program, Associate Professor of Neurosurgery

Saadi Ghatan, MD - Director of Pediatric Neurosurgery Program, Professor of Neurosurgery and Pediatrics

David S. and Ruth L. Gottesman Center for Headache Treatment and Translational Research

The David S. and Ruth L. Gottesman Center for Headache Treatment and Translational Research is a multidisciplinary center specializing in the diagnosis and treatment of chronic and acute headaches and other painful disorders of the skull, brain, and face in adults and children. Subspecialty-trained faculty at the Mount Sinai Hospital, working with a dedicated doctor of nursing practice and nurses form a strong clinical team that employs the newest technologies including a state-of-the-art fluoroscopy suite, botulinum toxin injections, nerve blocks, and a range of pharmacologic therapies including infusion therapies. Care goals are to provide tailored, evidence-based treatment for various headache and facial pain disorders with a focus on complex cases.

Our faculty also have the following interests:

- Autonomic Function Laboratory
- The epidemiology of migraine
- Interventional Pain Management
- In Vitro Fertilization and Migraine
- Pediatric Headache Medicine
- Transgender Headache Medicine
- Vascular Disorders Associated with Headache
- Virtual visits/teleurology outpatient visits for headache patients are available
- **UCNS-certified Headache Medicine Fellowship Program Available**

MSH Teaching Faculty:

Jihan A. Grant, MD - Director, David S. and Ruth L. Gottesman Center for Headache Treatment and Translational Research, Icahn School of Medicine at Mount Sinai; Assistant Professor of Neurology and Anesthesiology

Mark Barber, MD, MPH - Assistant Professor of Neurology, *Neurology Residency and Headache and Facial Pain Fellowship Alum*

Fred Cohen, MD - Assistant Professor of Neurology and Medicine

Mohamed El Shorafa, MD - Assistant Professor of Neurology and Pediatrics, *Headache and Facial Pain Fellowship Alum*

Mark W. Green, MD - Director Emeritus Professor of Neurology, Rehabilitation Medicine, and Anesthesiology

Jasmin Harpe, MD, MPH - Assistant Professor of Neurology

Michelle Liu, MD - Assistant Professor of Neurology and Anesthesiology

Bridget Mueller, MD, PhD - Assistant Professor of Neurology, *Neurology Residency and Headache and Facial Pain Fellowship Alum*

Anna Pace, MD - Fellowship Program Director; Assistant Professor of Neurology, *Neurology Residency and Headache and Facial Pain Fellowship Alum*

Alison Thaler, MD - Assistant Professor of Neurology, *Mount Sinai Neurology Residency Alum*

Marianna Vinokur, DO - Assistant Professor of Neurology



Neuro-Oncology Division

The Division of Neuro-Oncology at the Tisch Cancer Institute, a National Cancer Institute-designated Cancer Center, provides comprehensive care to patients with brain tumors. We design treatment plans for patients with primary brain tumors, including glioblastoma, CNS lymphoma, and rare primary CNS malignancies such as medulloblastoma, germinoma, and spinal cord tumors. Subspecialty consultations to medical oncology aid in determining the best treatment approaches to nervous system metastases. Novel treatment modalities are incorporated including CAR-T cells therapy, immunotherapy, and small molecular targeted therapy. Employing a multidisciplinary approach, we partner closely with colleagues across Neurosurgery, Medical Oncology, Radiation Oncology, Neuro-radiology, Neuropathology, Rehabilitation Medicine, and Palliative Care.

- PGY-2 Year rotation in inpatient Neuro-Oncology consult service at Mount Sinai Hospital, with wide exposure to primary brain tumors and neurologic complications of cancer; many residents elect to return for additional subspecialty rotation

- **A UCNS approved fellowship in Neuro-Oncology is available**

MSH Teaching Faculty:

Kevin Elmore, MD - Director, Neuro-oncology Fellowship Program; Assistant Director, Neuro-Oncology Education; Assistant Professor of Neurology, Neurosurgery, and Medicine;

Varun Jain, MBBS - Instructor of Neurology; *Neuro-Oncology Fellowship Alum*

Joshua Friedman, MD - Assistant Professor of Neurology Neurosurgery and Medicine; *Mount Sinai Neurology Residency Alum*

Lyndon Kim, MD - Director, Clinical Research in Neuro-Oncology; Medical Director, Skull-Based and Rare CNS Malignancies; Professor of Neurology, Neurosurgery, and Medicine

The Division of Behavioral Neurology and Neuropsychiatry

Within the Division of Behavioral Neurology and Neuropsychiatry, expert clinical care is provided to patients experiencing memory and other cognitive or behavioral symptoms. Patients are evaluated at the Barbara and Maurice Deane Center for Wellness and Cognitive Health for conditions including subjective cognitive complaints, mild cognitive impairment, dementia secondary to Alzheimer's disease, vascular disease, Lewy body disease, frontotemporal lobar degeneration, and chronic traumatic encephalopathy (CTE). In addition, the Center provides care for patients with cognitive and behavioral complaints secondary to traumatic brain injury, stroke, epilepsy, multiple sclerosis, and Parkinson's disease, among other neurologic disorders. The Deane Center features a multidisciplinary team of neurologists, neuropsychiatrists, geriatricians, neuropsychologists, and translational neuroscientists, and partners with social work, nursing, and advanced practice providers. Division faculty provide expert diagnostic assessments and management of patients referred from all over the world, and they lead investigator-initiated studies for various cognitive disorders, as well as recruit into clinical trials of the longstanding Mount Sinai Alzheimer's Disease Research Center. Division faculty also include clinician-investigators with substantial NIH and other funding, conducting mechanistic and translational research in Alzheimer's disease and other dementias.

- Translating innovative coordinated care models for dementia into the practice

- **UCNS-certified Behavioral Neurology and Neuropsychiatry Fellowship Program Available**

MSH Teaching Faculty:

Sam Gandy, MD, PhD - Division Chief, Professor of Neurology and of Psychiatry; Mount Sinai Endowed Chair in Alzheimer's Research

Georges Naasan, MD - Co-Chief and Medical Director, Division of Behavioral Neurology and Neuropsychiatry; Co-Medical Director, Barbara and Maurice Deane Center for Wellness and Cognitive Health; Behavioral Neurology and Neuropsychiatry Fellowship Program Director; Associate Professor of Neurology, and Geriatrics and Palliative Medicine

Arnabh Basu, MD - Assistant Professor of Psychiatry

Eileen Callahan, MD - Professor of Geriatrics and Palliative Medicine, and Professor of Internal Medicine

Emmanuel During MD - Associate Professor of Neurology

Fanny Elahi, MD, PhD - Associate Professor of Neurology, Neuroscience, and Pathology, Molecular, and Cell-Based Medicine

Joanne Festa, PhD - Assistant Professor of Neurology and Psychiatry

Trey Hedden, PhD - Director, Neuroimaging and Biomarker Research in Aging and Alzheimer's Disease; Associate Professor of Neurology, Radiology, and Neuroscience

Estevana Isaac, MD - Assistant Professor of Neurology

Sarah Levy, PhD - Assistant Professor of Neurology

Ana Pereira, MD, MS - Assistant Professor of Neurology and Neuroscience

Tianxu Xia, MD - Assistant Professor of Neurology and Psychiatry; Associate Director of Neurobehavioral Education

Pediatric Neurology Division

The Pediatric Neurology Division aims to provide patient-centered, compassionate, and proactive approaches to care. Pediatric patients and their families have unique needs, which our expert faculty and nurse practitioners address through 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, including seizures and epilepsy, stroke and cerebrovascular disorders, headache and concussion syndromes, neuromuscular disorders, movement disorders, neurometabolic and neurogenetic disorders, autoimmune neurological disorders (encephalitis and multiple sclerosis), neonatal encephalopathy, developmental and intellectual disability, learning disorders, and autism and neurobehavioral disorders.

- High-volume and complexity inpatient and consult pediatric neurology service and twice-weekly general pediatric neurology teaching clinics provide excellent training during pediatric neurology rotations both for primary neurological disorders and for neurological complications seen in complex patients at Mount Sinai Kravis Children's Hospital (part of The Mount Sinai Hospital), including its Pediatric Intensive Care Unit (PICU) and Neonatal Intensive Care Unit (NICU)
- Comprehensive care for children with epilepsy and seizure disorders is provided in a dedicated pediatric epilepsy monitoring unit (EMU) at Mount Sinai Kravis Children's Hospital, including a pediatric epilepsy surgical program
- Unique pediatric-specific subspecialty clinics in epilepsy, headache and traumatic brain injury, autoimmune neurology and multiple sclerosis, movement disorders, neurometabolism, adrenoleukodystrophy, and spasticity/cerebral palsy
- Internationally recognized pediatric program to evaluate and treat children with AVMs, vein of Galen malformations, aneurysms, and other cerebrovascular disorders
- Collaborative clinical research into genetic etiologies of developmental disorders and epilepsy with the Mindich Child Health and Development Institute and the Seaver Autism Center for Research and Treatment
- Basic science investigation with several NIH-funded pediatric neurology research laboratories that focus on pathophysiological mechanisms of genetic dystonias, neonatal opioid withdrawal syndrome, pediatric neurometabolic disorders, and pediatric brain tumors

MSH Teaching Faculty:

Walter J. Molofsky, MD – Division Chief; Associate Professor of Neurology and Pediatrics

Michelle Ehrlich, MD - Professor of Neurology, Pediatrics, and Genetics and Genomic Sciences

Mohamed El Shorafa, MD - Assistant Professor of Neurology and Pediatrics, *Headache and Facial Pain Fellowship Alum*

Jacqueline S Gofshteyn, MD - Assistant Clinical Professor of Neurology and Pediatrics

Kevin Gurcharran, MD - Assistant Professor of Neurology and Pediatrics

David M Kaufman, MD - Clinical Professor of Neurology and Pediatrics

Maite La Vega-Massello, MD - Assistant Professor of Neurology and Pediatrics - Epilepsy

Naomi Lubarr, MD - Assistant Clinical Professor of Neurology and Pediatrics

Isaac Marin-Valencia, MD – Assistant Professor of Neurology, Neuroscience, Genetics and Genomic Sciences, and Pediatrics

Hillary R. Raynes, MD – Director, Pediatric Neurology Residency Program; Pediatric Neurology Teaching Clinic; Associate Professor of Neurology and Pediatrics

Sonam Verma, MD - Assistant Professor of Neurology and Pediatrics - Epilepsy

Rachel Zolno MD - Assistant Professor Neurology and Pediatrics



Neuro-Ophthalmology Division

With a large outpatient practice located on the Mount Sinai Hospital campus and multiple locations around the health system where affiliated faculty and practices are based (including New York Eye and Ear Infirmary of Mount Sinai), the neuro-ophthalmology division is led by a board-certified neurologist and ophthalmologist, with decades of experience in diagnosing, treating, and conducting research in a wide range of conditions, including optic neuritis and other inflammatory optic nerve diseases; ptosis and double vision; idiopathic intracranial hypertension; meningioma, pituitary tumor, aneurysm, and craniopharyngioma; unexplained visual loss; untreated neurovascular disorders; and acute optic nerve injury. Three additional renowned faculty, Rudrani Banik, MD, Abby Craven, MD, and Valerie Elmalem, MD, Alberto DiStefano, MD are ophthalmology and neuro-ophthalmology trained. Rita Okumu, MD is neurology and neuro-ophthalmology trained.

Electives available for neurology residents:

- Major multisite NORDIC trials include the first study to establish the therapy and guidelines for management of idiopathic intracranial hypertension (IIH) and the first trial on acute neuroprotection for optic nerve injury
- New research in optical imaging of the optic nerve in intracranial hypertension, ischemic optic nerve injury, and optic neuritis, with deep learning approach to imaging swollen optic nerve; Phase II study on early intervention on ocular myasthenia gravis
- The Neuro-ophthalmology division has expanded research into artificial intelligence for analyzing visual fields, fundus photos, and optical coherence evaluations of conditions that cause swelling of the optic nerve head.

MSH Teaching Faculty:

Mark Kupersmith, MD - Division Chief
Professor of Neurology, Ophthalmology,
and Neurosurgery

Rudrani Banik, MD - Associate Professor
of Ophthalmology

Abigail Craven, MD - Assistant Professor
of Ophthalmology

Alberto DiStefano, MD - Assistant Professor
of Ophthalmology

Valerie Elmalem, MD - Associate Professor
of Ophthalmology

Rita Okumu, MD - Assistant Professor of
Neurology, Ophthalmology, and Neurosurgery



Neuro-Otology Division

Neuro-otology or vestibular neurology focuses on the inner ear and its connections to the brain in the control of eye movement, coordination, balance, and hearing. The Department of Neurology has had a distinguished history of 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. The division is led by a neurologist with formal training in neuro-otology, who evaluates and treats patients with dizziness due to benign paroxysmal positional vertigo, vestibular migraine, and other common conditions, as well as rare hereditary neurodegenerative conditions such as episodic ataxia and pontocerebellar hypoplasia.

- Neuro-otology clinic and multidisciplinary clinical conferences on the evaluation and management of patients with dizziness, imbalance, and hearing loss
- Close collaboration with Otolaryngology, Neurosurgery, and Physical Therapy/ Rehabilitation Medicine, with clinical and research opportunities for students and residents in neuro-otology
- Vestibular laboratory to assess eye movement controlled by the inner ear and the brain

- **Neuro-Otology Fellowship Program Available**



MSH Teaching Faculty:

Joanna Jen, MD, PhD - Division Chief, Dr. Morris B. Bender Professor of Neurology, Neurosurgery, and Otolaryngology

Jun Maruta, PhD - Instructor, Neurology

Sergei Yakushin, PhD - Associate Professor of Neurology

Neurogenetics Division

The Division of Neurogenetics of the Department of Neurology at Mount Sinai is focused on improving the diagnosis and management of patients with neurological manifestations from rare genetic diseases. We are dedicated to the evaluation, diagnosis, and treatment of neurogenetic disorders across the lifespan. Our multidisciplinary team includes pediatric and adult neurologists who share a special interest in neurological disorders with a strong genetic predisposition, in close collaboration with colleagues in medical genetics.

- Specialty clinics for neurometabolism and neurogenetics as well as multidisciplinary clinical conferences on the evaluation and management of patients with neurological manifestations of genetic disorders
- Close collaboration with Genetics and Genomic Sciences, Oncology, Otolaryngology, Neurosurgery, and Physical Therapy/Rehabilitation Medicine, with clinical and research opportunities for students and residents in neurogenetics
- Ongoing natural history studies and biobanking as well as genetic investigation

- **Neurogenetics Fellowship Program Available**

MSH Teaching Faculty:

Joanna Jen, MD, PhD - Division Chief, Dr. Morris B. Bender Professor of Neurology, Neurosurgery, and Otolaryngology

Fanny Elahi, MD, PhD - Associate Professor of Neurology, Neuroscience, and Pathology, Molecular and Cell-Based Medicine

Michelle Kaku, MD - Vice Chair of Education, Associate Professor of Neurology

Isaac Marin-Valencia, MD - Assistant Professor of Neurology, Neuroscience, Genetics and Genomic Sciences, and Pediatrics

Susan Shin, MD - Director, Neuromuscular Medicine Fellowship Program, Associate Professor of Neurology

Neuro-Infectious Diseases Division

Division faculty engage in expert clinical care for a range of diseases, including nervous system complications of HIV, CNS opportunistic infections, SARS-COV-2, neurosyphilis, meningitis, and others. The division supports a large portfolio of research in neuro-HIV, which integrates clinical research and patient care, education, and community outreach, with the aim of improving 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.

- One of four NIH-funded HIV Brain Banks in the U.S., with more than 25 years of continuous funding
 - The largest longitudinal multidisciplinary neuro-HIV cohort in New York City, with more than 250 research visits annually
 - Diverse portfolio of clinical neuro-HIV research, including projects to study autonomic dysfunction, neurodegenerative disease, cerebrovascular disease and motor dysfunction, opioid use and pain management, nervous system and immune reconstitution disease, peripheral neuropathy, impacts of early life stress on neuro-HIV disease, and sociocultural factors in the generation of cognitive and psychosocial difficulties
 - Neurologic care for the ISMMS Institute for Advanced Medicine, which follows more than 10,000 people living with HIV in New York City
- **Neuro-Infectious Diseases Fellowship Program Available**

MSH Teaching Faculty:

Susan Morgello, MD - Division Chief
Professor of Neurology, Neuroscience,
and Pathology

Desiree A. Byrd, PhD, ABPP-CN - Associate
Professor of Neurology and Psychiatry

Uraina Clark, PhD - Chair, Department Diversity
Committee Associate Professor of Neurology

Jairo Gonzalez, Psy.D., - Assistant Professor
of Neurology

Allison P. Navis, MD - Associate Program
Director for Continuity Care Education, Assistant
Professor of Neurology, *Mount Sinai Neuro-
infectious Diseases Fellowship Alum*

Jessica Robinson-Papp, MD, MS -
Vice Chair of Clinical Research; Director,
NeuroAIDS Program; Professor of Neurology,
*Mount Sinai Neurology Residency and Clinical
Neurophysiology Fellowship Alum*



Neuro-Palliative Medicine

Neuro-Palliative medicine is a new and growing subspecialty focused on improving quality of life for patients with serious neurologic illness, such as brain tumors, amyotrophic lateral sclerosis (ALS), Parkinson's disease, dementia, cerebrovascular disease, and others. Neurologists with subspecialty training in palliative medicine provide expertise in comprehensive symptom management, communication about medical decision-making (including goals of care discussion and advance care planning), and psychosocial support. There is increasing recognition in the neurology community of the need for such specialists, as well as for research regarding palliative care outcomes for neurologic disease.

The Department of Geriatrics and Palliative Medicine at Mount Sinai has a large, renowned ACGME-accredited palliative medicine fellowship program. Several neurologists, including graduates of the Mount Sinai residency, have completed this fellowship in recent years. Rita "Caroline" Crooms, MD MPH, is a neurologist who completed the Mount Sinai palliative medicine fellowship in 2019 and subsequently joined the Department of Neurology to establish a program of neuro-palliative care research, education, and clinical care.

Since joining the faculty, Dr. Crooms has developed didactic sessions for Mount Sinai's neurology residents on palliative care topics, including strategies for leading goals of care discussions and communicating about uncertainty in neuro-prognostication. Beginning in 2022, this curriculum was expanded to include a full week of lunchtime conferences covering a range of palliative care topics by Dr. Crooms and other Department of Neurology faculty.

Dr. Crooms has also established an outpatient neuro-palliative medicine practice to provide consultative service to colleagues primarily in neurology. She joins the ALS Clinic at Mount Sinai Union Square twice a month to enhance the multidisciplinary services provided there through provision of palliative care. She also has a research program with the long-term goal of improving quality-of-life outcomes for people with high-grade glioma.

MSH Teaching Faculty:

Rita "Caroline" Crooms, MD, MPH -
Assistant Professor in Neurology and Geriatrics
and Palliative Medicine



General Neurology Division

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 patients and colleagues, in the context of ongoing clinical practice.

The division includes full-time faculty with decades of prior experience in private practice, who bring this perspective and extensive expertise to the residency training experience.

MSH Teaching Faculty:

Charles B. Stacy, MD – Division Chief
Associate Professor of Neurology, Mount Sinai
Neurology Residency Alum

David J. Bronster, MD - Professor of Neurology,
Mount Sinai Neurology Residency Alum

Noam Harel, MD, PhD - Associate Professor
of Neurology and Rehabilitation Medicine

Michelle Liu, MD - Assistant Professor
of Neurology and Anesthesiology

Benjamin Natelson, MD - Professor of Neurology

Rita Okumu, MD - Assistant Professor
of Neurology, Neurosurgery and Ophthalmology

Vanessa Tiongson, MD - Assistant Professor
of Neurology

Varun Jain, MBBS - Instructor of Neurology; *Neuro-
Oncology Fellowship Alum*

The Division of Inpatient General Neurology, Quality and Safety

The mission of the Division of Inpatient General Neurology, Quality and Safety is to provide standardized, safe, high-quality care to all hospitalized patients with nonvascular neurologic conditions, while also providing exceptional training to residents and students.

The teaching faculty is composed of neurohospitalists, general neurologists and subspecialist neurologists, all of whom bring diverse experience, expertise and great enthusiasm for teaching. Through inpatient consultation and management, trainees are exposed to a wide range of neurologic conditions, as well as to systems thinking, to gain a deeper appreciation of the role of the provider in a complex care delivery system and to ensure the best possible care for every patient.

MSH Teaching Faculty:

Sophia Ryan, MD, MPH - Division Chief;
Medical Director Quality and Safety, Mount Sinai
West; Medical Director, MSH Lumbar Puncture
Clinic; Assistant Professor of Neurology

Helen Badu, MD- Assistant Professor of
Neurology

Pojen Deng, MD - Assistant Director of Quality
Improvement for Neurology, Mount Sinai West
and Morningside; Interim Site Neurology
Clerkship Director, Mount Sinai Morningside;
Assistant Professor of Neurology

Elissa Fory, MD – Site Medical Director for
General Neurology, Mount Sinai Queens; Site
Neurology Clerkship Director, Mount Sinai
Queens; Associate Professor of Neurology

Mark Homonoff, MD – Associate Professor
of Neurology

Andrea Lendaris, MD - MSH Emergency
Department - Neurohospitalist Attending;
Assistant Professor of Neurology

Justin Tay, MD - MSH Emergency Department
- Neurohospitalist Attending; Site Stroke Center
Director for Neurology, Mount Sinai Queens;
Assistant Professor of Neurology; *Mount Sinai
Neurology Residency Alum and Vascular Neurology
Fellowship Alum*

Neurocritical Care Division

As a division within the Department of Neurosurgery, the Neurocritical Care team cares for critically ill neurological and neurosurgical patients. A team of neuro-intensivist physicians, neuro-ICU nurses, and other allied health professionals provide excellent patient-centered care for brain- and spinal cord-injured patients across the spectrum of neurocritical care. An 18-bed, state-of-the-art, patient-centered Neurosciences ICU opened in October 2019, having the latest integrated data management platforms, continuous EEG monitoring, and an integrated CT-suite. It leverages the principles of artificial intelligence and machine learning to help patients embark on the best possible trajectory toward recovery. To enhance family engagement, the unit has open visitation, family involvement on rounds, family zone in every room, and dedicated areas to inspire learning and research and foster collaboration among all our trainees and faculty.

- Monthly meetings of leadership of neurocritical care, stroke, and general neurology faculty, fellows, and residents, to assess and continually improve workflow and communication
- Neuro Emergencies Management and Transfers (NEMAT) and Telehealth initiatives that has helped triage and treat more than 1,000 patients with Neuro emergencies annually
- Participation in NIH- and industry-sponsored clinical trials
- Mount Sinai Critical Care Resilience Program (MSCCRP), a multidisciplinary Program for innovative projects such as the Post-ICU Recovery Clinic and ICU diaries, with the goal of “humanizing the ICUs”
- Fellow involvement in Global Critical Care initiatives through the Institute of Critical Care Medicine
- **ACGME and UCNS-Accredited Neurocritical Care Fellowship Program**

MSH Teaching Faculty:

Neha S. Dangayach, MD - System Director, Neuroemergencies Management and Transfers (NEMAT); Associate Professor of Neurosurgery & Neurology

Alexandra S. Reynolds, MD - Director, Mount Sinai Hospital Neurosciences ICU; Program Director, Neurocritical Care Fellowship, Associate Professor of Neurosurgery & Neurology

Gabriela Keeton, MD - Associate Program Director, Neurocritical Care Fellowship; Assistant Professor of Neurosurgery & Neurology

Hae Young Baang, MD - Assistant Professor of Neurosurgery & Neurology

Fernanda Carvalho-Poyraz, MD PhD - Assistant Professor of Neurosurgery & Neurology

Dana Klavansky, MD - Assistant Professor of Neurosurgery & Neurology

Cappi C. Lay, MD - Assistant Professor of Neurosurgery

John Liang, MD - Assistant Professor of Neurosurgery & Neurology



Neuro-Informatics

The premise for building a clinical neuro-informatics capacity within the Department of Neurology is the belief that information technology (IT) – when applied correctly – can enhance care quality, efficiency, and value in health care. Clinical neuro-informatics, therefore, is the application of health IT processes and systems to patients with disorders of the nervous system.

In 2018, the department recruited Benjamin Kummer, MD, a vascular neurologist board certified in clinical informatics, incorporating resources to support a full-time Epic programmer. Working in partnership with an internal Epic billing/coding optimization group, an implementation specialist, and faculty across all divisions, Dr. Kummer and his team oversee changes in the Epic electronic health record to improve clinical operations in Neurology. These efforts also target increasing faculty well-being and self-efficacy with respect to clinical documentation and work credit.

Additionally, Dr. Kummer established the Clinical Neuro-informatics Program within the Department of Neurology, which serves as an academic platform for research collaboration and knowledge dissemination in the emerging field of clinical neuro-informatics. The Program comprises a central EHR data core to allow faculty affiliates and their laboratories to engage in informatics-related research projects and further the Program's mission.

Dr. Kummer also leads the new Neuro-AI elective for PGY3 and 4 residents, which exposes neurology residents to the basics of AI, machine learning, and data science applications to neurological care. His current research supports projects including developing AI/machine learning models for admission for neurological patients in the emergency department, as well as predicting CT perfusion abnormalities in acute ischemic stroke. Dr. Kummer currently oversees the Department's electronic consultation program.

Dr. Kummer is faculty in the Clinical Informatics Fellowship Training program at Mount Sinai and holds a secondary appointment in the newly established Windreich Department of Artificial Intelligence and Human Health at ISMMS, providing opportunities for neurology trainees to explore a career in clinical neuro-informatics.

MSH Teaching Faculty:

Benjamin R. Kummer, MD - Associate Professor of Neurology (Stroke Division); Director of Clinical Informatics, Department of Neurology; Associate Professor, Windreich Department of Artificial Intelligence and Human Health

Fred Cohen, MD – Assistant Professor of Neurology (Headache Division) and Internal Medicine

Neha S. Dangayach, MD, MSCR, FAAN, FCCM, FCCP, FNCS – Associate Professor of Neurosurgery and Neurology; Systems Director, Neuro-emergencies Management and Transfers (NEMAT); Research Director, Neurocritical Care and Recovery

Mark J. Kupersmith, MD – Professor of Neurology, Ophthalmology and Neurosurgery
Director of Neuro-Ophthalmology Vice Chair of Ophthalmology Translational Research





“Go where you are celebrated.”

Mount Sinai’s Neurology Department’s focus on academic excellence, scientific rigor, resident well being, and advocacy create an atmosphere that supports a diverse class with varied interests. I had the privilege of not only growing up here, running around the halls of Annenberg while my mom tirelessly worked on completing her MD/PhD here at Mount Sinai, but also of spending four amazing years learning and applying the foundations of medicine as a medical student here. Throughout that time the Neurology Department and the Mount Sinai community have shown me overwhelming support in my clinical and research interests. The mentorship, friendship, and support I have received has made choosing to continue my training here with the Mount Sinai Neurology department the best decision for me.

**– Masrai Williams, MD,
Class of 2025**



Mount Sinai Neurology Historic Milestones



Bernard Cohen, MD,
*Late Emeritus Professor of Neurology,
and the COSMOS Rotator, now in the
Smithsonian Collection (National Air
and Space Museum). Dr. Cohen was
continuously funded by NIH and NASA
for 54 years.*

The Department of Neurology at
The Mount Sinai Hospital is ranked
No. 1 in New York State,
No. 5 in the USA,
and **No. 9** in the world
on *Newsweek's*
"World's Best Specialized Hospitals"
2024 list.

U.S. News & World Report[®]
for 2024-25 ranked
The Mount Sinai Hospital
No. 16 in the nation for
Neurology and Neurosurgery.

Research Funding -

Department of Neurology in FY 2024

over \$45 Million

in total research funding from all sources

Mount Sinai Neurology Historic Milestones

1855	The Mount Sinai Hospital is founded
1887	Bernard Sachs, MD, identifies “Tay-Sachs Disease”
1890	Neurology clinic opens on 67th Street
1900	Neurology in-patient service established
1913	First neurology ward dedicated
1914	Invented the first modern electric ophthalmoscope
1920	Neuropathology laboratory created
1923	Residency Program established
1939	EEG unit established
1956	Classified transient circulatory disturbance of the brain, which came to be known as transient global ischemia
1958	Division of Neurophysiology established
1961	Neurochemistry lab opened
1964	Parkinson’s disease clinic opened
1968	Mount Sinai School of Medicine, now called the Icahn School of Medicine at Mount Sinai, began its first class of medical students
1978	First ALS clinic in the U.S. opened
1981	NASA invites vestibular researcher Bernard Cohen, MD, and lab to Moscow to fly monkeys in space on the Russian COSMOS Biosatellite
1988	Gustave L. Levy Acute Stroke Unit opened
1998	The Manhattan HIV Brain Bank is established by Susan Morgello, MD, supported by continuous NIH funding from 1998 to the present, renewed through 2028
2001	Corinne Goldsmith Dickinson Center for Multiple Sclerosis established
2008	Robert and John M. Bendheim Parkinson and Movement Disorders Center established

“Josephine Walter was said to be the first woman in the country to graduate from a formal house staff program when she received her Mount Sinai diploma in 1885.”

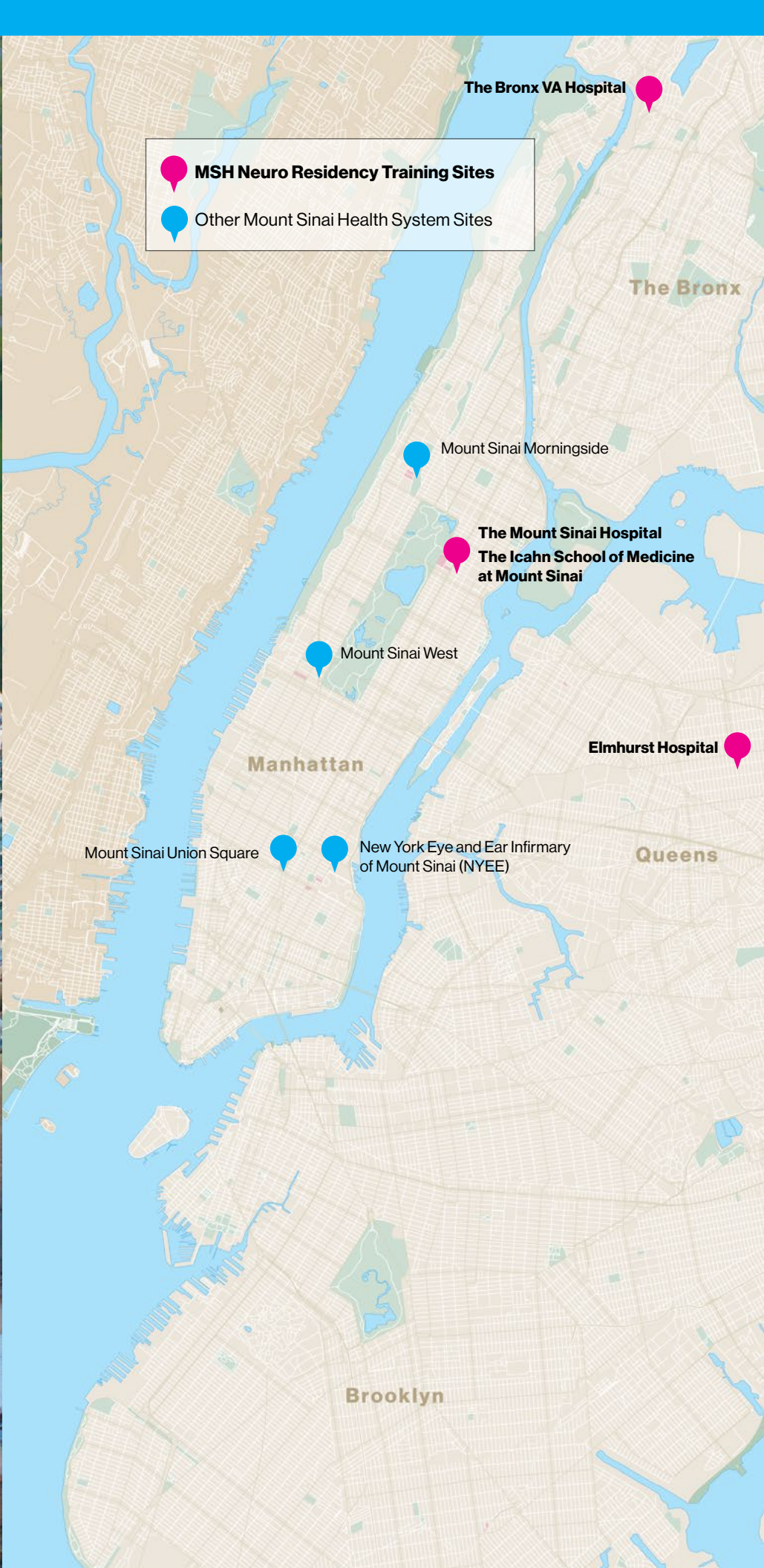
Aufses, Arthur H., and Barbara J. Niss, This House of Noble Deeds The Mount Sinai Hospital, 1852-2002 New York, NY: New York University Press, 2002) 6–7.

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- 2008** Friedman Brain Institute established
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- 2009** Center for Headache and Pain Medicine established
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- 2011** Identified differences in disease progression in two subtypes of multiple sclerosis
-
- 2013** First hospital in New York City and the second in New York State to receive Joint Commission Comprehensive Stroke Center designation
-
- 2013** Mount Sinai Health System (MSHS), one of the nation's largest not-for-profit health systems, is created following the successful merger of multiple hospitals in Manhattan and Queens, and later Brooklyn and Long Island, dramatically expanding the care MSHS provides in New York City
-
- 2015** Barbara G. Vickrey, MD, MPH, most recent faculty member to serve as President of the American Neurological Association
-
- 2017** Smithsonian accepts the COSMOS Rotator to its Air and Space Museum collection
-
- 2019** First neurologist completes the Palliative Medicine Fellowship at Mount Sinai; Neuro- Palliative Medicine division established
-
- 2019** The Barbara and Maurice Deane Center for Wellness and Cognitive Health is established
-
- 2020** Several dozen neurology faculty along with fellows and residents served on Medicine COVID Teams during the height of the pandemic surge in New York City, spring 2020
-
- 2020** Neurology faculty Uraina S Clark, PhD, and Neuroscience faculty Yasmin Hurd, PhD, publish a seminal article on addressing racism and disparities in the biomedical sciences, with over 19,000 accesses to date
-
- 2020** Stuart Sealfon, MD, and lab published article in the New England Journal of Medicine establishing that even in military recruits under strict, supervised quarantine, asymptomatic transmission of SARS-CoV-2 occurred
-
- 2022** Zhenyu Yue, PhD, receives funding from the Parkinson's Foundation for Research Center investigating the diversity of dopamine nerve cells in the brain and their vulnerability in Parkinson's disease
-
- 2023** The David S. and Ruth L. Gottesman Center for Headache Treatment and Translational Research is established
-

“After completing medical school here, I chose to stay at Mount Sinai for the people—both the patients and my future colleagues. As a leading institution in New York City, we see fascinating complex and rare diseases, and I admire how our faculty care for the individual’s story just as much as the patient’s pathophysiology. Whether I want to be a physician-educator, physician-researcher, a physician-advocate, or all of the above, I will be superbly prepared.”

**– Emma Loebel, MD,
Class of 2025**





“I was drawn to the Neurology program at Mount Sinai because I knew I wanted to take care of New Yorkers and provide them with the best care in the world. The breadth of subspecialties represented is astounding, and there is no time more critical to be exposed to these fields than during residency. I was hesitant to join a program that covered multiple hospitals, but have realized since that working in multiple environments challenges you to learn more and practice better. And I had the best co-residents: smart, caring, interesting, hard-working, supportive, motivated, humble, and a little quirky.”

**– Philip Maynard, MD,
Class of 2023
Headache Fellowship Alum**



Icahn School
of Medicine at
Mount
Sinai

The Mount Sinai Hospital
Department of Neurology
Residency and Fellowship
Programs

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<https://icahn.mssm.edu/education/residencies-fellowships/list/msh-neurology-residency/neurology>

