Mount Sinai Pediatric Department

Fellowship Scholarship Opportunities

Icahn School of Medicine Virtual Interviews 2020



Kravis Children's Hospital

Mount Sinai Health System offers a plethora of unique opportunities for pediatric fellows in its one-of-a-kind learning community.

Opportunities at Mount Sinai Abound!

At a glance, they include:

- Development of basic, translational, and clinical research skills
- Grant opportunities and guidance on the application process
- Statistical support and training
- Mentorship across disciplines in one of the top institutions in the country
- Mini-sabbaticals on topics of interest
- Ability to audit courses at the Icahn School of Medicine
- Levy Library with easy access to librarians for support on projects such as meta-analyses and a medical illustrator
- Leadership and Mentorship training courses
- Innovation Support

Scholarship Opportunities

Based in this active health care nexus, rather than an isolated academic setting, we are the cornerstone for an incredibly wide range of varied training and research opportunities.

Development of Research Skills



- Personalized scholarship oversight committee tailored to career goals
- Pediatric Fellows Longitudinal Lecture Series
 - Includes opportunities for Work-in-Progress Presentations from fellows to get feedback from a broader pediatric audience
- Child Health Research Lecture Series
 - Series of weekly lectures that highlight current and ongoing child health research from internal and visiting researchers
- Child Health Research Day
 - Full day program affording residents, fellows, and junior faculty the opportunity to present posters and oral presentations in basic, translational, and clinical research
- Cross Discipline Mentorship is a unique trait given the breadth of research across the Mount Sinai Health System

Example Child Health Research Lectures

Targeted Therapy for Pediatric Leukemia, Recent Trends Nobuko Hijiya, MD

TLC: Introductory Tutorial of the Minerva Supercomputer Lili Gai, Eugene Fluder, Hyung Min Cho

Investigating Racial/Ethnic Disparities in Very Preterm Birth, Neonatal Morbidities from a Population Health Perspective Teresa Janevic, PhD, MPH

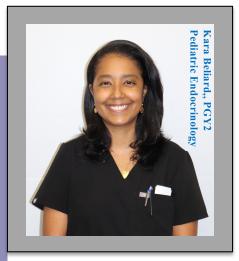
The Microbiome Translational Center – Role of the microbiome in health and disease Gerold Bongers, PhD

Pediatric Fellows Core Curriculum Course

- Annual introductory course aimed toward providing fellows with a better understanding of resources available at Mount Sinai to succeed in their scholarly research
- 5-day course broken down throughout the academic year
- Lectures are provided by a wide variety of faculty and include sessions on how to start a project at Mount Sinai, working with the IRB, mentormentee relationships, clinical research methodology, study design (power, sample size, statistical tools, etc.), biostatistical resources, Adult Learning Theory, Qualitative Learning, Building an Educator CV, and much more
- Senior fellows showcase their current research progress and share their experience for their own road to success at Mount Sinai

In Their Words

-One of the excellent benefits of the fellow's research course is the ability to familiarize ourselves with Mount Sinai's vast array of resources. The basic science and clinical research opportunities are diverse in the Mount Sinai institution. And this course aims to provide support and guidance from the librarians, statisticians, attendings of different pediatric subspecialties. It was a great introduction to get me thinking about research and let fellows know everything needed to be successful with our desired projects!

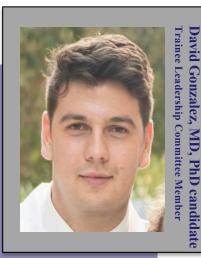


Mindich Child Health and Development Institute

- Mindich Child Health and Development (MCHDI) Annual Retreat
 - One day program including keynote talk, oral presentations, discussion panel, young investigators competition and family perspective segment. Research topics cover a wide range of disciplines within the institute
- Trainee Pilot Grant Program
 - Early career scientist pilot projects support innovative basic, clinical, or translational research for postdoctoral/clinical fellows or PhD/MD-PhD students
 - The purpose of the grants is to help support independently funded research focused on child health that could lead to career development or other grants for trainees
- GrantForward Subscription
 - Offered to MCHDI faculty and trainees which provides a comprehensive database of federal, foundation, and other funding sources

In Their Words

The MCHDI creates incredible opportunities to present and receive feedback from researchers with diverse backgrounds. I've been able to compete in the MCHDI Retreat Poster competition at the Annual Retreat as well as apply for Trainee Pilot grants that support new research avenues born out of my main thesis work. These opportunities have allowed me to hone in on new project ideas and develop myself further as an independent scientist.



Icahn School of Medicine (ISMMS)

- Cross-collaboration is key and emphasized by the ISMMS. ISMMS has and continues to recruit and train mathematicians, computer scientists, engineers, venture capitalists, leaders in human rights, social justice and global health, and they are *changing* the landscape of medicine and available for collaboration with fellows
- The Graduate School of Biomedical Sciences has innumerable opportunities for auditing coursework that can help fellows achieve their personal goals
- Biomedical Data Science Initiative (BDSI) at the ISMMS is bridging the gap between research and educational endeavors in computing and big data analytics and offers advanced computational training to fellows

In Their Words

One of the benefits of Sinai's close-knit community is the ease of cross-collaboration. We are working to build more multidisciplinary clinics, and as a fellow you can be involved in their design and implementation, which is a great experience for building up your future career. We also work closely as fellows to perform joint procedures, like bronchoscopy and EGD for our patients with esophageal atresia.



kaba Schoo i Medicine a

Health Disparities and Diversity Efforts

ACGME Health Disparities Collaborative

offers an opportunity to collaborate with other trainees and faculty throughout the health system and country around improving health disparities education and mediation

Diversity an Anti-Racism Efforts

- The Health System's Office of Diversity and Inclusion has sponsored the Diversity Innovation Hub to encourage health equity innovation in our community. The trainee design team is specifically for trainees interested in these efforts
- There are Departmental, Divisional, and GME Diversity and Anti-Racism Taskforces/Committees, within which trainees can work to improve diversity or combat systemic racism/bias

In Their Words

The interdisciplinary ethos within the Mount Sinai Health System has supported health disparities collaboration across departments, sites and cities with initiatives like the ACGME Health Disparities Collaborative and the Diversity Innovation Hub. My diverse interests in health disparities as well as the immune mechanisms of food allergy pathogenesis and treatment are supported by internal funding mechanisms to protect the research time of budding pediatrician-scientists. I was granted the STTEP-UP TL1 during PGY-5, and the Pediatric Scholars program during PGY-6 to help bolster my transition to faculty.



THE BEST EMPLOYE

Forbe

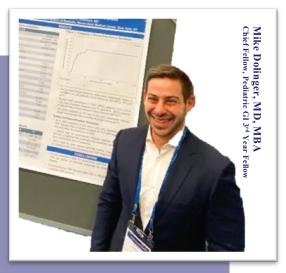
Statistical Training & Support



- Funding for statistical support for Pediatric Residents and Fellows
- Applied Statistics in Biological Systems (ASIBS) Short Course
 - Week-long course to provide training to apply the necessary quantitative, logical, and computational skills for clinical research with option to pursue training in SAS or R
- Ability to audit Masters and PhD courses in Statistics

In Their Words

The department of biostatistics has been immensely helpful to my research. I have worked closely with two different and amazing statisticians who have offered dedicated support to my project. Not only have they been there to help with statistics, but they were able to help provide unique insights that shaped my entire protocol and research methodology. They are a helpful resource that encourages you to seek their help as early as possible, even before your ideas have been completely formulated!



Grant Opportunities & Grant Writing



- Rolling seminars on grant and research paper writing
- Bioethics Seminar Series offered every other year
- Internal Grants available, as examples:
 - Pediatric Scholars Grant
 - Mount Sinai KL2 in Translational Research
- Wealth of local, national, and global grant opportunities posted and shared amongst the pediatric fellows and faculty
 - Grant and Contracts Office maintains an active website of opportunities
- Grant review program
 - Mock study sessions aimed at junior investigators preparing to submit NIH grants

In Their Words

The internal grant opportunities are invaluable. I was able to get funding for a project in fellowship to support the costs of the assays through the Pediatric Scholars Grant, which provided me with needed pilot data. Further, I am now supported on the Mount Sinai KL2 in Translational Research to help me transition to NIH funding and fund master coursework that I am taking. This support is indispensable to physician scientists early in their careers.



Mini-Sabbaticals & Short Courses



Environmental Scholars Retreat

- Numerous outlets at Mount Sinai offer Short Courses and Mini-Sabbaticals with internal funding available to cover any associated costs for trainees. Examples include:
 - ConduITS, the Clinical & Translational Science Award (CTSA) Program at Mount Sinai has many opportunities, for example:
 - Clinical Research Education in Genome Science (CREiGS) Short Course
 - Mini-Sabbaticals: For example The Exposome Bootcamp, Microbiome Data Analytics Boot Camp, Epigenetics Boot Camp, Environmental Mixtures Workshop
 - Read more at: <u>https://icahn.mssm.edu/research/conduits/about/programs</u>
 - Precision Immunology Institute at Icahn School of Medicine at Mount Sinai (PrIISM)
 - International Summer School of Immunotherapy
 - Institute of Translational Epidemiology
 - Introduction to Large Databases for Population Health Research

In Their Words

I took Introduction to Large Databases for Population Health Research during my second month of pediatric hospital medicine fellowship. The course consisted of 2 parts- each with about 7 lectures to listen to on your own time, then two half day sessions during which we did exercises to familiarize ourselves with different large healthcare databases. By the end of the course, I felt like I had a great introduction to what databases are out there and how I can use them to conduct research, as well as contacts within the Institute of Translational Epidemiology in case I needed help with a future project.





Center for Scientific Diversity at ISMMS

- NIH funded short course on the analysis and application of genetics and genomic data
- Weekly online lectures for 3 months
- Areas of focus include:
 - Introduction to Genetics and Genomics
 - Quantitative Methods for Analysis of Genetics and Genomics Data
 - Computational Tools and Data Management
 - Engaging Diverse Communities in Genetics and Genomics Research.

In Their Words

In my 1st year of pediatric nephrology fellowship I took part in the Clinical Research Education in Genome Science (CREIGS) short course offered at Sinai,. It has taught me valuable skills such as using statistical software (e.g. R) and how to interpret and communicate findings from genomic studies, which will undoubtedly be helpful as I pursue my interest in the genetic basis of childhood kidney diseases.



Levy Library



Levy Library Circulation Desk

- MANY Library Classes
 - Examples: Using EndNote, Making the Most of Scopus Author Profile, Understanding ORCID
- One-on-one consultations with a librarian
 - Perform literature reviews, assist in journal selection, provide Systematic Review and Meta-analysis Support (Including use of Covidence Software)
- Writing Support Services
- EndNote available to download, SAS & SPSS available on Library computers, virtual SAS OnDemand for Academics currently available
- Medical Illustrator available (free-of-charge) to help with illustrations for journal articles, patient education material

In Their Words

The library has many virtual courses to learn more about how to best utilize all of our available research and organizational tools. I've taken courses in EndNote and in the new IRB submission system that is rolling out. The librarians are also available for consult and are very helpful in helping formulate a literature review.

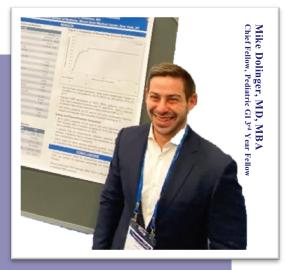


Leadership & Mentorship Training

- GME Leadership Development Program geared toward residents, fellows, and young faculty
 - 12-month Program designed to provide skills and tools to work more effectively in a variety of team settings and to increase self-awareness of leadership styles and impact
- GME Lean Training Program
 - 20-hour training program designed to promote resident/fellow engagement in quality improvement, providing exposure to Lean management principles and their application to the improvement of health care processes and operations
- Mentor Training Workshop offered through the Icahn School of Medicine Graduate School

In Their Words

I had the opportunity to be selected to the inaugural Mount Sinai GME Leadership Development program for trainees. This was an incredible learning experience. It was a monthly course taught by different outside guest lecturers who are experts in different aspects of leadership. I was able to work with trainees across various disciplines at different levels to learn invaluable skills and develop a truly meaningful capstone project on social networking and silos among healthcare teams. I was able to form lasting interdepartmental relationships and discover new career mentors.



Leadership Course

Support for Navigating Fellowship



Pediatric Teams

- Pediatric Fellow's Forum, 5-day course for all first year pediatric fellows with lectures aimed at navigating fellowship
- Shared Resources via Google Classroom
 - Advice available on accomplishing fellowship goals (eg sample scholarly productivity essays that are an ABP requirement at the end of fellowship)
- Guidance on Scholarly Oversight Committee creation
 - Help in selecting a mentor outside of your department to provide objective feedback

In Their Words

The Pediatric Fellow's Forum, which is a week-long course for pediatric fellows that occurs in the first year of fellowship, was very helpful. It prepared me to start my research projects in my second year by providing me with the building blocks and support I needed.



Mount Sinai Innovation Partners

MSIP Entrepreneurship Bootcamp

The fundamentals of technology transfer: from sharing research discovery to collaborating with industry partners Innovation initiatives available to the Mount Sinai community to create startups and license technologies through a Pitch Challenge and other programs Business modeling in the healthcare and biotechnology spaces

In Their Words

Mount Sinai Innovation Partners give you the resources and tools to bring your ideas to life. This program has taught me how to transform an idea into a reality through in depth lectures, conversations and mentorship programs. Having the opportunity to learn about medical technology and product development is critical invaluable!



Mount Sinai Innovation Partners



Convalescent Plasma Trial

- Mount Sinai Innovation Partners (MSIP) facilitates the real-world application and commercialization of Mount Sinai Heath System discoveries and the development of research partnerships
- SINA*Innovations*: Annual meeting to celebrate and encourage innovation at Mount Sinai

In Their Words

The Mount Sinai Innovation Partners can take your ideas and find you external partners to bring them to life. My mentor has recently obtained seed money, with the help of MSIP, to start an initiative to improve the quality of care for chronic diseases. They can make anything you dream up to help patients into a reality, which is so important in the ever-evolving landscape of Precision Medicine, of which Mount Sinai is a clear leader in the field.



Mount Sinai



Pediatric Fellowships

100000000