DEPARTMENT OF PSYCHIATRY

T32 Postdoctoral Research Fellowship Training the New Generation of Clinical Neuroscientists





The past decade has seen a surge in neuroscience research findings, but so far, this progress has not translated into better treatments and outcomes for patients. Clinician-scientists trained in clinical neuroscience can help bridge that gap.

Our National Institute of Mental Health (NIMH)-funded T32 postdoctoral research fellowship T32MH122394 is designed to train psychiatrists, clinically trained PhDs, psychologists, and social workers to formulate original research on etiology, pathogenesis, course, treatment, and prevention of serious mental illness, with a focus on schizophrenia and major mood disorders. Upon completion of this program, clinician-scientists will be uniquely poised to bridge the gap between basic neurobiology and clinical disease. This combination is critical for advancing our understanding of the neurobiology of psychiatric disorders and for developing the highly needed disease-modifying treatments for psychiatric illnesses.

The Icahn School of Medicine at Mount Sinai's Departments of Neuroscience, Psychiatry, and Genetics and Genomic Sciences are ranked №4, №7, and №5, respectively, in National Institutes of Health (NIH) funding. We have a successful track record in supporting other research career pathways including a physician-scientist residency research track for MD/ PhD trainees, and the first combined psychiatry residency and PhD training program in the United States, funded by an NIMH R25 grant.

Through this fellowship, we hope to help fill the dearth in clinical neuroscientists so that the recent advances in neuroscience can be translated into better care for the millions of patients with serious mental illness. We look forward to meeting you.



Antonia S. New, MD, Co-Director Vice Chair for Education for the Department of Psychiatry; Professor of Psychiatry



M. Mercedes Perez-Rodriguez, MD, PhD, Co-Director Director of the Medical Student Clerkship; Associate Training Director for Research; Associate Professor of Psychiatry



René S. Kahn, MD, PhD, Curriculum Committee Director

Esther and Joseph Klingenstein Professor; Chair of the Department of Psychiatry



Dolores Malaspina, MD, MS, MSPH, Steering Committee Director

Director of the Critical Connections Psychosis Program; Professor of Psychiatry, Genetics and Genomic Sciences, and Neuroscience

Structure

Throughout this two-year program (with optional competitive extension to three years), 75 percent of the time is protected for research activities. In order to keep your clinical skills up to date, up to 25 percent can be used for patient care. During the first year, you will complete an individualized "Basic Research Toolkit." Course examples include the following:

- Biostatistics for Biomedical Research
- Principles of Neural Science, Behavior, and Brain Pathophysiology
- Selected Topics in Neuroscience
- Responsible Conduct in Research
- Rigor and Responsibility
- Topics in Clinical Neuroscience
- Principles of Scientific Proposals
- Effective Science Communication
- Grant Writing

For the second year, each trainee chooses graduate school courses from up to two of three core tracks:

- Epidemiology, population health, and statistical methods
- Clinical trials and human research methods
- Genomics

Unique program elements include:

- Grant writing coursework, including a course geared towards writing a K award ("Reach for your first K" program) or other career development award.
- Internal grant review committee to optimize and streamline grant applications.
- Peer Mentoring "Buddy" system: All trainees in the program will be paired with a junior faculty member "buddy" (at the instructor or assistant professor level) who has a current career development award or R01 equivalent grant.

Second Year Course Samples

Training Tracks	Courses
Epidemiology, Population Health and Statistical Methods	Data Analysis for Behavioral Neuroscience; Machine Learning for Biomedical Data Science; Introduction to Algorithms; Computational Tools for Clinical Research
Clinical Trials and Human Research Methods	Brain Imaging: In <i>Vivo</i> Methods; Neuropharmacology; Advanced Topics in Cognition; Spectrum of Methods in Clinical Research; Applied Biostatistics in Clinical Trials
Genomics	Journal Club in Genetics and Data Science; Works in Progress: Genetics and Data Science; Translational Genomics; Computer Systems; Practical Analysis of a Personal Genome

Additional Activities

We have a rich academic community of trainees at Mount Sinai, and our T32 trainees are encouraged to participate in Medical Science Training Program and Graduate Programs activities such as the following:

- Monthly Medical Scientist Research Seminar Series
- Weekly Psychiatry Department Grand Rounds
- Biweekly Psychiatry Works In Progress Lecture
- Annual retreats for the Departments of Psychiatry, Neuroscience, and Genetics and Genomics
- Annual MD/PhD Retreat
- Monthly Department of Psychiatry Journal Club
- Friedman Brain Institute Translational Neuroscience Seminar Series
- Psychiatric Genomics Seminar Series
- American College of Neuropsychopharmacology (ACNP) and Society of Biological Psychiatry (SOBP) annual conferences



Mentoring

Each trainee will have a mentoring committee with extensive experience in patient-oriented research and will create an individualized career development plan with targeted goals for acquisition of skills, presentations, publications, gathering pilot data, and preparation of proposals for independent research funding—usually a career development award.

An External Advisory Committee, listed below, will also be available to facilitate career development.

- **Carrie E. Bearden, PhD,** Professor, Departments of Psychiatry and Biobehavioral Sciences and Psychology, UCLA; Program Director, UCLA Center for the Assessment and Prevention of Prodromal States.
- **Maurizio Fava, MD,** Director, Division of Clinical Research, MGH Research Institute, MGH, Boston, Massachusetts; Associate Dean for Clinical and Translational Research, Harvard Medical School.
- **Raquel Gur, MD, PhD,** Professor, Department of Psychiatry, Neurology, and Radiology; Director of Neuropsychiatry Section, Department of Psychiatry, University of Pennsylvania; Director, Lifespan Brain Institute, Children's Hospital of Philadelphia and Penn Medicine.
- **Francis S. Lee, MD, PhD,** Chair, Department of Psychiatry, and Professor of Psychiatry, Pharmacology, and Neuroscience, Weill Cornell Medicine.
- Ellen Leibenluft, MD, Senior Investigator and Chief of the Section on Bipolar Spectrum Disorders in the Emotion and Development Branch, Intramural Research Program, NIMH.
- **Kerry James Ressler, MD, PhD,** Chief Scientific Officer and James and Patricia Poitras Chair of Psychiatry at McLean Hospital; Professor, Department of Psychiatry, Harvard Medical School.
- **Carol Tamminga, MD,** Stanton Sharp Distinguished Chair in Psychiatry, Chairman of the Department of Psychiatry, and Chief, Translational Research in Psychosis, University of Texas Southwestern Medical School.
- **Carlos Zarate, MD,** Chief, Section on the Neurobiology and Treatment of Mood Disorders and Chief Experimental Therapeutics and Pathophysiology Branch at the NIMH; Clinical Professor of Psychiatry and Behavioral Sciences, George Washington University.

Trainees will be paid a competitive salary according to their degree and experience (PGY level). Funds are available to cover tuition for up to six credits per trainee per year; see the graduate school course catalog for details. Funds are also available to cover cost of registration and travel to scientific meetings.

Eligibility Requirements

In order to qualify for this fellowship, you must be a U.S. citizen or permanent resident and have completed one or more of the following:

- MD, DO or equivalent degree. An Accreditation Council for Graduate Medical Education (ACGME)-accredited residency program in psychiatry or related field is preferred.
- A PhD in clinical psychology from an American Psychological Association (APA)accredited doctoral program and have completed an APA-accredited clinical internship. There will be opportunities to fulfill the licensure requirements as a psychologist during the T32 fellowship.
- Doctoral degree in a health care-related field from an accredited domestic or foreign organization.

How to Apply

To apply, please email your completed application to **cindy.chiu@mssm.edu** and **mercedes.perez@mssm.edu** along with your CV, cover letter, and two letters of recommendation.





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