

Welcome!



Adult Psychiatry Residency Program

Welcome to our adult psychiatry residency training program at The Mount Sinai Hospital in the Department of Psychiatry at the Icahn School of Medicine! In these pages we've put together a detailed description of our academic program and the attendant clinical, research, and educational experiences that we believe reflect and will drive the future of psychiatric training and practice.



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Our Educational Philosophy

Mount Sinai is a unique place to learn how to become a 21st century psychiatrist. We have a top notch faculty which covers the broad field that psychiatry has become. From our outstanding physician/neuroscientists at the Friedman Brain Institute, to our clinical researcher physicians who are leading efforts to develop novel therapeutics for refractory mental illnesses, to our expert physician psychotherapists who will show you how to help patients learn to manage and overcome their intrapsychic pain, Mount Sinai faculty members will be here to teach you. Mount Sinai is truly unusual in that people from these divergent fields meet one another regularly, and the conceptual barriers that often separate "biological" models of mental illness from "mind" or "psychodynamic" models of mental illness are regularly transcended.

We expect all residents to gain the knowledge base and clinical skills to practice clinical psychiatry, but we aim for more than that. The field continues to expand, and practice as a *general* psychiatrist is in some ways outdated. Especially in an urban setting, a patient often seeks the *expert* for her/his condition. For a long time, psychiatrists have specialized according to population treated (e.g., geriatric, child) or method of treatment (psychotherapist, psychopharmacologist). *However, we at Mount Sinai see the field of psychiatry undergoing a new sort of differentiation—along the lines presaged by medicine and neurology—into subspecialties based on syndrome and/or disease processes (e.g., autism, bipolar disorders, anxiety disorders, attentional disorders, reward circuitry, etc.).* And, as some of the best treatments in psychiatry entail combining high-level psychopharmacology and illness-specific psychotherapy, we seek to train psychiatrists with clear areas of expertise in each.

As in your undergraduate careers, we will encourage you to define a major or area of concentration, and we aim for you to graduate with a level of expertise that will form the foundation for your careers as you go forward to become leaders in the field. As a resident at Mount Sinai, you will have an opportunity to develop individually-tailored educational programs to focus your training in a defined clinical area of interest and develop into a specialist able to provide the most effective, evidence-based treatments for patients in that domain. These skills will be honed through advanced training and mentorship and will provide a basis for your growth into an expert, be it as an academic clinician, researcher, educator, executive, theorist, and/or advocate who brings awareness of mental illness and potential treatments to the public.

We strive to provide an open, stimulating, and supportive environment for our residents. Residency education involves hard work, but there is joy and excitement in becoming a psychiatrist, and we intend for these years to be professionally productive and personally fulfilling for you. Welcome to Mount Sinai! We look forward to sharing with you our enthusiasm about the Mount Sinai Residency Program in Psychiatry.

What's New?

We're very excited to share with you some of the most recent developments in our program, including upcoming changes in program leadership, our redesign of the psychiatry residency experience, the roll-out of a novel clinical curriculum, and the growth in the numbers and expertise of faculty through abundant and successful recruitment and expansion of services.

Program Leadership

At the start of this academic year (July 2015), <u>Antonia S. New, MD</u>, Professor of Psychiatry, is the Director of Residency Education and subsequently Vice-Chair for Education (as of October 2015) in the Department of Psychiatry at the Icahn School of Medicine at Mount Sinai. Prior to this past July, <u>Ronald O. Rieder, MD</u> led the residency, and he will remain active faculty until he retires in October 2015, assuring a smooth transition in leadership.

As part of her new role, Dr. New has restructured the clinical training experiences in the residency program. Like many other medical specialties, psychiatry increasingly emphasizes outpatient care for illnesses that were formerly treated in inpatient settings. Our goal is to prepare our residents optimally to practice in our changing field. In addition, the revised residency curriculum provides more elective opportunities for all residents, which will enable trainees to define an area of concentration and complete residency with a level of expertise that will form the foundation for development as leaders in clinical practice, research, teaching, and/or administrative positions.

Mount Sinai is perfectly suited to this new educational model because it has faculty members who are nationally recognized clinical and research experts in many areas, such as OCD, depression, anxiety disorders, schizophrenia, eating disorders, autism, personality disorders, and Alzheimer's disease. Under the new curriculum, expert faculty members will serve as mentors and help train the next generation of specialists.

Along with Dr. New, <u>Asher B. Simon, MD</u>, Assistant Professor of Psychiatry, continues to play his central role as Associate Director of Residency Education, developing and implementing our program's new curriculum. Dr. Simon is an extraordinary teacher and guide whose steady hand has helped to make our training program as successful as it has been and whose input has been invaluable for our educational reform.

Since she first joined Mount Sinai in 1993, Dr. New has been a productive investigator, exemplary clinician, and esteemed educator. Her research focuses on the phenomenology and biological underpinnings of personality disorders, with a focus on borderline personality disorder and more broadly on impulsive aggression. In addition to her research accomplishments, Dr. New has been a clinical leader at the James J Peters VAMC as well as a valued teacher of medical students and psychiatry residents. Three years ago, Dr. New became even more formally involved in training, as she was appointed Director of Medical Student Education in Psychiatry at the Icahn School of Medicine at Mount Sinai. Her efforts have greatly enhanced medical students' appreciation of the clerkship as well as student interest in the field of psychiatry more broadly.

Graduating from the Honors Program at Swarthmore College, Dr. New received her medical degree AOA and completed her residency training at Weill Cornell Medical College. After residency, she came to Mount Sinai in 1993 as a research fellow studying the neurobiology of personality disorders and subsequently joined the faculty.

Dr. Rieder came to Mount Sinai eight years ago from Columbia University, where he was Director of Residency Training for more than 20 years. During his tenure at Mount Sinai as Vice Chair for Education, he introduced many important and novel programs, including the Physician-Scientist Track, and the Psychiatry Residency + PhD track. Both offer ways that psychiatry residents can develop substantial research platforms during residency and obtain skills necessary to conduct research to advance the field.

During this recent transition in leadership, Drs. New, Rieder, and Simon have and will continue to work closely as a team to ensure smooth and productive paths forward.

Psychiatry Residency Redesigned

Mission: Train residents to become leaders in academic psychiatry, employing six individually-designed tracks with subspecialty "majors"

Our mission relies heavily on and leverages Mount Sinai's culture of flexibility and innovation. We have a wealth of raw materials that residents can take and fashion into unique educational, academic, and professional experiences; we're open to innovation and new ideas. While we certainly excel in teaching the general basics of clinical psychiatry, our curriculum is to a significant degree "emergent" and based upon the interests and ideas of the involved trainees. We do not follow a "prep school" model where every resident learns the same things. We require that residents pick a major and develop a niche. This requires great advising and mentoring, which we facilitate and mandate. In our redesign of our psychiatry program, we have worked to maximize flexibility, facilitating the growth of projects and independent thinking early on in residency. Though we have established a minimum number of patients of each type of illness and applied treatment modality that each resident must treat, beyond that, our plan is to let residents choose the type of experience they want, what they want to learn, who they want to work with, etc. We recognize that there is a core knowledge base that every well-trained resident must master for a great education and we provide that, but for a residency program to encourage brilliance, we want to help residents gain individualized experiences and innovate from there. This is what Mount Sinai is all about.

Research Tracks (each with its own separate match number):

1. Physician-Scientist

- Description: 4-year research track for physician-scientists who already have a substantial research background
- Goal: To train psychiatrists to become independently-funded investigators who can make major contributions to the basic science understanding of mental illnesses and help create scientific breakthroughs that lead to novel treatment approaches

2. PhD+

- Description: 7-year research track for trainees wishing to obtain a PhD in neuroscience or genetics while simultaneously and longitudinally training in clinical psychiatry
- Goal: Use our expertise to modernize the way in which psychiatrist-researchers are trained, maximizing educational and productive flow and minimizing disruptions in training periods

Clinical Tracks (contained within the general psychiatry match number 1490400C0):

3. Academic Clinician-Educator (ACE) in Psychiatry, with subspecialty major

- Description: Individualized concentration-based program with substantial elective time and tailored experiences for in-depth training
- o Goal: Train academic leaders in psychiatric subspecialties through experiences in clinical and research groups and high-level mentoring
- Subspecialty Majors can exist along symptom domains (consistent with RDoCs), or be population or syndrome-based. Residents will receive extensive training in applicable novel pharmacology, evidence-based psychotherapy, and device-based treatments.

4. Administrative Psychiatry Track (APT)

- Description: Individualized program with substantial elective time for residents to learn about hospital administration, program development in mental health, the changing landscape of mental health care delivery, and financial underpinnings of those changes
- Goal: Use the Mount Sinai Health System (one of the largest nonprofit systems in the country) to provide exceptional training across different care-delivery models, leading to the acquisition of the high level skills of a psychiatric executive in areas of finance, personnel management, quality, and outcomes

Additional Tracks (contained within the general psychiatry match number 1490400C0):

5. Child & Adolescent Track (CAT)

- o Description: 5- or 6-year combined adult and child/adolescent psychiatry training
- Goal: Train academic leaders (clinical and/or research) in child and adolescent psychiatry (or subspecialties therein) through experiences in clinical and research groups and high-level mentoring

6. Global Mental Health Track (GMHT)

- Description: The <u>Arnhold Global Health Institute</u> supports an interdepartmental longitudinal two-year program combining a didactic series on global health with international field work. Also see http://www.gh-training.org/
- Goal: To train residents to advance the causes of global mental health through experiences in underserved areas, both locally and internationally.
- Residents apply to the GMHT in PGY-1 or 2 and complete the curriculum during psychiatry residency.

Departmental Expansion

In a time of rapid changes in health care, during which many institutions are downsizing, we at Mount Sinai have been growing and flourishing. This is evident throughout The Mount Sinai Health System, The Icahn School of Medicine at Mount Sinai, and particularly so within both our Department of Psychiatry (under the leadership of Wayne Goodman, MD) and the Friedman Brain Institute (led by Eric Nestler, MD, PhD). A major component of this growth has been the 2013 opening of the Hess Center for Science and Medicine, a new state-of-the-art building housing our multiple institutes dedicated to translational science.

In the past few years, we have successfully recruited multiple senior-level faculty to develop many new specialty research centers and added outstanding new clinical research and sub-specialty programs:

- Division of Psychiatric Genomics
- Division of Psychiatric Epigenetics
- Neuropsychoimaging of Addiction and Related Conditions (NARC) Research Program
- Division of Tics, OCD, and Related (DTOR) Disorders
- Obsessive-Compulsive Disorders Program
- Pediatric Mood and Anxiety Disorders Program
- Psychosis Research Program / Center for Neuroscience Studies
- New ECT suite; 2000/yr; biggest in the city
- New Partial Hospital Program
- New Eating Disorders Intensive Outpatient Program
- Growing Consultation-Liaison Department, with a greater footprint in primary care and specialty inpatient settings and outpatient clinics

These new divisions and centers build upon our existing excellence in clinical programs in child and adolescent, geriatric, and adult psychiatry in inpatient, outpatient, emergency, and consultative settings, as well as other subspecialized centers for patient care.

In addition, we have longstanding excellence in clinical research programs in Alzheimer's Disease, Mood and Anxiety Disorders, Personality Disorders, Attention-Deficit/Hyperactivity Disorder, Eating Disorders, Traumatic Stress Disorders, Autism, and Developmental Disorders.

It's inspiring to work in a department that continues to flourish and grow as we work together to learn how to do our best for our patients!

Other recent developments:

- In 2014, the Icahn School of Medicine at Mount Sinai was named by Fast Company as one of
 the "World's Top Ten Most Innovative Companies in Big Data" ranking at #5, alongside
 General Electric (#1) and IBM (#4). Fast Company is frequently quoted in Silicon Valley, and
 this ranking is a noteworthy honor that reflects our commitment to revolutionizing health care.
 http://www.mountsinai.org/about-us/newsroom/press-releases/fast-company-names-icahn-school-of-medicine-as-one-of-worlds-top-ten-most-innovative-companies-in-big-data
- The Mount Sinai Department of Psychiatry is now ranked 6th in the nation in NIH funding. This leap from 14th in 2012 is especially significant in today's increasingly competitive funding climate.
- On the clinical front, the Mount Sinai Health System includes the newly-created Mount Sinai Behavioral Health System, forming one of the nation's largest psychiatric systems providing expert and collaborative care.

Special Tracks

We have reconstructed our residency program to allow all residents the flexibility to use abundant elective time to explore specific aspects of psychiatry and develop special areas of expertise.

Three of our tracks have unique NRMP match numbers. These and the included sub-tracks are described more extensively on the hyperlinked pages.

Physician-Scientist 1490400C2 (Categorical)

Residency + PhD 1490400C3 (Categorical)

General Psychiatry 1490400C0 (Categorical)

- o Academic Clinician-Educator (ACE) in Psychiatry Track
- Administrative Psychiatry Track (APT)
- Child & Adolescent Track (CAT)
- o Global Mental Health Track (GMHT)

Physician-Scientist Track

Our Physician-Scientist (Research) Track, which has a separate match number in the National Residency Matching Program (1490400C2), is designed for applicants who have a demonstrated interest and aptitude in psychiatric research.

Note that while this track is not limited to MD/PhD applicants, priority is generally given to those who have participated in **substantial research activities prior to residency**. We anticipate two positions in each entering class.

Structure

PGY-1

PGY-2 PGY-3

DOV 4

The purpose of the Physician-Scientist Track is to provide substantial protected time for research throughout residency training. Residents have 2-3 full-time research months in the first half of PGY-2 (though this could be split between PGY-1 and 2). When residents treat outpatients longitudinally, a block research assignment is replaced by a longitudinal allocation of protected time, which we plan as 40% time throughout the latter half of PGY-2 and continuing throughout PGY-3. The fourth year allows even more protected time for research (70%) and is meant to provide for the execution of projects that could be continued following graduation from residency.

Full-time for 0-1 month

40% time throughout the year

Time Allocated for Research

Full-time for 1-2 months + 40% for latter 6 months

PGY-4 70% time throughout the year											
1	Med Inpt	Inpt Child	Psych ER	Med ER	Inpt Geri	Night- float	Neuro Outpt	Inpt Adult	Med Inpt	Neuro Inpt	Med Outpt
2	Inpt Adult + CL at CL at Nightfloat VA MSH		Research			VA OPD 2 days/wk + Class day Research 2 days/wk					
3	Mount Sinai Outpatient 2 days/wk + Class day (includes Child/Adolescent Clinic) Research 2 days/wk										
4		Mount Sinai Outpatient ½ day/wk + Class day (option for Collaborative Care Clinics) Research 3½ days/wk									

Research Support

We are pleased to introduce <u>Schahram Akbarian</u>, <u>MD</u>, <u>PhD</u> (<u>Neuroepigenetics Laboratory</u>) as appointed Advisor to our Research Tracks. Working closely with the training directors as well as <u>Wayne Goodman</u>, <u>MD</u>, and <u>Eric Nestler</u>, <u>MD</u>, <u>PhD</u>, Dr. Akbarian will oversee the productivity and professional growth of all Physician-Scientist and PhD+ residents, ensuring that appropriate and substantial mentorship relationships are developed and maintained.

Given the substantial protected time we've created, Physician-Scientist track residents are expected to intensively pursue their research, translating their scientific interests into demonstrable products. This requires time and energy, and we expect that when such residents are not engaged in clinical responsibilities, they will be involved in research-related pursuits. As such, Physician-Scientist track residents are expected not to moonlight, and as compensation we've sought (through foundation grants and other departmental sources) additional research funding and salary stipends, including the following:

- Augmented salaries
- Funding for research needs (travel costs, equipment, etc.)
- Dedicated research technician time

Applicants should note that this level of financial support is not guaranteed and is dependent on supplementary evaluations and evidence of ongoing progress in research.

Faculty

Our Department of Psychiatry is #6 in the US as ranked by federal funding, and our Department of Neuroscience is #3, with individual investigators listed among the top 10 funded Pl's.

- Psychiatry/Neuroscience Active NIH Grants (see Appendix A)
- Psychiatry/Neuroscience Active VA Grants (see Appendix B)
- Icahn School of Medicine at Mount Sinai Research Laboratories
- Department of Psychiatry
- Friedman Brain Institute
- Department of Neuroscience Research Laboratories
- Fishberg Department of Neuroscience
- Icahn Institute for Genomics and Multiscale Biology

Additional information regarding foundation grants, such as the <u>Seaver Autism Center for Research and Treatment</u> is available by request from the training directors.

How to Apply

Applicants to the Physician-Scientist Track should indicate their interest to the training directors and select it as one of their chosen ERAS tracks. Given the specialty nature of this track and the **expectation that applicants will have considerable prior research experience**, we will often ask applicants for additional information to supplement their ERAS portfolios, including a scientific biography, a statement of research interest, and a letter from a primary research mentor (if not included as one of the ERAS LORs) before releasing invitations to interview.

If you are selected to be interviewed for the Physician-Scientist track, you will attend our usual interview process as well as additional meetings that could occur on the day before or after your interview day. Based on the material you provide, we will select some investigators whom we believe share interests with you, and likewise we would like to know which scientists on our faculty you may be particularly interested in meeting.

Psychiatric Residency + PhD Track

The Department of Psychiatry at Mount Sinai has been awarded NIMH support for an extraordinary program that offers a second path to MD/PhD training. This is an integration of PhD training with psychiatry residency training, over seven years and is designed for those who are 1) committed to psychiatry, and 2) committed to becoming trained at the PhD level in genetics or neuroscience, which will equip them to do sophisticated academic work in those disciplines. This opportunity is unique in the nation, and also offers substantial financial advantages through the NIH's Loan Repayment Program.

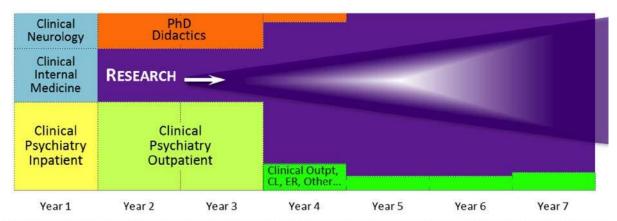
The 2008 National Advisory Mental Health Council Workgroup on Research Training Report stated "It is widely believed that MD/PhD investigators bring a unique perspective to their research programs because of the blend of clinical and research perspectives honed through graduate and medical education, residency and fellowship. In addition, MD/PhD investigators may be well-trained for translational research careers." This view has led to MD/PhD having high rates of grant funding from NIMH.

The fields of neuroscience and genetics have developed such depth in terms of knowledge base, research strategies and research techniques that PhD training (or its equivalent) may be a necessity for effective translational research and obtaining research funding. Unfortunately, the number of psychiatrist MD/PhD researchers is small. The NIH and NIMH substantially support Medical Scientist Training Programs and individual MD/PhD students, and have done so over many years. However, the established method of combined MD/PhD training is inefficient, in that the period of intense research and PhD completion is followed by many years of clinical training. Thus there is a long separation from research, leading to a decline in research skills, distance from the knowledge base, and a need to retrain after residency.

New models for training translational researchers are needed, and we have developed an innovative program for the production of superbly trained MD/PhD psychiatrist-researchers. The program offers individuals who, at the end of medical school, are ready to commit both to psychiatry and research, a training opportunity that will simultaneously promote both their clinical and research abilities. The program will integrate their clinical training with their PhD training, and their PhD research with post-residency research. The excellence of both clinical and research training at Mount Sinai, in addition to excellent financial incentives, make it a very advantageous program.

PhD+ Program Approach and Content

The Department of Psychiatry at Mount Sinai has been awarded NIMH support for this extraordinary and groundbreaking program—unique in the nation—offering a **second path to MD/PhD training** for up to 2 residents per year. Designed for residents ready to commit to both psychiatry and research, the "PhD+" program longitudinally integrates clinical and research training over 7 years. It also offers the possibility of substantial financial advantages through NIH's Loan Repayment Program (up to \$140,000).



As the fields of neuroscience and genetics have advanced in knowledge base and research strategies and techniques, PhD-level training may be a necessity for both effective translational research and obtaining research funding. Unfortunately, the number of psychiatrist MD/PhD researchers is small. Additionally, while the NIH has long supported Medical Scientist Training Programs, the established method of combined MD/PhD training is inefficient, in that the period of intense research and PhD completion is followed by many years of clinical training, meaning a long separation from research, a decline in research skills, a distance from the knowledge base and collaborators, and a need to retrain after residency.

The PhD+ program consists of 5 components:

- 1) Completion of all clinical rotations/experiences required for Board Certification by the American Board of Psychiatry and Neurology; attendance at core didactics of the Residency Program.
- Completion of all coursework, examinations, research activities and thesis requirements of the Graduate School of Biomedical Sciences at the Icahn School of Medicine at Mount Sinai for the PhD degree in either Neuroscience or Biomedical Sciences (Genetics and Genomics)
- 3) Dual mentorship, with true integration of PhD work with one's clinical psychiatry training, including protected time for PhD thesis research while maintaining one's clinical skills
- 4) A program customized to one's personal career goals, with flexible adjustment of experiences and objectives over the course of one's training, including close mentorship, training in research and grant writing, scientific career-building activities (presenting at meetings; joining professional organizations), and connecting with other scientists (including those in our Physician-Scientist Track, other doctoral candidates, and other neuroscientists at Mount Sinai and beyond).
- 5) A supportive community of fellow clinicians and physician-scholars within the Mount Sinai Health System, the largest health care provider in New York City

Our PhD+ track will participate as Residency + PhD (1490400C3) in the offerings of the Icahn School of Medicine at Mount Sinai's Psychiatry Residency Training Program, so that applicants may enter the program via the National Residency Matching Plan as PGY-1s. Current PGY-1 residents may also transfer into this track, both from within our residency as well as from elsewhere.

Yearly Structure

Clinical experiences are front-loaded and continue throughout the 7 years. The first year is a full intern year devoted to meeting residency requirements in Primary Care, Neurology, and Inpatient Psychiatry. For each of the following 6 years, 50% is hospital-supported "residency time" and 50% is NIMH-supported "PhD time." The residency time includes core clinical training, core residency didactics, and research electives; the PhD time is used for PhD didactics and research. Total research-related time is 55 months (4.6 years) and is appropriate for completing a PhD. PhD+ Residents attend core didactics with residency classmates in Years 1-3; they do not attend in year 4 and beyond, unless they wish to. For a complete breakdown of the Clinical, Research, and Didactic activities, please see below.

Total Clinical, Research, & Didactic Activities Over 7 Years

Training Year	Residency Time*	Residency Activities	NIMH Time	NIMH-Supported Activities	Effective Research Time**
1	100%	Internship, including 6 months Inpatient Psychiatry	0%	0%	0%
2	50%	Outpatient Psychiatry	50%	PhD Didactics (20%) Research (30%)	30%
3	50%	Outpatient Psychiatry	50%	PhD Didactics (20%) Research (30%)	30%
4	50%	Clinical (15%)*** .Research Elective (35%)	50%	PhD Didactics (5%) Research (45%)	80%
5	50%	Clinical (8%)*** Research Elective (42%)	50%	Research	92%
6	50%	Clinical (8%)*** Research Elective (42%)	50%	Research	92%
7	50%	Clinical (10%)*** Research Elective (40%)	50%	Research	90%
Totals	48 months 36 months supported by The Mount Sinai Hospital supported by NIM				55 onths

^{*} Residency Time is time spent on clinical rotations, residency didactics, and research electives, spread over 7 years, all paid by the hospital as with any other psychiatry resident.

^{**} Effective Research Time combines the research elective time under Residency Time with the research time provided by NIMH support. The elective research time coming from residency assignments adds up to 19 months. The total amount of research-related time adds the 36 months of NIMH-supported time (6 months x 6 years) to the 19, and arrives at 55 months (4.6 years) of Effective Research Time. In this way, the NIMH support and the elective residency research leverage each other to provide the time that would be considered appropriate for completing a PhD.

^{***} Clinical refers to Consultation-Liaison, Child and Adolescent, Outpatient, Community, Emergency, and Forensic Psychiatry (see text).

"Residency Time" Clinical & Elective Research Assignments

Year 1: (counting for 12 months of residency training)

- 4 months of primary care
- 2 months of neurology
- 6 months of inpatient psychiatry, including 1 month child/adolescent

Year 2: (counting for 6 months of residency training)

• 6 months of adult outpatient psychiatry (done as 50% time over 12 months) with some supervised psychiatry ER experiences evenings, nights, and weekends

Year 3: (counting for 6 months of residency training)

• 6 months of outpatient psychiatry (done as 50% time over 12 months, with 40% adult and 10% (0.6 months) child/adolescent)

Year 4: (counting for 6 months of residency training)

- 1.8 months of outpatient psychiatry (done as 15% time over 12 months, with 10% adult, and 5% child/adolescent)
- 4.2 months of research time

Year 5: (counting for 6 months of residency training)

- 1 month of consultation-liaison psychiatry (done as a block rotation)
- 5 months of research time

Year 6: (counting for 6 months of residency training)

- 1 month of consultation-liaison psychiatry (done as a block rotation)
- 5 months of research time

Year 7: (counting for 6 months of residency training)

- 1.2 months of community, emergency, and forensic psychiatry (done as 10% time over 12 months)
- 4.8 months of research time

PhD Didactics and Thesis

The Graduate School of Biomedical Sciences at the Icahn School of Medicine at Mount Sinai has 9 defined Multidisciplinary Training Areas, each with its own curriculum and leaders, including Neuroscience with 53 current PhD students and Genetic & Genomic Sciences with 18 current PhD students.

The graduate school didactic component of our PhD+ program will begin in Year 2 and continue in Years 3 and 4, on a part-time basis, along with the half-time residency activities described above. The PhD coursework required in this program will be similar to that required of current MD/PhD candidates at Mount Sinai. Though 72 credits are needed, **20-28 credits may be awarded for prior Medical School coursework and research**. Also, 6 credits are awarded for each semester of independent research while pursuing the PhD.

Three "Core Courses" are taken sequentially in Year 2

Each has embedded Journal Clubs in addition to weekly didactics. Course Credits are in parentheses.

Neuroscience Core Courses:

Systems Neuroscience (4)

Cellular and Molecular Neuroscience (4)

Neural Basis of Behavioral Plasticity and

Cognitive Processes (4)

Genetics/Genomic Core Courses:

Biomedical Sciences 1 (6)

Biomedical Sciences 2 (6)

Advanced Courses, Seminars and Journal Clubs

Year 3 and Year 4 students choose from advanced courses, departmental seminars, and journal clubs.

Neuroscience Advanced Courses:

Cognitive Neuroscience Advanced Topics (1)

Brain Imaging: In Vivo Methods (1)

Neuropharmacology (1)

Neurodegeneration (2)

Neuroanatomy (3)

Molecular Pathogenesis of Neurological &

Psychiatric Disorders (3)

Advanced Topics in Synapses (1)

Molecular Pathways of Metabolic Disease (2)

Topics in Clinical Neuroscience (1)

Neurobiology of Aging & Adult Development (3)

Other required courses:

Responsible Conduct of Research, year 2 or 3 (1)

Biostatistics, year 2 or 3 (3)

Genetics and Genomics Advanced Courses:

Translational Genomics (2)

Statistical Genetics (2)

Intro to Human Genome Sequencing (2)

Psychiatric Genomics (2)

Advanced Topics in Human Genetics (3)

Systems Approach to the Genetic Basis of

Disease (3)

Additionally, students receive instruction in scientific writing and attend grant proposal writing workshops. For example, there is a "Specific Aims" workshop two months before the thesis proposal time period so that students learn how to write and critique in preparation of their thesis proposals. There is also an oral presentation skills workshop on how to effectively present a PowerPoint presentation.

The Program has given much thought to the PhD thesis. In obtaining research funding, journal publications are given substantial weight. The Mount Sinai Graduate Program allows trainees to combine 3 publications into a thesis, with the addition of an introduction chapter and a discussion chapter. It is this plan which we consider most appropriate for trainees in this Program, and thus trainees will be encouraged to publish their research results early in the training schedule.

Trainee Stipends

For the PGY-1 year, trainees are full-time Mount Sinai Hospital interns and paid accordingly. They are also eligible for Mount Sinai housing, and are eligible to receive support for travel to scientific meetings and any costs related to research activities.

In years 2 through 7, trainees will be paid by both The Mount Sinai Hospital for their work as 50% time resident psychiatrists and via NIMH and Department of Psychiatry funding. The salary is at least equal to that of residents having a similar number of years after graduation from medical school (i.e., the postgraduate year or "PGY"-level). Additional sources of support for successful trainees in the Residency+ PhD program may also be available, both for research activities and for salary.

Academic Clinician-Educator (ACE) Track

In keeping with our Educational Philosophy, itself influenced by the growth of psychiatry and new developments in the field, we designed the Academic Clinician Educator (ACE) in Psychiatry track. In this track residents acquire the skills to become excellent clinical psychiatrists, experts in clinical subspecialties, and effective educators. In our redesigned curriculum, we have provided abundant elective opportunities to enable residents to gain substantial experience in areas of psychiatry that captivate their interest.

Here at The Mount Sinai Hospital and the Icahn School of Medicine, we have expertise across the broad landscape of modern psychiatry, and we have designed our curriculum for residents to take advantage of our specialty resources while developing necessary skills for clinical excellence. Subspecialty clinical areas can be defined in a number of ways, partially described by the following:

Therapeutic Modality

- Psychopharmacology
- Psychotherapy: Psychodynamic, Cognitive, Behavioral, Dialectical, Family, Group, Interpersonal, Motivational, etc.
- Procedural Treatments (rTMS, ECT, DBS)

Population/Setting

- Child and Adolescent
- Geriatric
- Substance Abuse
- o Medically III (CL, HIV, Transplant, etc.)
- Forensic
- o Public/Community
- o Women
- o Veterans
- Emergency
- Inpatient
- International

Diagnosis/Dimension

- Psvchosis
- Mood and Anxiety
- o OCD, Tics, and related disorders
- Personality
- o Neurocognitive Disorders
- Traumatic Stress Disorders
- Substance Use and Addictions
- Attentional Disorders
- Autism Spectrum Disorders
- Eating Disorders

In all of these areas and more, we have world class clinical and research excellence. Within these subspecialties, residents learn expert diagnostic skills and how to characterize the phenomenology of symptom domains in a sophisticated manner. Residents also learn cutting edge therapeutics, including evidence-based psychotherapies, psychopharmacology, electroconvulsive therapy, transcranial magnetic stimulation, deep brain stimulation, etc. The close collaboration between clinical research teams and clinical trainees provides a rare opportunity for a truly translational conceptualization of psychiatric illness, in which research informs clinical care and clinical insights further research.

Individually tailored programs are developed for each resident's concentration. These experiences provide the foundation for residents completing our program to be poised to become leaders.

Learning how to be an effective teacher is necessarily included in leadership. Residents have a substantial role in supervising and mentoring medical students at the Icahn School of Medicine at Mount Sinai. Residents also learn how to employ interactive teaching methods which will enable them to present their work and ideas on a larger scale. Learning to communicate and disseminate knowledge through excellent teaching is an essential skill set for clinician leaders in their careers and is a focus of training.

Administrative Psychiatry Track (APT)

Our Administrative Psychiatry Track is designed for applicants who have an interest in learning how to navigate and lead the changing terrain of medical and psychiatric services—in effect being a psychiatric executive. With our redesigned curriculum, we have provided abundant elective opportunities to enable residents to gain substantial experience in executive administration.

Working directly with and apprenticing under senior departmental and hospital leaders, residents will have the chance to work in and learn about the management and structure of mental health care in a variety of settings and systems, including in

- Individual settings and Patient Centered Medical Homes within a larger health care system
- Not-for-profit hospitals
- Single-payer systems (James J Peters VA Medical Center)
- Collaborative Care Clinics (psychiatrist embedded in medical clinics)
- Federally-funded non-VA specialty care clinics (World Trade Center Mental Health and Monitoring Program)
- Foundation-funded specialty care clinics (Human Rights Clinic)
- Specialized faculty practices
- Department-based care (inpatient, outpatient)
- Community-based care (Day Treatment, Visiting Doctors, etc.)
- Partial hospital programs
- Others

These multiple health care delivery models in which residents may elect to learn administrative skills are enriched by the recent creation of the very extensive <u>Mount Sinai Health System</u>—one of the largest nonprofit systems in the country with seven hospital campuses and one renowned medical school that serves as the academic and research hub for the entire institution. This system provides an extraordinarily fertile opportunity for residents seeking to train as a psychiatric executive and learn how new clinical programs can be developed as well as how to plan effective financial management while ensuring and furthering high quality care.

Individually tailored programs will be developed for each resident to develop his/her educational program in psychiatric administration, up to and including the ability to **earn an MBA or MPH during residency** training.

Child & Adolescent Track (CAT)

At The Mount Sinai Hospital, we have created a well-established and rich integration of child and adolescent psychiatry experiences into the general training program. Child and adolescent psychiatry is a career trajectory for a significant number of residents, and true to our educational philosophy of "picking a major" and developing a niche, we have developed a flexible Child and Adolescent Track (CAT) to stimulate residents and foster earlier immersion into this specific subspecialty.

We have amassed considerable experience and expertise in the arena of developing and combining adult and child psychiatry training. In fact Mount Sinai's Triple Board residency program (adult psychiatry, child/adolescent psychiatry, and pediatrics) was one of the original six such programs established in 1986. This decades-long experience allows us to now create a combined adult and child/adolescent psychiatry experience with the fluidity, flexibility, and maturity such a program demands.

CAT residents may match on a general psychiatry track or one of our research tracks.

Those residents primarily interested in the clinical areas of child and adolescent psychiatry (and matching through the "categorical" number on ERAS) can construct their CAT experience as either 1) A three-year adult psychiatry residency program, then fast-track-applying into a two-year Child and Adolescent Psychiatry fellowship, or 2) A four-year adult psychiatry residency program, then applying to Child and Adolescent Psychiatry fellowships.

Residents on our Physician-Scientist Track can pursue research foci specific to child/adolescent psychiatry. Due to the nature of our PS research track, we expect that residents would embark on a 6-year journey (4 years adult + two year child/adolescent fellowship), during which immersive and longitudinal research time will be maximized, and child/adolescent experiences will account for a substantial component of clinical time.

Following our successfully being awarded a substantial and innovative grant to combine Psychiatry Residency + PhD training, we have recently applied to the American Board of Psychiatry and Neurology (ABPN) for approval of an 8-year program which combines psychiatry residency, child/adolescent fellowship, and a PhD, allowing for substantial clinical and research opportunities in child and adolescent psychiatry alongside the career-defining mentorship and financial rewards conferred in our PhD training.

In all cases the time in adult residency includes opportunities in child/adolescent psychiatry substantially beyond those required for other psychiatry residents, and may include any or all of the following partial list: three-months of pediatrics in PGY-1; additional month(s) on child/adolescent inpatient service; additional child/adolescent outpatient psychopharmacology and psychotherapy cases; child/adolescent consultation-liaison; adolescent day program; child trauma training; therapeutic nursery; immersion into clinical Centers of Excellence (Autism, ADHD, OCD, Tics, Mood/Anxiety, Trauma/ Resilience, etc.); and others. Please see Child Behavioral Health and Science Center for other opportunities.

At this time residents on the CAT track are not pre-matched into any of our child and adolescent fellowship positions, as we want to leave residents with abundant flexibility should their career or personal interests and trajectories change. In other words, we developed CAT as a means by which a resident may pursue a subspecialty clinical or research concentration, not as a fellowship entry point. The only exception to this is in the planned PhD+ Child Psychiatry Program.

Global Mental Health Track

For an up to date overview of the Global Health opportunities at Mount Sinai and our psychiatry-specific elements, please visit:

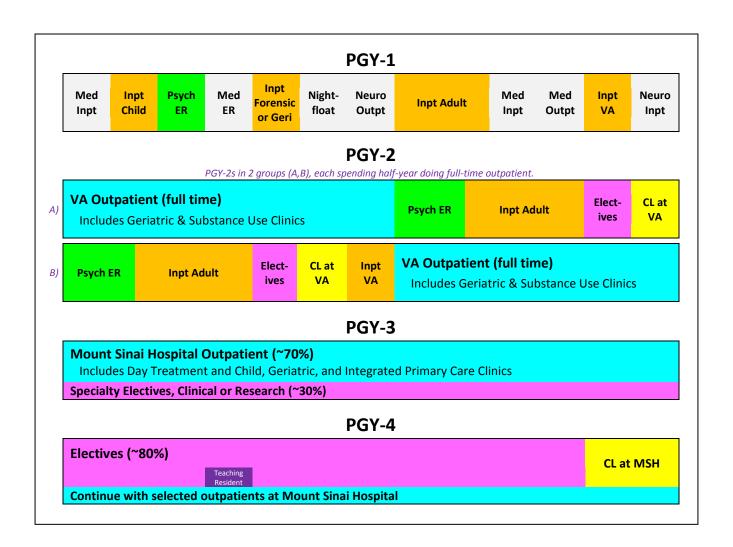
- Arnhold Global Health Institute
 - o https://icahn.mssm.edu/research/institutes/global-health
- Global Health Residency Program
 - o http://www.gh-training.org/

A Four-Year Experience

We have redesigned the clinical curriculum to create an innovative and forward-thinking program, which allows for exploration and development of residents' individual interests. Recent changes

- Maximize outpatient experiences to reflect the changing practice of psychiatry
- Maximize elective opportunities in multiple settings
- Maximize the ratio of educational opportunities to service-delivery
- Permit substantial time for individualization and academic sub-specialization
- Broaden opportunities for longitudinal research with active mentorship throughout the training process

Core Clinical Curriculum



In the Department of Psychiatry at the Icahn School of Medicine at Mount Sinai, we are committed to training compassionate, dedicated, knowledgeable, and skilled leaders in psychiatry.

We maintain a significant exposure to an exceptionally diverse patient population across ethnic, socioeconomic, gender, age, and diagnostic categories, as well as an experience of training under personable, accessible faculty with national expertise in subspecialty areas of psychiatry. Our challenging and supportive academic culture encourages residents to identify their individual interests and skills within psychiatry, making for an individualized approach that takes advantage of our breadth and depth of expertise in clinical and research areas.

The richness of the educational experience at Mount Sinai prepares psychiatrists-in-training to become skilled academic clinicians, talented educators, productive researchers, and dynamic contributors to the future of psychiatry.

First Year: Getting Grounded

Second Year: Solidifying Skills

Third Year: Developing Independence & Subspecialty Interests

• Fourth Year: Promoting Professional Identity & Uniqueness

The First Year: Getting Grounded

The first year in residency is focused on helping you learn the basic skills of being a practicing physician. This includes learning not only the requisite medical knowledge but also how to work with acutely ill patients in a likely unfamiliar system. We have arranged your initial postgraduate year to have a wealth of contact with attendings and senior residents, with a goal being to instruct you in interviewing, diagnosis, treatment, independence, communication, institutional requirements, information retrieval, and professionalism.

The PGY-1 clinical curriculum is divided into month-long rotations in internal medicine (or pediatrics), neurology, and psychiatry. We have arranged these services in an inter-digitated schedule to allow all residents a mix of medicine and psychiatry early on and throughout the year.

Internal Medicine/Primary Care: 4 months

• Inpatient adult *or* pediatric medicine: 2 months

Outpatient medicine: 1 monthEmergency medicine: 1 month

Neurology: 2 months

• Inpatient neurology: 1 month

Outpatient and consult neurology: 1 month

Psychiatry: 6 months

Inpatient psychiatry: 5 months

Emergency psychiatry: 1 month

Residents rotate for 4-5 months on our adult inpatient teaching service (2 months as first years and 2 as 2nd years). While there are other inpatient psychiatry services at The Mount Sinai Hospital (geriatric, addiction), we have selected the core adult service to be included in our educational mission, so as to 1) not dilute residents' experiences, 2) limit the use of residents for service provision, 3) concentrate the best teachers, teaching cases, and case conferences, and 4) have a mixture of PGY-1 and PGY-2 residents present for a textured learning/teaching environment.

PGY-1 rotations also include subspecialty experiences in child and adolescent inpatient psychiatry, Veterans inpatient psychiatry, forensic inpatient psychiatry, and the Psychiatry Emergency Service. (Residents get substantial experience in geriatric psychiatry in the outpatient setting in PGY-2 and 3. Addiction psychiatry is likewise learned in a PGY-2 outpatient setting as well as during the VA adult inpatient rotation.) Through this approach, we hope to provide a breadth of experience and exposure to a range of opportunities in the field, allowing residents to develop grounding as well as contemplate areas of eventual focus. Senior residents may elect to rotate on any inpatient unit as appropriate for their particular concentrations.

Didactics

An important component of this first year is the yearlong didactic curriculum for all PGY-1 residents. This weekly program is attended not only by those residents who are on psychiatric services, but also the majority of those on medicine and neurology. We believe this promotes greater class cohesion and augments both the personal and educational experiences of the intern year.

We have also augmented the weekly classroom didactic curriculum and the clinical-based education on the units with a series of case conferences and clinical seminars:

- Twice weekly morning report run by the Chief Residents with selected faculty during which residents discuss interesting cases and issues encountered during short call and night float
- Weekly case conference (July-Sept)—"CBT for Psychosis"—taught during the first 3 months of each academic year
- Bi-weekly case conference (Sept-May)—"Clinical Neuroscience"—taught by expert clinical researchers on faculty, and co-led by Antonia S. New, MD.
- Bi-weekly case conference (Sept-May)—"Psychodynamic Perspectives of Inpatient Psychiatry"— taught by Peter Dunn, MD, the Medical Director of the New York Psychoanalytic Society & Institute
- Weekly case conference (year-round) on psychiatric case formulation, symptom-specific interviewing, patients' subjective experiences of symptoms, and how to think deeply and flexibly about patients, taught by Asher B. Simon, MD and Antonia S. New, MD
- Weekly seminar (year-round) on the VA adult inpatient unit, with invited faculty leaders

Required Events & Conferences (apart from classroom didactics)

Mon	Tues	Wed	Thu	Fri
8-8:30am Morning Report	11:30am-12:30pm Grand Rounds	N/A	2-3:30pm (July-Sept) CBT for Psychosis (Oct-May) Alternating Clinical Neuroscience and Psychodynamic Case Conferences	8-8:30am Morning Report 12:30-2pm Formulation Case Conference
				4-5pm
				Sign-out

Call

Call during the first year varies depending on the service. Psychiatry residents do not take overnight call while rotating on the inpatient medicine service. In the medical emergency room, residents work a combination of day shifts and night shifts over the course of the month. While on all other services (except psychiatry night float), residents are on-call covering the inpatient psychiatry services at The

Mount Sinai Hospital. While on call, clinical support for all questions and concerns is provided by an attending psychiatrist and a senior resident who are both available on-site 24/7 in the Psychiatric Emergency Service. Psychiatry call at The Mount Sinai Hospital during the first year usually consists of three short calls per month and one weekend call. The call schedule is arranged by a member of the PGY-1 class, selected by the class. The call is as follows:

Weekday Short Calls:

Monday – Thursday evenings

Weekend Long Calls:

- Friday overnight
- Saturday day
- Sunday day

Night Float

Saturday – Thursday overnights
 (consists of two 2-week blocks during which a PGY-1 resident receives sign-out from the resident on-call and assumes nighttime coverage of The Mount Sinai Hospital inpatient units)

The Second Year: Solidifying Skills

We see the second year as a time when you solidify your knowledge of inpatient psychiatry, round out your clinical experiences by learning to treat patients in a multitude of psychiatric settings—including full-time outpatient), and develop the necessary skills to enter into the more independent third year. Additionally, we hope to inspire you to begin thinking of an area of psychiatry in which you would like to focus more of your time in the latter two years.

We divide the PGY-2 year into several rotations on a number of different psychiatric services:

Outpatient Adult, Geriatric, & Addiction: 6 months full-time

Consultation liaison: 1 month
Adult inpatient: 2 months
Emergency: 1-2 months

In our redesigned curriculum, we have reduced the number of total inpatient months from 13 down to 7-8, in keeping with the changing practice of how psychiatric services are provided.

Summary of Changes in our Redesigned Curriculum

Beginning in the 2015-16 academic year, PGY-2 residents now have a **six-month-long, full-time outpatient experience** at the James J Peter VA Medical Center. An educationally rich teaching service, the VA outpatient clinic is a hospital-based and highly supervised setting in which residents learn to evaluate and treat established and new patients. Each resident begins with a very modest individual caseload of patients and performs two new intakes per week. The treatments provided focus on both acute stabilization and longer term psychopharmacologic management. The VA is unique in that all supervisors are present on-site, making for a medical-model of treatment. This full-time immersive and continuous experience exposes 2nd year residents to a breadth and depth of psychopharmacological and acute management in the outpatient setting. Additionally, during this six-month PGY-2 outpatient experience, residents learn acute-care psychotherapy skills, including crisis management and DBT-

modeled and targeted techniques, which will be applied in many subsequent clinical training experiences. Residents' experiences also include four hours per week in the geriatric psychiatry outpatient clinic. For the addiction psychiatry component, residents rotate in the Substance Recovery Service (SRS) at the VA. Experiences include intake evaluations, group therapy, and individual treatment. Residents learn to use buprenorphine, naltrexone, and other specialized psychopharmacological interventions for substance dependence, as well as gain significant experience in using motivational interviewing (an evidence-based psychotherapy). Each of these experiences prepares residents for their more independent 3rd year.

The JJP VAMC outpatient clinic treats veterans along a wide range of ages (18-90+), illnesses, and functional levels. Over the last 10 years, the average age has declined from the 40-50s to the 20-30s. Our VAMC houses one of 10 MIRECCs (Mental Illness Research, Education, and Clinical Center) in the country. Designated by congress, the MIRECC is a think-tank with a staff of physicians, psychologists, and neuroscientists tasked with addressing best practices and novel therapeutics in serious mental illness, particularly among veterans.

In returning to the inpatient adult teaching service and the psychiatry emergency service, PGY-2 residents move beyond learning the basic skills of internship and begin to acquire more specific diagnostic, therapeutic, leadership, and educational skills, which they bring to more advanced interactions with patients and colleagues. PGY-2s are also responsible for more intensive teaching responsibilities, where they work with more autonomy, teach and lead PGY-1 residents, and supervise medical students. Learning and participating in the provision of electroconvulsive therapy (ECT) also occurs during this inpatient time. All PGY-2 residents complete one to two months in the Psychiatric Emergency Service at The Mount Sinai Hospital, where they encounter a variety of acute presentations of psychiatric illnesses while being supervised by on-site attendings.

During the one-month Consultation-Liaison rotation at the JJP Bronx VAMC, residents are very closely supervised by an attending, while also working with a Psychosomatic Medicine fellow. Consults come from services as varied as those of acute inpatient medicine, spinal cord rehabilitation, the on-site nursing home, and other acute subspecialty areas.

Mentorship

In keeping with the goal of developing an area of concentration for their studies, PGY-2 residents are assigned a senior faculty mentor/advisor of their choice to facilitate their developing careers and their navigating the national psychiatric landscape.

Didactics

During this second year of residency, and after completing the more introductory PGY-1 didactic schedule, residents begin what will be the backbone of their classroom didactic curriculum in a six-hour block one day per week. As for first-year residents, didactics represent protected time, away from clinical duties. The expanded curriculum includes classes overseen and taught by recognized experts in the field.

Residents on the 6-month outpatient block participate in a weekly **Evidence Based Psychotherapy Seminar**, which includes Motivational Interviewing, Acceptance and Commitment Therapy, Problem Solving Therapy, DBT, Prolonged Exposure Therapy, and Cognitive Processing Therapy.

PGY-2 residents rotating at The Mount Sinai Hospital attend the same case conferences and seminars described above under PGY-1.

Call

PGY-2 residents take overnight and weekend call at the VA. An attending psychiatrist, available by phone throughout the night, provides clinical supervision. This experience provides an opportunity for expanded

responsibilities and professional growth, as residents cover the inpatient psychiatry service and provide consultation services to the ER and to the general medical/surgical floors. PGY-2 residents do not take call during their rotations in the Psychiatry Emergency Service, and they are never scheduled to be post-call when working as part of an inpatient or CL team.

The Third Year: Developing Independence & Subspecialty Interests

All residents will have substantial outpatient training at both The Mount Sinai Hospital (PGY-3&4) and VAMC (PGY-2), allowing for diversity of experience in population, illness, treatment modality, evaluation style, system-based practices, supervision, mentorship, clinical/research, etc.

The PGY-3 experience continues residents' immersion into outpatient psychiatry, where formal training and supervision in the overall management and long-term care of outpatients is combined with additional experiences in multiple specialty and primary care clinics and elective time.

- Outpatient cases in Resident Training Clinic
- Psychotherapy cases
- Day Treatment Program
- Geriatric psychiatry clinic
- · Child and adolescent psychiatry evaluation clinic and ongoing cases
- Integrated Primary Care Psychiatry Clinics
- Elective time
 - Approximately 30% elective time to define and pursue individual concentrated focus (i.e., your "major")
 - Sub-specialty clinics

In each of the outpatient clinics, PGY-3 residents evaluate new patients seeking treatment, completing approximately 50+ new evaluations (brief and extended).

In the third year, foundational skills in both the psychotherapies and the pharmacotherapies are emphasized, as residents treat cases in a longitudinal fashion throughout the year. All PGY-3 residents are based in the outpatient department at The Mount Sinai Hospital, where they are supervised by expert psychiatrists trained in the relevant disciplines/modalities of care. In addition to treating adult patients, residents also attend weekly geriatric and child/adolescent psychiatry clinics and participate in co-leading groups in the Day Treatment Program.

Several hours each week, residents will attend one of The Mount Sinai Hospital's Integrated Primary Care Psychiatry Clinics. Reflecting the newest form of the changing practice of psychiatry, the clinics foster an integration of services such that patients attending non-psychiatric clinics (internal medicine, HIV, Ob-Gyn, oncology, etc.) may be treated or receive consultation by a psychiatrist who interacts closely with the primary physicians. Attending psychiatrists are present to supervise residents in these novel roles.

Experience in various psychotherapies is a core element of PGY-3, including work with both adult and child/adolescent patients and access to dedicated and experienced supervisors. All residents receive essential training (e.g., technique, supervision, patient care) in treating multiple cases with CBT, psychodynamic psychotherapy, and supportive psychotherapy. CBT supervisors are drawn from faculty in our specialty clinics, faculty psychotherapy researchers, and voluntary faculty. The Icahn School of Medicine at Mount Sinai's formal affiliation with The New York Psychoanalytic Society & Institute has united our faculties and resources and given residents access to leaders in the field and individualized supervision by senior psychotherapists.

Beyond this core training in the psychotherapies, residents can elect to learn, practice, and receive supervision in the following modalities:

- CBT for specific conditions (eating disorders, anxiety disorders, mood disorders, psychotic disorders, Exposure-Response Prevention, others)
- Dialectical Behavioral Therapy
- Transference-Focused Psychotherapy
- Schema Therapy
- Brief Psychotherapy
- Prolonged Exposure Therapy
- Interpersonal Therapy
- Motivational Interviewing
- Family/Couples Therapy
- Group Psychotherapy
- Others

A significant component of the PGY-3 curriculum is the 30% elective time afforded each resident. We expect that residents will work with their advisors, mentors, and training directors to determine an optimal distribution of experiences to focus their learning and skills, in keeping with the idea of having a "major." These electives may be based in clinical, teaching, administrative, or research settings, and most often will include experiences in our subspecialty clinics working with experts in defined areas. Our goal is for residents to develop advanced skills in the diagnostics and therapeutics germane to their areas of interest, as well as the ability to translate novel research findings into practice.

In addition to choosing electives in specialty clinics with an opportunity to focus one's learning and skills, residents may also elect to spend additional time in any one of the established PGY-3 outpatient rotations described above.

During this year (or PGY-4), each resident also presents one of her/his more challenging cases at a Clinical Grand Rounds. The care of the patient and the various teaching points therein are then discussed by an expert faculty member invited by the resident.

Didactics

As in the prior two years of training, PGY-3 residents are given protected time for their classroom didactic curriculum, representing six hours one-day per week. The PGY-3 didactic curriculum prioritizes an indepth focus on the different psychotherapies and outpatient psychopharmacology. Continuous case conferences allow residents to follow the treatment of a single case over time.

Call

PGY-3 residents take call in The Mount Sinai Hospital's dedicated Psychiatry Emergency Service, which is staffed by a supervisory attending psychiatrist 24/7. Individual residents elect whether to work on a night-float system (one-week at a time), or by scheduling specific days, in keeping with their own specific needs as outpatient providers). Shifts are 12 hours (8:30pm-8:30am)

Vacation during PGY-3 is scheduled and taken as desired by the individual resident, provided that it is cleared by the training office.

The Fourth Year: Promoting Professional Identity & Uniqueness

The PGY-4 experience focuses on specialty training and cultivating residents' developing expertise and readiness for independent psychiatric practice and directed professional growth.

- Electives
- Teaching Resident
- Chief Residents
- Consultation-Liaison Psychiatry
- Outpatient practice

9-10 months of elective time in specialized settings and in areas of one's choosing provide residents with resources and mentorship to develop clinical, research, and/or administrative expertise.

We believe that in addition to pursuit of individual career interests, residents should develop teaching facility to become future leaders in psychiatry. To cultivate these skills, we have established the Teaching Resident rotation, in which each PGY-4 resident spends 30% time for one to two months taking responsibility for educating both junior residents and medical students in programmatic, supervisory, and didactic modalities. While closely supervised by the residency training directors, the Teaching Resident provides additional supervision of junior residents on the inpatient units and teaches interviewing skills to both junior residents and rotating medical students. Residents have found this rotation to be an invaluable experience, helping them both consolidate their knowledge base as well as develop the necessary skills they will employ in future faculty positions.

Continuing their immersion in the practice of outpatient psychiatry, residents maintain a more circumscribed caseload of patients of their choosing, which allows for both an ongoing longitudinal outpatient experience as well as more time to pursue additional clinical and research interests. Together with this condensed outpatient caseload, residents continue with their psychotherapy cases and associated supervisors. The many months of elective time as well as the flexibility of the fourth year make it possible for interested residents to begin formal psychoanalytic training as candidates at the New York Institute.

Three residents per year are chosen to be Chief Residents; they each perform in this role for four months and alternate this with other experiences. In addition, one resident from the Physician-Scientist Research Track is selected to be the Research Chief, focusing on facilitating the experiences of residents interested in pursuing basic science or clinical research. The Chief Residents attend weekly operations meetings of the Office of Psychiatric Education, and they are responsible—under the supervision of the training directors—for guiding much of the day-to-day operations of the residency. They hone their leadership and administrative skills through intimate involvement in the interview season, orientation, inviting speakers for Grand Rounds, teaching junior residents, organizing events for the residents (e.g., the Retreat, Chairman's Journal Club, get-togethers, etc.), and providing office hours for junior residents to discuss issues in a meaningful and confidential forum.

The fourth year also includes two months of training in Psychosomatic Medicine (Consultation-Liaison Psychiatry). As one of the preeminent academic medical centers in the United States, The Mount Sinai Hospital has expertise in a multitude of disciplines, including geriatrics, gastroenterology, cardiology and cardiac surgery, neurology and neurosurgery otolaryngology, endocrinology, rehabilitation medicine, gynecology, renal medicine, pulmonology, and cancer. In addition to evaluating and treating general medical and surgical patients who require psychiatric care, residents work with subspecialty-trained faculty who pursue clinical and research interests in transplant psychiatry, movement disorders, HIV psychiatry, the psychiatric aspects of multiple sclerosis, and post-partum and women's mental health.

Didactics

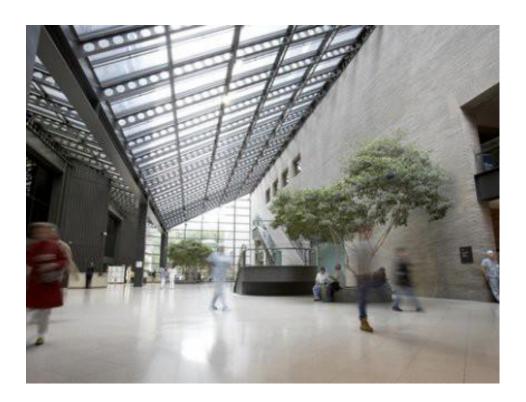
As in the prior two years of training, PGY-4 residents are given protected time for their classroom didactic curriculum, representing seven hours one-day per week. This year includes courses in advanced psychopharmacology and psychotherapy as well as covering special clinical and practical topics important for practicing psychiatrists.

Call

There is no call in the fourth year.

PGY-4 vacation is scheduled and taken as desired by the individual resident, provided that it is cleared by the training office.

Overview of Clinical Services



Mount Sinai

Over the years, both The Mount Sinai Hospital and the Icahn School of Medicine have soared in reputation to rank among the top institutions in the nation. This rise has been due largely to the ongoing collaboration between defined institutes within Mount Sinai, linking research, clinical, and administrative arms and making a focus on translational science a reality. Mount Sinai's ongoing intellectual, humanistic, and financial growth is also evident in the new Leon and Norma Hess Center for Science and Medicine. This state-of-the-art facility integrates clinical and basic science research with an ambulatory care center, uniting clinicians, scientists, educators and their colleagues in a unique, collaborative way. Occupying the 9th and 10th floors of the Hess Center, the Friedman Brain Institute, directed by psychiatrist Eric Nestler, MD, PhD, exemplifies our translational and interdisciplinary focus in psychiatry. This emphasis is the vision of the highest-ranking leaders of the institution, who are themselves psychiatrists—Ken Davis, MD, CEO of the Hospital, and Dennis Charney, MD, Dean of the School of Medicine—personifying the esteem to which psychiatry is held within the institution, and the level of importance given the study of the brain and mind.

About The Mount Sinai Hospital

Founded in 1852, The Mount Sinai Hospital is a 1,171-bed, tertiary-care teaching facility acclaimed internationally for excellence in clinical care.

The Mount Sinai Hospital was named to the U.S. News & World Report Honor Roll in its 2014-2015

edition, ranking 16th out of nearly 5,000 hospitals nationwide, and nationally-ranked or high-performing in multiple specialties, including Psychiatry, Geriatrics, Gastroenterology & GI Surgery, Neurology & Neurosurgery, Cancer, Diabetes & Endocrinology, Ear, Nose & Throat, Gynecology, Cardiology & Heart Surgery, Nephrology, Pulmonology, Rehabilitation, Orthopedics, and Urology.

Hospital Statistics

- 1.171 Beds
- 2,510 Physicians
- 1.097 Residents and Fellows
- 2.278 Nurses
- 58,332 Inpatient Discharges
- 644,527 Outpatient visits (non-emergency room)
- 102,639 Emergency Room Visits

About the Icahn School of Medicine at Mount Sinai

The Icahn School of Medicine at Mount Sinai is internationally recognized as a leader in groundbreaking clinical and basic science research and is known for its innovative approach to medical education.

With a faculty of more than 3,400 in 38 clinical and basic science departments and centers, Mount Sinai ranks among the top 20 medical schools in receipt of NIH grants and in US News and World Report.

Academic Community

- 550 Medical Students
- 272 PhD Students
- 98 MD/PhD Students
- 598 Postdoctoral Fellows

Inpatient Psychiatry Services

The Mount Sinai Hospital has one of the oldest general hospital psychiatric inpatient services in the nation. As currently arranged, we have approximately 90 inpatient psychiatry beds divided by specialty focus (e.g., General Adult, Dual Diagnosis, Geriatric) in several locked units. Each unit is a self-contained space, with its own staff (nurses, professionally trained recreational therapists, social workers, and members of other allied professions) and each is run by attendings who have completed fellowship training in the designated clinical areas. This division of duties facilitates the provision and promotion of excellent patient care within each of these subspecialties.

Rather than asking residents to rotate through all our inpatient units, we have chosen to concentrate teaching cases, highly-rated teaching faculty, and residents on selected teaching units. The non-teaching units remain available for elective experiences for junior and senior residents if they choose. Serving a vastly diverse patient population, The Mount Sinai Hospital Inpatient Psychiatry Service has routinely treated approximately 2,000 patients per year. Genders are approximately equal, and ethnic makeup is approximately 45% Caucasian, 30% Hispanic, 20% African-American, and 5% other.

The Mount Sinai Hospital serves both the affluent Upper East Side of Manhattan and the

socioeconomically challenged East Harlem community. In addition, many admissions are transferred directly from affiliate hospitals (within and outside the Mount Sinai Health System), nursing homes, community mental health agencies, and residential programs. Many patients are homeless and seriously disenfranchised. Others are severely mentally ill and in need of comprehensive psychiatric, medical, and social services. Still others are high-functioning professionals with acute psychiatric illnesses.

The diagnostic range of patient presentations is also extremely diverse. Residents gain experience in the evaluation and treatment of all the major psychotic, mood, anxiety, personality, cognitive, and substance-related syndromes.

Residents learn intensively through immersion in acute psychiatric care, crisis intervention, establishment of a therapeutic alliance, maintenance of safety, and rapid psychopharmacological stabilization. Experience with electroconvulsive therapy and with serious medical comorbidity is also part of the training, as residents rotate through our specialized ECT service run by Dr. Charles Kellner. Residents occasionally treat patients participating in research studies, thereby becoming familiar with research methodology and protocols.

On the general adult teaching service, there are usually approximately 4 rotating residents at any one time. Treatment teams consist of attending psychiatrists, residents (PGY-1 and 2), nurses, social workers, psychology externs and interns, and recreational/art therapists. As the average length of stay on inpatient units is approximately 11-12 days, residents have the opportunity to get to know their patients relatively well. Residents generally work from 8am until 5-6pm and are expected to manage up to 6 patients at a time with whom they will meet for daily sessions. This cap of 6 will provide for more in depth experiences, the ability to develop strong therapeutic alliances, pursue chosen academic interests, and attend frequent academic case conferences.

PGY-1 and 2 residents provide patient care, participate in daily interdisciplinary team meetings, daily patient rounds, run community meetings and medication groups, and receive ongoing direct one-on-one supervision by full-time inpatient attendings in an apprenticeship model. Emphasis is placed on psychiatric and medical evaluation, formulation, treatment intervention, and acute psychiatric care of serious mental illness. Evidence-based psychopharmacological practices are stressed, as is targeted supportive psychotherapy. Psychiatric interviewing and mental status examinations are performed with the unit attending. Case formulation, differential diagnosis, and treatment planning are discussed daily. PGY-2s work in a more supervisory capacity than PGY-1s, teaching interns and medical students, running a greater share of patient rounds, and having a greater ownership of the team. They also provide more in-depth and advanced psychotherapeutic interventions.

Besides the daily presentations of their patients in morning rounds, residents present each patient's condition and care plan status at weekly interdisciplinary team rounds. Residents provide medical student supervision and education, gaining invaluable experience as teachers themselves early in their training. Psychiatric interviewing skills and mental status examinations are further refined by this experience. Residents also present selected inpatients at case conferences and clinical seminars held on the inpatient units.

In 2015, The Mount Sinai Hospital's Child and Adolescent Psychiatry Inpatient Service relocated to a renovated space at the Mount Sinai St. Lukes site. Run by two Mount Sinai-trained attendings and including child fellows and triple board residents, the unit has an expanded the number of beds, space allocation, and staffing. Mount Sinai residents continue to rotate through this unit, gaining experience with running family meetings and learning about different care systems, including working with the school system and child protective services.

Ambulatory Psychiatry Services

Ambulatory Psychiatry Services at The Mount Sinai Hospital include a variety of outpatient settings. Residents' offices are located in a modern renovated space on Fifth Avenue, where treatment is overseen by both dedicated full-time faculty and an extensive voluntary faculty.

Adult Psychiatry Outpatient Division (OPD)

This general clinic provides residents experience in a variety of treatment modalities, including psychopharmacology and multiple forms of individual and group psychotherapy. Services rendered in the clinic include comprehensive assessments and treatment planning, crisis intervention, psychotherapy, individual and group psychopharmacology, treatment for co-occurring disorders, collateral and family engagement and support, and recovery oriented services for the chronically and severely ill. Integrated, around-the-clock emergency services are a standard of care. Common diagnoses include depression, bipolar disorder, schizophrenia spectrum disorders, anxiety disorders, post-traumatic stress disorder, obsessive-compulsive disorder, substance abuse, personality disorders, and cognitive, emotional, and behavioral disorders of aging. In the OPD, residents work relatively independently, strengthening their autonomy and solidifying their skills, but always in the knowledge that an attending is on-site for any urgent issues. Residents meet with their caseload supervisors once a week and also have weekly meetings with multiple adjunct supervisors and educational consultants who specialize in a variety of psychotherapeutic specialties. A clinic manager is on site to facilitate administrative responsibilities.

An average adult outpatient caseload consists of 20-35 patients in various modalities and phases of care. A typical distribution of these patients at any one point in time (i.e., PGY-3 caseload) may include

- Patients in evaluation/short-term crisis intervention and stabilization
- Patients receiving continuation and maintenance phase psychopharmacologic treatment (these patients also receive parallel verbal therapy) seen 1-2 times per month
- Patients in Integrated Primary Care Psychiatry Clinics
- Patients in psychodynamic psychotherapy seen 1-3 times weekly
- Patients in cognitive-behavioral therapy seen weekly
- Patients in supportive psychotherapy seen every 1-2 weeks
- Child and adolescent patients in longer-term treatment, as well as child or adolescent patients undergoing diagnostic evaluation at any given time
- Patients in the Day Treatment Program (these severely mentally ill patients are seen in a weekly group)
- Additionally, each resident manages a caseload of 15-20 patients in the geriatric service, typically seen on a monthly basis
- Patients treated as part of electives: Couples/family, DBT, research evals, TFP, etc.

PGY-4 Caseloads are reduced substantially to allow for extended PGY-4 elective opportunities. PGY-4s continue to treat long-term therapy cases as well as selected others of their choosing.

Outpatient Supervision

Each PGY-3 resident receives mandatory scheduled supervision in every area of practice throughout the vears of her/his involvement.

- Direct attending supervision of the evaluation and stabilization of patients seen for new intakes
- Caseload supervision: 1 hour/week

- Cognitive-behavioral therapy supervision: 1-2 hours/week
- Psychodynamic psychotherapy supervision: 1 hour/week per patient (residents often have a different supervisor for each patient treated in this modality)
- Couple/family supervision and elective: 2 ½ hours/week
- Group therapy supervision: elective 1 hour/week
- Child and adolescent supervision: 2 hours/week (1 for ongoing cases and 1 in evaluation clinic)
- Geriatric psychiatry supervision: 4 hours/week in medical-model clinic
- Day treatment supervision: 1 hour every other week
- Elective supervision: dependent on specific electives

Geriatric Psychiatry OPD

Providing ongoing clinical care for more than 3,000 patients annually and the setting for the evaluations of all patients entering studies in the <u>Alzheimer's Disease Research Center</u>, the geriatric psychiatry OPD is embedded in Mount Sinai's <u>Martha Stewart Center for Living</u>, a modern, state of the art clinic, with available medical services, including easy access to EKG, lab work, and medical technicians. In this clinic, residents treat patients 4 hours/week in both a medical-model (i.e., attending geriatric psychiatrist preceptor on-site for immediate supervision) as well as a collaborative care model (in which patients are followed by internal medicine and geriatric medical specialties allowing for integrated treatment). Residents treat patients with psychopharmacology and psychotherapy. Geriatric social workers are available to provide social services such as home and safety assessments.

Child and Adolescent Psychiatry OPD

In the <u>child and adolescent psychiatry OPD</u>, residents evaluate and treat patients (ages 18 months to 18 years) and their families across a broad range of psychiatric disorders. PGY-3 residents attend an evaluation clinic 2-3 hours per week in which they assess and potentially treat new patients (with evaluations often lasting several weeks). Senior child and adolescent clinicians provide direct on site supervision. This experience provides excellent training in diagnostic, formulation, and communication skills. Diagnoses encountered include disruptive, attention-deficit, mood (including depression and bipolar), anxiety, post-traumatic stress, and psychotic disorders. Residents also treat at least 1 (more if desired) child/adolescent longitudinally while receiving supervision from both voluntary and full-time child/adolescent psychiatry faculty. A range of therapeutic modalities is available, including individual and group psychotherapy, psychopharmacology, and parent guidance and family treatment. This clinic also has social workers and case managers who aid with social services.

Integrated Psychiatry in Primary Care Clinics

PGY-3 psychiatry residents spend approximately 4 hours per week for 6 months working collaboratively with non-psychiatric physicians both in a consultative manner as well as providing direct treatment to psychiatric patients in satellite psychiatric clinics co-located with primary care and specialty medicine clinics. Residents serve as consultants in the treatment of patients with co-morbid medical and psychiatric conditions. Depending on the specific setting, the resident may acts a supervisor to the internal medicine resident, guiding her/him through a psychiatric assessment and treatment options. For other patients, the psychiatry resident may evaluate and treat the patient her/himself in the non-psychiatric clinic setting. Attending psychiatrists provide direct supervision to psychiatry residents. Residents develop supervisory and teaching skills as well as experience in working collaboratively with physicians from other disciplines, effectively preparing psychiatry residents for one aspect of the changing world of psychiatric practice.

Residents may work in a variety of general medicine and non-psychiatric specialty clinics, including the busy Internal Medicine Associates (IMA) clinic (serving the East Harlem and Harlem population and offering general as well as subspecialized care), pain management, the <u>Jack Martin Fund Clinic</u> (HIV), the Ob-Gyn clinic, liver transplant, etc.

Continuing Day Treatment Program (CDTP)

In the CDTP, patients requiring additional support and a structured treatment experience and those patients transitioning from the inpatient setting attend daily groups and receive treatment by psychiatrists, social workers, and therapists. The program is located in a newly renovated building with modern, state of the art facilities. CDTP is a group-focused, five-days-per-week program, providing comprehensive treatment, including case management services, psychopharmacology, group psychotherapy (of varied modalities, including DBT), individual psychotherapy of varied modalities as needed, social skills training, crisis management, entitlement planning, as well as prevocational and psycho-educational groups. Integrated vocational rehabilitation services are also available. The CDTP assists patients who have a vocational goal to achieve competitive employment through our State funded Supported Employment Program, and then to maintain that employment though our New York State Office of Mental Health sponsored follow along program (Extended Ongoing Supported Employment).

This structured daily program for adult patients with severe mental illnesses (e.g., schizophrenia, bipolar disorder, borderline personality disorder, dissociative disorders, affective disorders, PTSD, OCD, etc.) allows residents a unique view into the world of **treatment refractory populations**. Residents gain experience leading a multidisciplinary team (social workers, activities therapists, psychology interns, occupational therapists), leading medication groups for 5-6 patients, and managing patients with long-acting injectable depot formulations of antipsychotics. Chronic management of intricate psychopharmacological regimens is a mainstay of this experience, and residents learn to work with cutting-edge pharmacological treatments, including much experience with patients on clozapine. The resident's experience is longitudinal with these very complex patients, and because the patients are seen by staff daily, residents feel comfortable and supported in learning to use quite novel medications and making decisions based on current neuroscientific literature. Residents receive ongoing supervision from the medical director of the program, with whom s/he meets for biweekly supervision and biweekly rounds; the medical director is available for urgent supervision if the need should arise.

Deepening the experience, residents work closely with social workers, activities therapists, and the clinical and medical directors of the program. Part of this experience entails forming a working alliance with allied professionals who provide clinical assessments as well as perform triage in patient emergencies. Anticipating working in split treatments later in one's career, residents learn to extract important data while gauging the clinical acumen of co-workers who see the patients daily and often know the patients much better than the resident does. Residents learn the difficulties in managing a chronically ill population, including the effects of ongoing psychosis (positive and negative symptoms), childhood trauma, ongoing psychosocial stressors, and medication non-adherence, as well as potential needs for re-hospitalization. Crisis management is another of the skills that residents acquire in this setting, learning to mobilize resources rapidly in the interest of patient safety. Residents are encouraged to be involved in a patient's care while s/he is in the hospital to assist the inpatient treaters and maximize the benefits received by the patient; making this process collaborative is often an overlooked skill.

In addition to the above-described required clinical experiences, the field of care in CDTP is open to the creation of individualized elective experiences for senior residents. For example, a resident would be able to create and run a group focusing on a subset of the DTP population (e.g., clozapine patients, patients with negative symptoms of schizophrenia, those with persistent positive symptoms, heroin users, etc). Alternatively, the resident may elect to run or co-lead a medication group or other specialty group already in existence. Then again, if the resident is interested in focusing on cognitive therapy for positive symptoms of schizophrenia, s/he could forego running a group and instead meet regularly with a few select patients to provide such individual specialized care.

Psychiatric Emergency Service

A separate dedicated newly renovated, state of the art facility adjacent to the medical ER, the Psychiatric Emergency Service (PES) provides rapid, comprehensive assessment and treatment to nearly 3,000 patients per year. With a dedicated security guard(s) at all times, the PES prides itself on providing a safe environment for patients and clinicians, allowing for intimate therapeutic contact with patients in quiet interview rooms, while at the same time providing for the absolute safety of staff members. The psychiatric emergency room has a large open model room as well as individual rooms, which include a specific room for child and adolescent assessments, and a safe, padded seclusion room, with an observation window. While working in the emergency room, residents have the opportunity to see consults in the main medical section of the Emergency Room that allows for close collaboration with medical ER staff. There is also a social worker and a nurse practitioner who have vast experience in psychiatric ER work.

Residents receive instruction in the practice of triage, assessment, crisis management, community psychiatry, and disposition to care, as they work one-on-one with an attending and teach medical student rotators. In addition to the direct supervision residents receive from specialized ER psychiatrists through all stages of the patient's care, the PES runs Journal Clubs as well as joint PES / Medical ER Case Conferences in which participants discuss complex patient presentations.

Consultation-Liaison Psychiatry

The Division of Psychosomatic Medicine at The Mount Sinai Hospital offers rich clinical training with eight full-time, highly trained, and experienced attendings who provide clinical supervision. Three Psychosomatic Medicine fellows also serve as supervisors. Please see the Mount Sinai Psychosomatic Medicine Fellowship webpage for details. Clinical experiences include general medical/surgical services and subspecialty programs, including Organ Transplantation, Geriatrics, HIV, and Ob-Gyn, Neurology/Multiple Sclerosis. Residents rotate through this service during their 4th year of training. However, so that residents may have some CL experience prior to their 4th year when they begin applying for fellowships, they spend one month at the James J Peters VAMC in the Psychiatry Consultation-Liaison Service as PGY-2s. While at the VA, residents work closely with an attending and a Psychosomatic Medicine fellow and have the opportunity to treat a wide range of psychiatric problems encountered on the medical floors, including working with patients on the spinal cord injury service, evaluating delirium and capacity on the medical floors, and often collaborating with other services in treating rare and complicated cases.

James J Peters VA Medical Center

The James J Peters VA Medical Center is located in the Bronx and is the oldest VA Medical Center in New York City, serving veterans since 1921. Today, it is a Level 1 Clinical Referral Tertiary Care Center housed in a modern building with 311 hospital beds with an adjoining 120-bed nursing home facility. In addition, it is one of only 10 VA Medical Centers in the country housing a congressionally-designated Mental Illness Research, Education, and Clinical Center (MIRECC), providing Mount Sinai residents with unique research opportunities.

Residents begin their experience at the VA either in the latter half of PGY-1 or in the first half of PGY-2,

when they rotate on the inpatient and consultation liaison services (each for one month). At the VA, residents see a broad range of psychiatric diagnoses, including PTSD, substance abuse, psychosis, acute and chronic suicidality, and mood disorders in a unique population of US military veterans.

Residents start their full-time outpatient experience at the VA during PGY-2, spending 6 months engaged in rapid evaluation and treatment of new patients as well as in geriatric, and substance use clinics. The outpatient services at the VA are very active, serving almost 2000 veterans. During the six months in the VA outpatient clinic, residents work autonomously, but are closely supervised by on-site attending supervisors. The clinical experience in the OPD provides residents with an opportunity to see patients across a wide range of levels of severity in a unique medical system with extensive outpatient psychiatric resources that are often unavailable to patients in the private healthcare system. Residents have a broad experience in psychopharmacology, diagnostic assessment, crisis intervention, evidence-based psychotherapies, group psychotherapy, and collaboration with other mental health professionals. In addition, residents take overnight and weekend call at the Bronx VA, gaining valuable experience as independent clinicians evaluating patients in the emergency setting as well as on the medical floors as a consulting physician under the supervision of an off-site attending.

Rapid Access Clinic

The Rapid Access Clinic provides a setting where residents evaluate and treat a rich array of new patients representing the full range of psychiatric pathologies. Most patients have self-presented, been referred by other providers, or been discharged from acute inpatient units. Residents provide crisis management psychopharmacology and brief psychotherapy as they formulate cases and determine the optimal ongoing treatment and referral for the patient. Patients stable enough for outpatient care are referred either to the general clinic or to one of the other specialty outpatient clinics in the Mental Health Patient Care Center (PTSD, Substance Recovery Services, Schizophrenia Treatment and Research Program, Geriatric Psychiatry, Young Adult/Transitions). Occasionally, patients present who require inpatient treatment and will be referred to the Emergency Room or at times admitted directly to the inpatient service.

Geriatric Psychiatry Clinic

The Geriatric Psychiatry Clinic is staffed by board certified geriatric psychiatrists, clinical neuropsychologists, a nurse practitioner, social workers, social work interns, and geriatric psychiatry fellows. In this clinic, veterans are provided with specialty mental health services unique to the geriatric patient population. These services include psychopharmacology, psychotherapy (cognitive behavioral, interpersonal, supportive, and group), and couples and family work. Residents manage treatment of their patients, including the specialized pharmacology appropriate for this population. They conduct intake evaluations and carry a caseload of individual patients from a variety of psychiatric diagnostic categories. Special emphasis on areas of mourning and loss as well as adjustment to illness are incorporated into the experience.

Substance Recovery Service (SRS)

The Substance Recovery Service (SRS) provides individualized assessment and integrated care in an outpatient setting. The SRS offers a range of options, including intensive daily programming, ongoing rehabilitation, and aftercare, and care is provided within several related programs. An Opioid Treatment Program (OTP) provides opiate replacement (methadone/suboxone) therapy and psychosocial treatments. Patients with Alcohol or other Drug Dependence(s) are also treated in the SRS and group interventions involve a mix of patients with various disorders. The Dual Diagnosis Program (DDP) provides specialized treatment to patients who suffer both serious mental illness (SMI) and substance use disorders. Residents are trained to assess and care for patients with primary addictive disorders with or without co-occurring disorders and work in all of the substance abuse services. They learn to utilize a

variety of specific pharmacologic interventions, including opiate replacement therapy and outpatient detoxification. Residents also learn to develop and implement care plans as members of multidisciplinary treatment teams and learn about a range of individual and group interventions (e.g., Motivational Interviewing, Harm Reduction, 12-step support, and Cognitive Behavioral t\Therapy).

Dialectical Behavior Therapy

PGY-3 and PGY-4 residents may elect to participate in the DBT (Dialectical Behavior Therapy) Training Program, which has been established in the VA psychiatric outpatient clinic. This weekly training includes participation in a weekly skills training group, individual psychotherapy, telephone consultation, and participation in the DBT team consultation meeting.

The clinic staff have been trained as part of the founding DBT Team at the JJP VAMC. DBT has been demonstrated to be very effective in the treatment of impulsive and self-harming patients with borderline personality disorder. It is a synthesis of behavior therapy, which promotes positive emotional regulation and behavior change, and the principles of Zen, which promote the acceptance of one's current distressing state, while change occurs. Validation of the patient's experience is balanced with the dialectic of coaching and positively reinforcing cognitive and behavior skills to manage and thus change the patient's current experience. DBT emphasizes the patient's responsibility in being a co-equal partner with the therapist to work toward behavioral stabilization and the learning of skills to be able to have an enhanced quality of life. The DBT Training Program offers treatment that targets not only self-harm, but also aggressive and harmful behavior toward others. The DBT treatment team also extends the application of DBT to patients with suicidal ideation who do not necessarily have borderline personality disorder.

Forensic Psychiatry

PGY-1 residents are given a choice between an inpatient forensic and an inpatient geriatric psychiatry rotation. Residents who desire both may use elective time in PGY-2. Forensics rotations occur at two sites: Manhattan Psychiatric Center and Kirby Forensic Psychiatric Center.

Kirby Forensic Psychiatric Center

<u>Kirby Forensic Psychiatric Center</u> is a maximum-security hospital of the New York State Office of Mental Health. The PGY-1 rotation at Kirby offers residents an opportunity to work with different forensic populations:

- Individuals charged with serious crimes who have been found unfit to stand trial as a result of mental illness
- Inmates transferred from jail or prison who have become mentally ill while serving their sentences
- Patients who have never been charged with criminality but are felt to be too dangerous or unmanageable to be housed in less restrictive state psychiatric hospitals

Residents spend approximately half of their time on a short-term unit where patients are treated with the goal of rendering them fit to stand trial or to return to the prison population. The remainder of the resident's time is spent conducting preliminary fitness examinations of patients to evaluate whether they are fit or competent to stand trial. Court proceedings occur at the Kirby facility on a weekly or biweekly basis. Each week, residents are also able to participate in ECT. Residents are generally given as much responsibility for patient care as they wish, enabling the motivated resident to play an active role in virtually every aspect of the forensic process, from admission through discharge. In addition, the faculty at

Kirby is highly interested in teaching, and all residents leave with a basic understanding of psychiatric law and the role of psychiatrists in the legal system.

Manhattan Psychiatric Center

At the Manhattan Psychiatric Center (MPC) residents serve patients not just as physicians, but also as teachers, group leaders, evaluators, and cognitive therapists—all within a unique, long-term, rehabilitative treatment setting. Residents working at MPC observe, assist in, and run groups, including community meetings and psychopharmacologic education as well as provide individualized care to patients. Residents have the opportunity to attend court with their patients for a number of issues, including advancement of privileges, retention/release, and treatment over objection. The didactic experience at MPC includes lectures on the nature of borderline personality disorder, the complexity in treating sexual predators, and the nuances within the criminal justice system as it pertains to psychiatric illness. Residents are also instructed on how to administer a violence risk assessment using the HCR-20 and Hare Psychopathy scales and are expected to present their findings to a group of other physicians and students at MPC.

Subspecialized Clinical and Research Centers for Patient Care

Through our specialized programs and services, the Department of Psychiatry provides expert care for patients and research about a range of mental health conditions. We expect that residents will take advantage of this depth and breadth of translational medicine to develop a concentrated area of focus, with intensive training in not only clinically relevant psychopharmacology, psychotherapy, and methods of evaluation, but also facility with the emerging findings and investigations into the pathogenesis and therapeutics of these conditions.

- Division of Tics, OCD, and Related Disorders (DTOR)
- Obsessive-Compulsive and Related Disorders Program
- Pediatric Mood and Anxiety Disorders Program
- Psychosis Research Program / Center for Neuroscience Studies
- Alzheimer's Disease Research Center
- Mood and Anxiety Disorders Program
- Consultation Liaison Psychiatry Specialty Programs
- Personality Disorders Program
- Center of Excellence for ADHD and Related Disorders
- Tics and Tourette's Clinical and Research Program
- Eating and Weight Disorders Program
- Appearance and Performance Enhancing Drug Program
- Neuropsychoimaging of Addiction and Related Conditions (NARC) Research Program
- Traumatic Stress Disorders Program
- Seaver Autism Center
- World Trade Center Mental Health Monitoring Program
- Human Rights Program
- Neuropsychological Testing and Evaluation Center
- Learning and Development Center

Additionally, the <u>Friedman Brain Institute</u> integrates multiple clinical and research programs in which residents may elect to become involved.

Translational Research: Linking Basic Science with Clinical Practice

Mount Sinai has a proud tradition of translational research, and our residents have numerous opportunities to become vital members of our family of researchers both at the Icahn School of Medicine at Mount Sinai and at the James J Peters VA Medical Center. Our Centers of Excellence in areas as diverse as autism, OCD, schizophrenia, eating disorders, mood/anxiety disorders, substance use, and dementia actively combine clinical care with clinical research, as our Friedman Brain Institute explores cutting-edge concepts in neuroscience.

Our VA is proud to be home to a highly funded Mental Illness Research, Education, and Clinical Center (MIRECC), established by congress with the goal of pursuing a discovery-to-recovery approach for serious mental illness by determining causes, identifying predictors, and developing treatments that overcome barriers and enable recovery. Specifically, the mission of the VISN 3 MIRECC is to enhance the recovery of Veterans with schizophrenia, bipolar disorder, and borderline personality disorder, by focusing on four psychological domains that are essential to healthy functioning—reality testing, cognitive function, affective processing, and aggression /impulse regulation—through clinically-oriented neuroscience and genomic research, new forms of assessment, clinical interventions, and health service interventions.

Our Department of Psychiatry is #6 in the US as ranked by federal funding, and our Department of Neuroscience is #3, with individual investigators listed among the top 10 funded Pl's.

- Psychiatry/Neuroscience Active NIH Grants (See Appendix A)
- Psychiatry/Neuroscience **Active VA Grants** (See <u>Appendix B</u>)
- Icahn School of Medicine at Mount Sinai Research Laboratories
- Department of Psychiatry
- Friedman Brain Institute
- Department of Neuroscience Research Laboratories
- Fishberg Department of Neuroscience
- Icahn Institute for Genomics and Multiscale Biology

Additional information regarding foundation grants (e.g., the <u>Seaver Autism Center for Research and Treatment</u>) is available by request from the training directors.

While all residents have opportunities to do clinical or basic science research with excellent mentors, we also have a Physician-Scientist track with a more specific focus on research as well as a novel Psychiatry Residency + PhD track which allows residents to obtain a PhD while completing a residency in psychiatry.

Through our close relationship with the <u>Department of Neuroscience</u> at the Icahn School of Medicine, we encourage residents to explore and think about potential future directions for our field.

Didactic Curriculum

We base our didactic curriculum for residents on the concept of a frame, or matrix, of areas of knowledge. For clinical work, one needs to have at one's disposal a broad knowledge base regarding phenomenology, diagnosis, and treatment. This is in addition to such skills as interviewing, clinical reasoning, and initial psychotherapeutic management. Of course, it is not possible to have a deep knowledge of all these areas straight away, especially in the first year of training, when a resident is practicing internal medicine as well as neurology and psychiatry.

The frame concept focuses on acquiring general principles in many areas of clinical knowledge and skills. Residents then apply this material more specifically to their clinical work and discuss it with their supervisors. Throughout the years of training, each subsequent pass over the material increases in complexity, filling in the original "frame," until residents reach a textured proficiency.

Our residents attend a didactic curriculum, which spans all four years of their residency. Rather than relegating the intern year to that of "workhorse," and assigning the residents' sole learning to their clinical rotations, we believe that classroom education and multiple conferences during this formative year can be an invaluable experience, especially because interns are hungry to learn. The weekly curriculum progressively broadens and deepens across the subsequent years, covering and delving into the many related subjects that comprise the psychiatric landscape.

The curriculum is organized as multiple courses which run in parallel time slots within a given residency year. Several courses last a few months while others (e.g., psychopharmacology, psychotherapy) span two to three years. Our training directors oversee the entire curriculum, and a faculty member with special expertise in each area directs each individual course. Individual classes are taught by invited faculty and guests, usually in a seminar format.

All classroom didactics are considered protected time, allowing residents to be excused from their clinical duties.

PGY-1 Didactics

The core PGY-1 didactic course meets for two hours weekly throughout the year. So that we create a sense of continuity and coherence for the first-year residents whose time often spreads across different services, we have arranged for most to attend these sessions even when they are assigned to rotations on internal medicine, pediatrics, and neurology (with exceptions being emergency medicine and every other week on inpatient internal medicine), as well as when on psychiatry rotations.

Please see Appendix C1 for a sample PGY-1 class schedule.

The overall aims of the course are

- To provide the knowledge and clinical skills that are useful for the types of psychiatric care that beginning residents are providing on inpatient services
- To provide an opportunity for residents to reflect on their PGY-1 experience and the challenges of being a physician with primary responsibility for extremely ill patients being treated in a busy academic urban hospital

The necessary knowledge base relates to the evaluation, diagnosis, and treatment of major psychiatric disorders encountered on an inpatient unit, as well as major comorbidities, including substance abuse

and medical problems. Interviewing is a primary focus, and faculty members formally trained in the examination of interviewing techniques lead practicum sessions throughout the year. Additionally, the curriculum includes multiple lectures on psychopharmacology, differential diagnosis, supportive psychotherapy, drug withdrawal, cognitive evaluations, neuropsychiatry, and neuroscience.

The PGY-1 didactic curriculum also includes elements related to core competencies that go beyond the above didactic offerings. Beginning residents are faced with navigating the unusual situation of simultaneously being students of the Department of Psychiatry while also being employees of the medical center, in which they are responsible (within reasonable supervisory limits) for the lives and care of their patients. Adapting to and internalizing this responsibility is a significant focus of the PGY-1 didactic and clinical curricula. Throughout the year, multiple sessions are devoted to advancing skills in, knowledge of, and attitudes inherent in successful communication, professionalism, leadership, and practicing within a system.

PGY-2 Didactics

For most of the day on Wednesdays, PGY-2 residents are excused from clinical responsibilities to attend their weekly classroom didactic curriculum. Consisting of five courses running in parallel, the curriculum is divided thematically into the following areas, which are listed and described in detail below:

- Phenomenology & Clinical Neuroscience
- Psychotherapy
- Clinical Psychopharmacology
- Social & Psychiatry Services
- Process Group

Please see Appendix C2 for a sample PGY-2 class schedule.

Phenomenology & Clinical Neuroscience

Meticulous understanding of and ability to describe symptomatologies are necessary skills, and in this year-long course, residents learn multiple ways of conceptualizing patients' presentations. We start with dimensional symptoms (Part 1: Descriptive Psychopathology: Symptoms) and move to diagnosis-based constellations (Part 2: From Symptoms to Syndromes). Part 1 symptoms exists across diagnostic categories (e.g., altered motivation in depression and schizophrenia, etc) and do not necessarily have specificity to a given diagnosis. Residents learn how to recognize and describe these symptoms and from an atheoretical and non-syndromal manner, helping them become expert diagnosticians and maximizing their abilities to engage and build rapport with patients.

Parts 1 and 2 also include a focus on the underlying neuroscience of the various symptoms and syndromes. Additionally, beyond the usual and expected teaching of the neuroscience of pathological functioning, we believe in the importance of also learning what happens in the brain when things go right. As such, we teach residents the neuroscience of "normal" functions. Our goal is to provide a translational means for residents to understand and talk to their patients as well as a literacy in approaching new research findings.

Part 3 (Intermediate Phenotypes & Clinical Neuroscience) is a much more in-depth neuroscientific look at emotion, cognition, learning, and behavior, from socially observable phenomena down to genetics and epigenetics. In Part 3, residents are taught using an experience-heavy pedagogical approach, departing from a basic lecture format in many instances and highlighting the approachability and clinical relevance

of the material.

Psychotherapy

The primary goal of our psychotherapy didactic curriculum is to cultivate sophisticated and scholarly psychiatrists who have knowledge and practical skills in the established and emerging evidence-based psychotherapies. In presenting residents with the major techniques, theories, formats, and modalities of treatment, the psychotherapy curriculum grows in its breadth and depth, such that the 1-hour per week psychotherapy course in PGY-2 morphs into a more substantial 3-hours per week experience in PGY-3 and 4. (Note that these times only reflect classroom time and do not include other psychotherapy-focused learning experiences for residents, like weekly case conferences, supervision, etc.).

The PGY-2 psychotherapy curriculum begins with a 12-week course on techniques in listening and talking with acutely ill patients, from an atheoretical and flexible perspective. As PGY-2 residents are by then well-versed in the basic care of inpatients, they are asked to begin working more psychotherapeutically with this population, with a greater attention to patients' moment-to-moment cognitions, emotions, and behaviors and how these may be acknowledged and therapeutically addressed. In this class residents learn focused and core listening and responding skills common to a variety of different therapeutic orientations and techniques and how to apply these principles in daily sessions with their patients. The questions, "What is the patient trying to tell me?" and "What do I say next?"—as well as the How, When, and Why of it—form the core conceptual and pragmatic scaffolding on which this class is built. This class is additionally novel in its requiring residents to write process notes of sessions with inpatients.

After this pragmatic and practice-heavy introductory course, the residents are attend an 8-month weekly series on various Models of the Mind, with each theory-heavy component is followed by learning specific techniques fundamental to specific psychotherapy practice. The technique component often includes learning from the process of the instructor's actual ongoing treatment of patients.

The following seminars are included in the Models of the Mind:

- Cognitive Models: Theory & Technique
- Behavioral Models: Theory & Technique
- Dialectical models: Theory & Technique
- Psychodynamic Models: Theory & Technique

The psychotherapy curriculum ends its PGY-2 iteration with a course on Good Psychiatric Management for Borderline Personality Disorder and a course on Picking Up Transferred Cases, both in preparation for residents' assuming their PGY-3 caseloads.

PGY-2 residents rotating on the 6-month outpatient block also participate in a weekly **Evidence-Based Psychotherapy Didactic Seminar** and learn Motivational Interviewing, Acceptance and Commitment Therapy, Problem Solving Therapy, DBT, Prolonged Exposure Therapy, and Cognitive Processing Therapy.

Clinical Psychopharmacology

Psychopharmacology begins with a brief overview of the nuts and bolts of the field, including pharmacodynamic and pharmacokinetic principles, the concept of target symptoms, and assessment of efficacy. A five-class series on treatment of addictions is taught early in the course, commensurate with the residents' beginning their on-call experiences at the VA. The rest of the course goes on to examine, in more nuanced fashion, each major class of psychiatric medication, devoting approximately 6 weeks to each. Each module is led by an expert in that area—usually a faculty member who is involved in both clinical care and current research. The year-long course concludes with a 6+ week series on Advanced Psychopharmacological Consultation in which residents present cases to be discussed by experts.

Goals of the curriculum include mastery of psychopharmacology related to acute care psychiatry and how to adjust psychopharmacological treatments in the transition of patients from inpatient settings to alternative levels of care. Residents also learn that psychopharmacology is practiced in the context of a relationship with the patient, and attention is given to the art of working with reluctant patients.

Social & Psychiatry Services

In keeping with the pedagogical philosophy behind our residency curriculum, Social & Psychiatry Services is a comprehensive, multi-year course consisting of several discrete modules. In this course residents learn about the practice of psychiatry in systems, including the principles of publicly-funded mental health services, emergency psychiatry services, and consultation-liaison psychiatry, including clinical, social, ethical, legal, administrative, and safety-based facets of treating psychiatric patients and managing systems of care within these multiple sectors. Residents are introduced to increasingly complex issues in forensic psychiatry, including attending mock trials. This course also includes an introduction to mental health ethics, taught by Jacob Appel, MD, JD, (PhD in process), a graduate of our program and a highly-regarded former university professor of bioethics.

Some representative topics within the individual modules are as follows:

- Emergency Psychiatry
 - o Suicide/Violence assessment and intervention
- Consult-Liaison Psychiatry
 - o CL emergencies
 - o Delirium
 - Capacity Assessments
 - o Psychopharmacology in the Medically III
 - The Difficult Patient
 - Psychiatric Symptoms Secondary to General Medical Conditions
 - Psychotherapy in the Medically III
- Forensic Psychiatry
 - o Introduction to the Law
 - Coercion
 - Child abuse
 - Mock courtroom, criminal and civil
 - o Medico-Legal aspects of Suicide
 - Community-based treatment regulations
 - Disability
 - o Competence, Guardianship
 - Law and psychiatry, Malpractice
 - Health policy and the physician
 - Malingering
- Hospital Based Ethics
 - Autonomy
 - Bad news and truth telling
 - Surrogate decision making
 - Confidentiality
 - o Double agency
 - Professionalism

Teaching faculty include specialized researchers and clinicians in the department of psychiatry at Mount Sinai, administrative figures in the department of health policy, and other local and nationally-known figures brought in for their unique knowledge and experiences.

Process Group

Process Group offers PGY 2, 3, and 4 residents a unique training experience in which residents come to learn, first-hand, about themselves, their peers, and to process and examine their experiences in real time. Process Group is an in vivo training in how groups function and the effects of an individual within and upon the group. (As a resident, you work not only in tight-knit groups with your peers but also in larger groups within the medical system, and issues of leadership, professionalism, communication, responsibility, and individuality are ever-present.) In Process Group, residents are invited to share their thoughts, feelings, work with patients, etc. and simultaneously experience and observe a group experience, fostering growth and development. While not explicitly "therapy," Process Group also fosters self-reflection, cohesion among residents, and an opportunity to discuss, in a confidential and supportive environment, the pressing emotional, social, and interpersonal issues involved in being a resident in psychiatry. The process which unfolds from week to week often helps with the pressures and stresses of residency. A fundamental agreement between members of the group and the leader(s) is that all said within the group is confidential.

Each PGY class has its own weekly group, with leaders who remain the same through all 3 years. The leaders are chosen from experienced members of the voluntary faculty who have no supervisory or evaluative functions in the residency.

PGY-3 Didactics

PGY-3 residents have class from 9:30am-4:00pm each Thursday throughout the year. The PGY-3 curriculum advances the residents' classroom experience commensurate with their growing clinical knowledge base, practice, and independence. The focus is primarily on the evaluation and treatment of outpatients, and various psychotherapies and ongoing cases are discussed in greater depth.

The PGY-3 curriculum is divided thematically into the following areas:

- Neuropsychopharmacology
- Psychotherapy
- Social & Psychiatry Services and Global Psychiatry
- Process Group

Please see Appendix C3 for a sample PGY-3 class schedule.

Neuropsychopharmacology

The PGY-3 year revisits many previously-encountered psychopharmacology topics at an increasing level of sophistication. This more advanced year-long iteration consists of seminars organized by symptom, syndrome, disease, and population, rather than by medication-class (as in the PGY-2 course). Additionally, the focus becomes more geared toward the psychopharmacological treatment of outpatients. These seminars also include a focus on the neuroscientific bases of such treatments.

As usual in our curriculum, each mini-module is led by an expert in that area—usually a faculty member who is involved in both clinical care and current research.

Psychotherapy

In this 3rd year of training, outpatient care takes center stage, both clinically and in the didactic curriculum. A full 3 hours per week are devoted to psychotherapy didactics, with a primary focus on psychodynamic and cognitive behavioral treatments. These didactics add academic and theoretical considerations,

rounding out and helping to consolidate residents' practical experiences of providing outpatient psychotherapy and receiving psychotherapy supervision. PGY-3 residents are expected to learn more advanced concepts inherent in doctor-patient relationships and be able to manage such relationships effectively. Likewise, psychotherapy classes are also designed to enhance learning about and managing other dyadic relationships within psychiatry, such as supervision, consultation, and administration. Through coursework, residents develop further abilities to study and discuss in-depth and longitudinally normal and pathological mental functioning in the context of their ongoing treatment of patients. This understanding is essential in the treatment planning and management of virtually all patients in outpatient care.

The PGY-3 psychotherapy course is divided into multiple topic-based modules, each taught by select faculty members representing extraordinary diversity and expertise.

We chose to begin the course with an eight-hour primer on Dialectical Behavioral Therapy (DBT), as this modality contains techniques and core elements (e.g., mindfulness, treatment frame, etc.) which may be applicable to a majority of affectively dysregulated outpatients and may form a foundation for learning additional psychotherapies. Simultaneously, the residents begin a 30-week class on CBT. Following the DBT module, and running in parallel with the CBT class, residents learn the knowledge and skills necessary for the practice of multiple different psychotherapies, including psychodynamic, family/couples, group, transference-focused, and schema.

The classes in the PGY-3 psychotherapy curriculum are replete with syllabi, readings, videos, and discussions of clinical and process materials. The following are the core modules and number of course hours devoted to each:

- DBT (8)
- CBT (30)
 - Case material, experiential exercises, selected readings, and role playing are used to enhance training along the following topics, including key session components, case conceptualization, motivation, functional analysis, cognitive restructuring, exposure, acceptance, schema therapy, and how to apply CBT to specific disorders (e.g., binge eating, OCD, depression, panic, psychosis, etc.)
- What Does Psychotherapy Look Like? (8)
 - Using published videos of expert therapists conducting CBT, psychodynamic, and emotion-focused psychotherapy with the same patient, this course provides a detailed picture of what happens (or should happen) behind closed doors
 - o Compares and contrasts the different therapies
 - Provides a roadmap for beginning outpatient residents learning how to employ various techniques in their sessions with patients
- Combining psychopharmacology with psychotherapy (6)
 - The patient's experience of medication and its effect on medication adherence, in situations both where formal psychotherapy is and is not part of the treatment; Use of the therapeutic alliance to foster medication compliance; Split-treatment with allied mental health professionals, focusing on role definition, practical management parameters, optimal communication practices, and legal issues
- Advanced Psychodynamic Technique (16)
 - Topics include basic principles, selecting a treatment modality, starting a treatment, frame, fees, frequency, medications, transference, countertransference, therapeutic action, interpretation, role of the relationship, non-interpretive interventions, case formulation, termination, treatment of sicker patients, errors and mistakes, clinical consequences of diverging theories, impact of hospitalization, suicide, contact with relatives, role and use of supervision, etc.
- Brief Psychotherapy (6)
 - o Theoretical basis for the major approaches to the brief psychotherapies (psychodynamic,

cognitive-behavioral, and supportive); Universal/essential principles and tactics of brief treatment; Residents observe the in-room brief treatment of a patient, conducted by the instructor

- Practicum in Treatment of Complex Trauma (5)
 - Unique therapeutic approaches to treating complex, multiply-traumatized patients with mood, anxiety, and dissociative disorders; Actual patient encounters form a part of the series
- Transference-Focused Psychotherapy TFP (6)
 - A manualized, evidence-based treatment for severe personality disorders, combining a psychodynamic approach with structure and limit-setting
- Psychodynamic Continuous Case and Formulation (17)
 - Continuous presentation of session/process material both by a single resident and extended presentation of selected cases in a serial manner provides opportunities to discuss the technical aspects of long-term dynamic psychotherapy, including developing skills for synthesis of a psychodynamic case formulation; Residents are also taught about anticipating, analyzing, and avoiding ethical dilemmas and transgressions, as well as managing complex reactions to patients.
- Group Therapy (5)
 - Therapeutic factors, formation of the group (with regard to both patient composition and theme), patient selection criteria, preparation of the patient, group treatment contract, essentials of technique
- Family and Couples Therapy (7)
 - o Major approaches, both psychodynamic and non-dynamic; Systems theory

Psychotherapy Training Clinic

Adding practical experiences to the extensive classroom studies and theoretical discussions, residents accumulate closely supervised clinical experiences in short- and long-term individual psychotherapy, psychodynamic psychotherapy, cognitive behavioral therapy, family/couples therapy, and group therapy, among others. Patients accepted into the psychotherapy training clinic may be seen as frequently as is clinically optimal. The Department has cultivated sources of referrals for psychotherapy training, including the Treatment Center of the New York Psychoanalytic Institute, university and graduate studies programs, the performing arts community, and others.

Reflecting the high value placed on psychotherapy training, the department has formally and proudly established a collaborative affiliation for education and training with The New York Psychoanalytic Society & Institute. Established in 1911, the New York Psychoanalytic Society & Institute is the oldest and among the most esteemed psychoanalytic organizations in the United States. The formal education and training collaboration with the Mount Sinai Department of Psychiatry is the first such arrangement the Institute has ever established. Essential components of the collaboration include supervision of long-term psychotherapy cases and leadership and instruction of aspects of the core curriculum in psychodynamic theory and clinical practice beginning in the PGY-2 year. Additionally, the collaborative affiliation makes a specific provision for residents who elect a professional path involving forms of psychodynamic training. Such residents, if also accepted into such training, are able to begin while still in residency.

Personal Psychotherapy

The training program explicitly endorses personal psychotherapy as a uniquely useful strategy for the development of psychotherapeutic and psychological sophistication. Toward this goal, the program has taken care to establish a consultant available to all residents to secure affordable psychotherapy of the highest quality in a completely confidential manner. Free confidential consultation and referral to affordable care are available to residents in all four years via a

consulting clinician.

Social & Psychiatry Services / Psychiatry in the World

In addition to consisting of an increasingly advanced study of the topics presented in the PGY-2 curriculum (e.g., principles of publicly-funded mental health services and administration; systems of care; legal issues; ethical issues), this course is directed toward augmenting the residents' experiences of treating outpatients in the community. As such, important elements in community mental health take center stage, including recovery, rehabilitation, and social service provisions. A brief listing of some of these seminars is provided here:

- Ethics
- Asylum Evaluations
- Evidence Based Practices and the PORT Study
- Person Centered Care and Recovery
- Medicare: Historical and Practical Perspectives
- Medicaid: Historical and Practical Perspectives
- Assertive Community Treatment (ACT) Teams and AOT
- Practicing Psychiatry in the Field with Homeless People
- Substance Abuse in LGBT
- Work as a Means to Rehabilitation
- Supportive Housing in NYC

Teaching faculty include specialized researchers and clinicians in the department of psychiatry at Mount Sinai, administrative figures in the department of health policy, and other local and nationally-known figures brought in for their unique knowledge and experiences. As such, residents are introduced to some of the leaders in the field by way of their instructors.

Process Group

Process Group offers PGY 2, 3, and 4 residents a unique training experience in which residents come to learn, first-hand, about themselves, their peers, and to process and examine their experiences in real time. Process Group is an in vivo training in how groups function and the effects of an individual within and upon the group. (As a resident, you work not only in tight-knit groups with your peers but also in larger groups within the medical system, and issues of leadership, professionalism, communication, responsibility, and individuality are ever-present.) In Process Group, residents are invited to share their thoughts, feelings, work with patients, etc. and simultaneously experience and observe a group experience, fostering growth and development. While not explicitly "therapy," Process Group also fosters self-reflection, cohesion among residents, and an opportunity to discuss, in a confidential and supportive environment, the pressing emotional, social, and interpersonal issues involved in being a resident in psychiatry. The process which unfolds from week to week often helps with the pressures and stresses of residency. A fundamental agreement between members of the group and the leader(s) is that all said within the group is confidential.

Each PGY class has its own weekly group, with leaders who remain the same through all 3 years. The leaders are chosen from experienced members of the voluntary faculty who have no supervisory or evaluative functions in the residency.

PGY-4 Didactics

As in the other years of training, PGY-4 residents have an uninterrupted and protected block of classes, for 7 hours on Tuesdays, inclusive of Grand Rounds. This 4th-year curriculum focuses on advanced topics in psychiatry, assuming a previously well-integrated background of knowledge learned in the first 3 years. In our residency's focus on "picking a major" (i.e., specialization) and developing expertise, we have allowed for ~10 months of true elective time in the fourth year. In this vein, we've extended this thinking to our didactic curriculum, allowing each upcoming PGY-4 group of residents to have a significant say in their class schedules. As such, these advanced courses are often tweaked and geared to the needs and interests of each year's group of PGY-4 residents, though the presence of a core set of classes provides information suitable to (and generally required for) all clinical interests.

The fourth year curriculum is split into the following areas, each with distinct modules:

- Psychopharmacology
- Advanced Clinical Topics
- Professional Development
- Psychotherapy: Continuous Case Conferences

Please see Appendix C4 for this year's PGY-4 class schedule.

Psychopharmacology

Learning the nuances and practical applications of advanced topics forms the core of the PGY-4 psychopharmacology curriculum. In two longitudinal parallel seminars throughout most of the year (one weekly and the other biweekly), expert faculty members present cases from their practices and discuss cases presented by residents. Additional faculty lecture on specific topics, as below:

- Little-used medications (e.g., MAOIs)
- Polypharmacy
- Treatment Resistance
- Psychotherapy & Psychopharmacology

Advanced Clinical Topics & Professional Development

PGY-4 level residents have developed specific interests and help drive the content of this year's curriculum. Additionally, we offer residents multiple classes on post-residency fellowships/jobs, setting up practices, board review, etc. Topics included this past year include the following:

- Sexuality
 - Treatment of Sexual Dysfunctions; Sexual History Taking; Sexual Attraction & Arousal;
 Love and Attachment; Marriage; Differences in Communication; Divorce; Male and Female
 Homosexuality
- Women's Mental Health
- · Health Care Reform, the Structure of US Psychiatric Services, and Hospital Financing
- Ethics
- · Personal Finance and Investing
- Jobs and Fellowships
- Office Practice
- Stress
- ABPN Board Review, including Neurology Review

Psychotherapy: Continuous Case Conferences

Some of the PGY-4 psychotherapy classes stand as individual topic-based modules, but the core didactic experience is driven by several continuous case conferences in which residents and faculty present and discuss ongoing cases.

Continuous Case Conferences:

- CBT Continuous Case (weekly)
- Adolescent Continuous Case (biweekly)
- Psychodynamic Continuous Case (weekly)

Topic-based modules:

- Consultation-Liaison Psychotherapy
- Schema Therapy
- Mentalization
- Current Controversies in Psychoanalysis

Process Group

Process Group offers PGY 2, 3, and 4 residents a unique training experience in which residents come to learn, first-hand, about themselves, their peers, and to process and examine their experiences in real time. Process Group is an in vivo training in how groups function and the effects of an individual within and upon the group. (As a resident, you work not only in tight-knit groups with your peers but also in larger groups within the medical system, and issues of leadership, professionalism, communication, responsibility, and individuality are ever-present.) In Process Group, residents are invited to share their thoughts, feelings, work with patients, etc. and simultaneously experience and observe a group experience, fostering growth and development. While not explicitly "therapy," Process Group also fosters self-reflection, cohesion among residents, and an opportunity to discuss, in a confidential and supportive environment, the pressing emotional, social, and interpersonal issues involved in being a resident in psychiatry. The process which unfolds from week to week often helps with the pressures and stresses of residency. A fundamental agreement between members of the group and the leader(s) is that all said within the group is confidential.

Each PGY class has its own weekly group, with leaders who remain the same through all 3 years. The leaders are chosen from experienced members of the voluntary faculty who have no supervisory or evaluative functions in the residency.

Residents

Matched Residents by Year

Each of the bullets below links to a page in Appendix D.

- Matched residents 2015
- Matched residents 2014
- Matched residents 2013
- Matched residents 2012
- Matched residents 2011
- Matched residents 2010
- Matched residents 2009
- Matched residents 2008
- Matched residents 2007
- Matched residents 2006
- Matched residents 2005
- Matched residents 2004

Note: The content in each resident's description is current as of the time he/she matched in psychiatry at Mount Sinai.

Publications and Awards

We actively encourage our residents to present their clinical and research work, and many residents have published in a variety of sources and forms, including original research in top tier journals, reviews, novels, opinion pieces, and case reports.

Please see Appendix E for a list of **Selected Resident Publications** over the past few years.

Similarly, we advocate for our residents to pursue clinical, research, and administrative awards, both locally and nationally. The sheer number of successes in this competitive context speaks to the esteem with which our residents are held, the scope of their varied interests, and their potential for future accomplishments.

Please see Appendix F for a list of **Selected Awards** received by residents in the past few years.

Illustrating Life at Mount Sinai

For a ground-level perspective on training, thriving, and life at Mount Sinai, take a look at how some of our residents characterize their individual experiences.



Hello, applicants! My name is Linda. I was raised in Orange, CT, with a Brooklyn-ite podiatrist and a Polish physicist for parents, as well as some sisters, dogs, and a flock of overweight backyard chickens... I initially had no interest in doing residency in NYC...but the interview day confirmed the rumors that I had heard. Mount Sinai was an exceptional program. The residents I met appeared to be very happy, well-adjusted people, who...

Read Linda's full narrative in Appendix G1.



Hi, my name is Alfredo, and I'm a second year resident at The Mount Sinai Hospital. I was born and raised in El Paso, Texas and moved to Houston to attend Rice University where I majored in psychology. I continued my studies in Houston and went to Baylor College of Medicine, specifically planning to go into psychiatry... The didactics this year are probably one of my favorite parts of second year so far. Being able to spend a whole afternoon focusing only on expanding my knowledge base has been a great experience, and I look forward to learning so much more...

Read Alfredo's full narrative in Appendix G2.



Hello! My name is Simon. I was born and raised in Westport, Massachusetts. As an undergraduate, I majored in jazz performance and ethnomusicology with a concentration in African Drumming and Dancing. How am I spending my days this year? I split my time into four main categories, 1) Masters in Business Administration (MBA), 2) clinical work, 3) chief duties, and 4) elective projects. Halfway through my PGY2 year I formulated a plan to pursue my interest in hospital administration...

Read Simon's full narrative in Appendix G3.



Physician-Scientist

My name is Tobias. I was born and raised in Germany. My path to Mount Sinai ran as follows: Military service \rightarrow Medical School in Italy and Germany \rightarrow Psychiatry resident at RWTH Aachen University \rightarrow PhD at the University of Pennsylvania \rightarrow Post-doc at the University of Pennsylvania \rightarrow Published sufficiently to reach Asher's and Ron's awareness threshold for IMGs (International Medical Graduates) \rightarrow Interview \rightarrow Match \rightarrow Bingo!...

Read Tobias' full narrative in Appendix G4.



PhD+ Track

Hi everyone! My name is Kenechi and I am a second-year psychiatry resident at Mount Sinai. I was born in Nigeria and moved to Minnesota at the age of 8...I was also involved in starting a life science company focused on commercializing messenger RNA therapeutics based in Cambridge, MA. I have always been fascinated with mental illness and was drawn to Mount Sinai's Psychiatry program because of the entrepreneurial spirit that I sensed, the dynamic clinical experiences available, and Mount Sinai's deep commitment to translational research...

Read Kenechi's full narrative in Appendix G5.

Residents' Positions after Graduation

2014 and 2015 graduates are listed below. For 2007-2013, please see Appendix I.

The positions below are those taken by the individual residents immediately following graduation and may not be current.

While most residents begin a part-time private practice in addition to their academic appointments and positions, only those who enter into full-time private practice are listed as such below.

2015

Yadira Alonso, MD

Psychosomatic Medicine Fellowship Brigham and Women's Hospital

Jesse Costales, MD

Child & Adolescent Psychiatry Fellowship Mount Sinai Hospital Icahn School of Medicine

Thomas Deprima, MD

Attending, World Trade Center Mental Health Program Assistant Professor of Psychiatry Icahn School of Medicine

Simon Desigrdins, MD, (MBA in process)

Attending and Director, Rapid Access Clinic, James J Peters VAMC Assistant Professor of Psychiatry Icahn School of Medicine

Samuel Greenstein, MD

Assistant Professor of Psychiatry and Behavioral Neuroscience University of Cincinnati

Tobias Halene, MD, PhD

MIRECC Research Fellow Icahn School of Medicine

Marc Lener, MD

Research Fellowship NIMH

Daniella Loh, MD

Attending, World Trade Center Mental Health Program Assistant Professor of Psychiatry Icahn School of Medicine

Stacy McAllister, MD

Child & Adolescent Psychiatry Fellowship Children's Hospital of Philadelphia

University of Pennsylvania School of Medicine

Nathaniel Mendelsohn, MD

Forensic Psychiatry Fellowship NYU School of Medicine

Jennifer O'Keeffe

Child & Adolescent Psychiatry Fellowship New York-Presbyterian Hospital Columbia/Cornell Universities

Laura Powers, MD

Child & Adolescent Psychiatry Fellowship Mount Sinai Hospital Icahn School of Medicine

Allison Ungar, MD

Addiction Psychiatry Fellowship Columbia University College of Physicians & Surgeons New York-Presbyterian Hospital

Alison Welch, MD

Attending, Integrated Primary Care Psychiatry Clinic Assistant Professor of Psychiatry Icahn School of Medicine

2014

Benjamin Angarita, MD,

Child & Adolescent Psychiatry Fellowship Mount Sinai Hospital Icahn School of Medicine

Michael Brus, MD

Private Practice Clinical Instructor of Psychiatry Icahn School of Medicine at Mount Sinai

Rachel Gorman, MD

Public Psychiatry Fellowship Columbia University College of Physicians & Surgeons

Robert Jaffe, MD

Child & Adolescent Psychiatry Fellowship Mount Sinai Hospital Icahn School of Medicine

Brandon Johnson, MD

Child & Adolescent Psychiatry Fellowship New York-Presbyterian Hospital Columbia/Cornell Universities

Adam Karz, MD

Geriatric Psychiatry Fellowship Mount Sinai Hospital Icahn School of Medicine

Evan Leibu, MD

Co-Investigator, Clinical Neuroscience Studies Center Attending, Obsessive-Compulsive and Related Disorders Program Attending, Student Health and Wellness Program Instructor of Psychiatry Icahn School of Medicine

John Leikauf, MD

Child & Adolescent Psychiatry Fellowship Lucile Salter Packard Children's Hospital Stanford University School of Medicine

Sara Lozyniak, MD Child & Adolescent Psychiatry Fellowship Cambridge Health Alliance Harvard Medical School

Violeta Nistor, MD

Geriatric Psychiatry Fellowship Cambridge Health Alliance Harvard Medical School

Betsy O'Brien MD

Psychosomatic Medicine Fellowship Mount Sinai Hospital Icahn School of Medicine

Erica Kirsten Rapp, MD

Psychosomatic Medicine Fellowship Mount Sinai Hospital Icahn School of Medicine

Le-Ben Wan MD, PhD

Attending Psychiatrist Kirby Forensic Psychiatric Center

For prior years, please see Appendix I.

Extracurricular Training Opportunities

In keeping with our focus on residents determining an area of concentration and developing subspecialty proficiency, we support residents seeking additional advanced training prospects in addition to the extensive opportunities described in the preceding pages. Below, we highlight just a few of the extracurricular advanced training opportunities that residents may choose to pursue. Some are through the <u>Graduate School of Biomedical Sciences of the Icahn School of Medicine</u>, while others are directed by affiliated or non-affiliated organizations. Participation in any of these is dependent on approval from the training directors and requires that the resident be and remain in good standing.

Master of Public Health (MPH) Program

The Master of Public Health (MPH) program trains health professionals and others to apply the principles of public health to health care delivery, research, and population-based health initiatives with an emphasis on community health, health promotion, and disease prevention. All students attain the competencies required to apply the appropriate tools to address population health problems through community engagement in a culturally sensitive manner. Service goals involve collaborating on community initiatives to improve health and prevent disease.

Please see the <u>Graduate Program in Public Health at the Icahn School of Medicine at Mount Sinai</u> for details.

Masters of Science in Clinical Research (MSCR)

The Master of Science in Clinical Research, established as a two year, part-time program, provides outstanding clinical and postdoctoral fellows, residents, junior faculty, and other trainees (MD, MD/PhD, and "basic science" PhD students) with the knowledge, skills and experience to launch successful clinical and/or translational research-intensive careers. The MSCR includes graduate courses in biostatistics, epidemiology, research design, data analysis, and grant writing as well as a mentored clinical research project leading to a Masters thesis. Though the program is designed to be completed in 2 years, coursework can be taken over a longer period of time.

The Clinical Research Training Program (CRTP) is a more modest, 1 year, part-time certificate version of the MSCR program, which includes the core of class work without the Masters thesis requirement and 2nd year research seminars.

Please see the Clinical Research Education Program for more details.

Masters of Business Administration (MBA)

Residents have chosen to complete an MBA degree during residency, using the elective time available in PGY-3 and PGY-4. Various schooling options are available in New York City.

New York Psychoanalytic Society & Institute

The New York Psychoanalytic Society & Institute (NYPSI) is formally affiliated with Mount Sinai and maintains a close relationship through offering supervision, teaching, and advanced training opportunities. Many of our residents interested in pursuing advanced training in psychodynamic psychotherapy during residency have enjoyed participating in the Psychoanalytic Fellowship during PGY-3 or PGY-4. This one-year academic program introduces residents to modern theory and practice through bi-monthly seminars including cases presented by some of the preeminent leaders in the field. For more intensive advanced

training, interested residents may enroll in the two-year Psychodynamic Psychotherapy Program, which provides a weekly curriculum designed to further the theoretical and clinical knowledge of psychodynamic principles through clinical supervision and didactic courses. Senior residents may also elect to begin psychoanalytic training while in residency. The following video, screened at the NYPSI Centennial Gala, offers highlights of the unique qualities of NYPSI, which is the oldest psychoanalytic institute in the United States. Watch Video Introduction to the NYPSI

Group Psychotherapy Training Program (Eastern Group Psychotherapy Society)

Mount Sinai PGY-3 and 4 residents interested in pursuing further group psychotherapy training are encouraged to attend this one-year program with the <u>Eastern Group Psychotherapy Society (EGPS)</u>, in which residents develop and run a psychotherapy group and attend didactics and supervision once weekly with leaders in the field. Residents also receive hands-on experience participating as group members in a year-long process group at the EGPS, separate from the process group residents attend in their psychiatry residency training at Mount Sinai.

Salaries, Benefits, and Housing

Resident Salaries

Resident salaries are adjusted periodically. The most recent salary scale as of July 2014 is as follows:

Current Resident Salaries as of July 2014 (Planned increase in January 2016)

PGY-1	\$59,237
PGY-2	\$62,449
PGY-3	\$65,804
PGY-4	\$68,429

PGY-4 Chief Residents receive an additional \$2,500.

Health Insurance and Other Benefits

Mount Sinai offers a comprehensive package of benefits including health insurance with dental, vision, and prescription medication coverage, malpractice insurance, short term/long term disability, accidental death & dismemberment insurance, life insurance worker's compensation, nursery care, dependent care reimbursement accounts, and a 403(b) plan. Residents receive 20 days paid vacation per year and 12 days of paid sick leave per year. For additional information, please see the Leahn School of Medicine House Staff Manual.

Housing

Mount Sinai owns several apartment buildings near the medical center and guarantees a housing offer for all incoming residents. However, housing assignments are offered based on a lottery system, and it is recommended that incoming residents apply immediately after matching into the program to increase the chances of getting a preferred apartment. Rental prices are generally at and frequently below market prices for the area. Residents may apply as incoming singles, incoming couples, or incoming families. Apartments include studios, 1-bedroom, and multi-bedroom options. For more information, please see the Housing Department website.

Appendices

- A: Active NIH Grants
- B: Active VA Merits and Grants
- C1: PGY-1 Didactic Schedule
- C2: PGY-2 Didactic Schedule
- C3: PGY-3 Didactic Schedule
- C4: PGY-4 Didactic Schedule
- D: Matched and Current Residents
- E: Publications
- F: Awards
- G: Life at Mount Sinai
- H1: Physician-Scientist Trainees
- H2: PhD+ Current Trainees
- H3: PhD+ Faculty
- I: Residents' Positions after Graduation (2007-2013)

Appendix A

Mount Sinai Research: <u>Active</u> NIH Grants

Mount Sinai Departments of Psychiatry and Neuroscience as of August 1st, 2015

Each Project Title links to the NIH RePORTER (Research Portfolio Online Reporting Tools) abstract.

Project Title	PI
EPIGENOME MAPPING IN CORTICAL INTERNEURONS	Akbarian, Schahram
CIS-REGULATORY EPIGENOME MAPPINGS IN SCHIZOPHRENIA	Akbarian, Schahram
GABA EPIGENOMES IN AUTISM	Akbarian, Schahram
HIGHER ORDER CHROMATIN AND GENETIC RISK FOR SCHIZOPHRENIA	Akbarian, Schahram
COGNITIVE AND SOCIOEMOTIONAL DEVELOPMENT AFTER POSTNATAL ANESTHESIA	Baxter, Mark G
CONTRASTING CAUSAL MICRORNAS IN FOREBRAIN AND MIDBRAIN COS HIPSC NEURAL CELLS	Brennand, Kristen Jennifer
UNDERSTANDING THE NEUROCOGNITIVE HETEROGENEITY IN BIPOLAR DISORDER	Burdick, Katherine
TARGETING CIRCADIAN AND COGNITIVE DYSFUNCTION IN BIPOLAR DISORDER WITH MODAFINIL	Burdick, Katherine
1/2-PRAMIPEXOLE IN BIPOLAR DISORDER: TARGETING COGNITION (PRAM-BD)	Burdick, Katherine
IDENTIFYING THERAPEUTIC TARGETS FOR AUTISM USING SHANK3-DEFICIENT MICE	Buxbaum, Joseph D.
POPULATION-BASED AUTISM GENETICS & ENVIRONMENT STUDY	Buxbaum, Joseph D.
1/4-THE AUTISM SEQUENCING CONSORTIUM: AUTISM GENE DISCOVERY IN >20,000 EXOMES	Buxbaum, Joseph D.
PREFRONTAL FUNCTION IN THE SHANK3-DEFICIENT RAT: A FIRST RAT MODEL FOR ASD	Buxbaum, Joseph D.
HISTONE DEACETYLATION IN OLIGODENDROCYTE DIFFERENTIATION	Casaccia, Patrizia
ROLE OF CELL CYCLE REGULATORS IN DIFFERENTIATION	Casaccia, Patrizia
MOLECULAR MECHANISM OF NEURONAL DAMAGE IN DEMYELINATING DISORDERS	Casaccia, Patrizia
NORADRENERGIC CIRCUIT MECHANISMS OF PERSISTENT FEAR	Clem, Roger Lee
NEURAL BASIS OF BEHAVIORAL PLASTICITY IN A SIMPLE SYSTEM	Cropper, Elizabeth C
PREDICTING LONG-TERM CLINICAL OUTCOMES IN BORDERLINE PATIENTS	Denny, Bryan Thomas

MOLECULAR DETERMINANTS OF INDIVIDUAL DIFFERENCES IN FEAR REACTIVITY AND RECOVERY	Dracheva, Stella
PHOTOCHEMICAL REGULATION OF CALCIUM IN CELL PHYSIOLOGY	Ellis-Davies, Graham
OPTICAL PROBES FOR CONTROLLING CELLULAR FUNCTION	Ellis-Davies, Graham
GENE EXPRESSION PROFILES AS MARKERS OF PTSD RISK AND RESILIENCE IN WTC RESPONDERS	Feder, Adriana
DECONSTRUCTING PSYCHOSES BASED ON PATTERNS OF ABNORMAL BRAIN ACTIVITY	Frangou, Sophia
THE NEUROIMMUNOLOGY OF ANHEDONIA	Gabbay, Vilma
NEUROINFLAMMATION AND PVS DEFICITS IN ADOLESCENTS	Gabbay, Vilma
GENERATION AND CHARACTERIZATION OF ALZHEIMER BRAIN CELLS	Gandy, Samuel E
PHASE 11-GRAPE SEED EXTRACT AS ANTI-OLIGOMERIZATION AGENT IN ALZHEIMER'S DISEASE	Gandy, Samuel E
MODEL FOR SORCS1-MEDIATED DIABETES WITH DEMENTIA	Gandy, Samuel E.
THE ROLE OF ASTROCYTES IN MEMORY CONSOLIDATION	Gao, Virginia
REGULATION OF EPHRINB2-DEPENDENT ANGIOGENESIS BY PS1 IN NORMAL AND AD	Georgakopoulos, Anastasios
USE OF ENDOPHENOTYPES IN THE SEARCH FOR ALZHEIMER'S DISEASE RISK GENES	Goate, Alison M
DEVELOPMENTALLY SENSITIVE REGULATORY MECHANISMS OF SYNAPSE ASSEMBLY AND FUNCTION	Gunal, Ozlem
NEURODEVELOPMENTAL PROFILING OF THE EPIGENOME IN HUMAN AND RHESUS	Haghighi, Fatemeh G
NUCLEAR STRUCTURE REORGANIZATION DURING OLIGODENDROCYTE DIFFERENTIATION	Hernandez, Marylens
INHIBITORY SYNAPTIC CONTROL OF SOCIAL AVOIDANCE BEHAVIOR	Heshmati, Mitra
BRAIN AROMATASE AVAILABILITY IN STEROID USERS: PET STUDIES WITH [11C]VOROZOLE	Hildebrandt, Thomas B
MODELING CELLULAR DETERMINANTS OF COGNITIVE DECLINE IN AGING	Hof, Patrick R
MOLECULAR CONTROL OF PREFRONTAL CORTICAL CIRCUITRY IN AUTISM	Huntley, George W.
MOLECULAR NEUROBIOLOGY OF HUMAN DRUG ABUSE	Hurd, Yasmin L
NEURODEVELOPMENTAL EFFECTS OF CANNABIS AND ITS EPIGENETIC REGULATION	Hurd, Yasmin L
MULTIGENERATIONAL EPIGENETIC EFFECTS OF CANNABIS EXPOSURE	Hurd, Yasmin L
A NOVEL COGNITIVE TRAINING INTERVENTION FOR DEPRESSION	lacoviello, Brian
ROLE OF DISC1 AND NRG1 IN OLIGODENDROCYTE DEVELOPMENT IN SCHIZOPHRENIA	Katsel, Pavel Leon

1/8-PROLONGING REMISSION IN DEPRESSED ELDERLY (PRIDE)	Kellner, Charles H
5HTT AND 5-HT2A RECEPTORS IN IMPULSIVE AGGRESSION AND EFFECTS OF FLUOXETINE	Koenigsberg, Harold W
AN FMRI STUDY OF THE ENHANCEMENT OF EMOTION REGULATION IN BORDERLINE PATIENTS	Koenigsberg, Harold W
PILOTING TREATMENT WITH INSULIN-LIKE GROWTH FACTOR-1 IN PHELAN-MCDERMID SYNDROME	Kolevzon, Alexander
ETHANOL MODULATION OF GLYCINE RECEPTOR MEDIATED CURRENTS IN THE STRIATUM	Mccracken, Lindsay M.
IDENTIFYING DISTINCT STRIATONIGRAL AND STRIATOPALLIDAL DISTURBANCES	Miller, Michael Lawrence
GENETIC MARKERS ASSOCIATED WITH BRAIN STRUCTURAL ABNORMALITIES AND DRUG USE IN HUMAN ADDICTION	Moeller, Scott J
MECHANISMS OF DIETARY RESTRICTION MEDIATED BY CREB-BINDING PROTEIN IN MICE	Moreno, Cesar Llogari
GLUTAMATE RECEPTORS IN AGING CORTICAL CIRCUITS	Morrison, John H
ESTROGEN AND THE AGING BRAIN	Morrison, John H
FUNCTIONAL MRI STUDIES OF EMOTION IN DEPRESSION AND RAPID ANTIDEPRESSANT RESPONSE	Murrough, James Warren
MOLECULAR STUDIES OF COCAINE ACTION IN BRAIN	Nestler, Eric J.
MOLECULAR NEUROBIOLOGY OF DRUG ADDICTION	Nestler, Eric J.
NEUROTROPHIC MECHANISMS IN COCAINE AND OPIATE ACTION	Nestler, Eric J.
PHARMACOLOGICAL ACTIONS OF STRESS AND ANTIDEPRESSANTS	Nestler, Eric J.
EPIGENETIC MECHANISMS OF DEPRESSION	Nestler, Eric J.
A D1 AGONIST FOR WORKING MEMORY ENHANCEMENT IN THE SCHIZOPHRENIA SPECTRUM	New, Antonia S
IMAGING STIMULANT AND NONSTIMULANT TREATMENTS FOR ADHD: A NETWORK-BASED APPROACH	Newcorn, Jeffrey H
BCI-BASED FEEDBACK SYSTEM TO PROMOTE COGNITIVE CONTROL OF CRAVING	Parvaz, Muhammad Adeel
ROLE OF LEUKOCYTE-DERIVED MICRORNAS IN STRESS-INDUCED INFLAMMATION AND DEPRESSION	Pfau, Madeline Leah
LONG NON-CODING RNAS IN GENE REGULATORY NETWORKS UNDERLYING AUTISM	Pinto, Dalila
SOFTWARE FOR THE ANALYSIS OF LARGE-SCALE GENOTYPING AND SEQUENCING STUDIES	Purcell, Shaun M
LEVERAGING IDENTITY-BY-DESCENT INFORMATION IN LARGE-SCALE POPULATION SEQUENCING	Purcell, Shaun M
COMBINED PSYCHIATRY RESIDENCY AND PHD TRAINING AT MOUNT SINAI	Rieder, Ronald O

PRESENILIN1/G-SECRETASE REGULATE MIRNAS AND NEURONAL SURVIVAL	Robakis, Nikolaos K
	•
PS1 REGULATES PROCESSING AND SIGNALING OF EPHRINB/EPHB	Robakis, Nikolaos K
MECHANISMS OF STRUCTURAL PLASTICITY IN STRESS-RELATED DISORDERS	Russo, Scott J
PERIPHERAL IL-6 FROM LEUKOCYTES CONTROLS SUSCEPTIBILITY TO SOCIAL DEFEAT STRESS	Russo, Scott J
TRAINING PROGRAM IN NEUROSCIENCE	Salton, Stephen R
ALZHEIMER'S DISEASE RESEARCH CENTER	Sano, Mary
COGNATE MICROGLIA-NEURON INTERACTION AND ITS ROLE IN INFLAMMATION	Schaefer, Anne
FEAR LEARNING AND RECONSOLIDATION AFTER TRAUMA EXPOSURE A COMPUTATIONAL APPROACH	Schiller, Daniela
INFLAMMATION, LONG-TERM DIABETES CHARACTERISTICS, AND COGNITIVE DECLINE	Schnaider Beeri, Michal
LONG TERM INSTABILITY OF GLYCEMIC CONTROL AND HIPPOCAMPAL FUNCTION	Schnaider Beeri, Michal
LEARNING, PREFRONTAL CORTEX, AND MULTIPLE MEMORY SYSTEMS	Shapiro, Matthew L
PROSPECTIVE CODING AND MEMORY RETRIEVAL	Shapiro, Matthew L
TRAINING PROGRAM IN MENTAL HEALTH RESEARCH	Shapiro, Matthew L
SUCCESSFUL COGN. AGING AND CARDIOVASCULAR RISK FACTORS IN THE CENTRAL VALLEY CR	Silverman, Jeremy M.
THE EPIDEMIOLOGY OF POSTPARTUM DEPRESSION AND ASSOCIATED CHILDHOOD OUTCOMES.	Silverman, Michael Evan
2/2-A LARGE-SCALE SCHIZOPHRENIA ASSOCIATION STUDY IN SWEDEN	Sklar, Pamela
4/4-PSYCHIATRIC GWAS CONSORTIUM:GENOMIC FOLLOW-UP NEXT-GEN SEQUENCING & GENOTYPI	Sklar, Pamela
1/3-NETWORKS FROM MULTIDIMENSIONAL DATA FOR SCHIZOPHRENIA AND RELATED DISORDERS	Sklar, Pamela
1/3 GENETIC ANALYSIS OF THE INTERNATIONAL COHORT COLLECTION FOR BIPOLAR DISORDER	Sklar, Pamela
STRUCTURAL ANALYSIS OF ALCOHOL-DEPENDENT ACTIVATION OF GIRKS	Slesinger, Paul A
DISSECTING MECHANISMS OF GABAB-GIRK PLASTICITY WITH PSYCHOSTIMULANTS	Slesinger, Paul A
FUNCTIONAL AND MULTI-ETHNIC FINE-MAPPING OF SERUM URATE/GOUT LOCI	Stahl, Eli A
INTEGRATIVE MODELING OF SCHIZOPHRENIA RARE VARIANT GENETIC ARCHITECTURE	Stahl, Eli A
FACILITATING HEALTH BEHAVIOR CHANGE AMONG MORBIDLY OBESE ADOLESCENTS	Sysko, Robyn Jennifer

NEURAL EFFECTS OF SUSTAINED OXYTOCIN TREATMENT IN CHILDREN WITH Wang, A. Ting **AUTISM NEURAL BASIS OF BEHAVIORAL AROUSAL** Weiss, Klaudiusz **NEURAL BASIS OF BEHAVIORAL FLEXIBILITY** Weiss, Klaudiusz CELLULAR MECHANISMS OF ANTIDEPRESSANT DRUG ACTIONS IN Zachariou, Venetia **NEUROPATHIC PAIN MODELS** HDAC5 IN THE NUCLEUS ACCUMBENS MODULATES THE ACTIONS OF Zachariou, Venetia ANTIDEPRESSANT DRUGS IN MODELS OF NEUROPATHIC PAIN PROMOTING AXON REGENERATION BY ACTIVATION OF THE SMAD1 Zou, Hongyan **SIGNALING PATHWAY**

Appendix B

Research: Active VA Grants

James J Peters VAMC Departments of Psychiatry and Neuroscience, as of August 1st, 2015

Project Title	PI
NEUROCOGNITIVE HETEROGENEITY IN PATIENTS WITH PSYCHOSIS A DIMENSIONAL APPROACH	Burdick, Katherine Elizabeth
DEVELOPMENT OF NOVEL THERAPIES FOR AD TARGETING ABETA CLEARANCE	Cai, Dongming
GENETIC AND MOLECULAR DETERMINANTS OF SUICIDE	Dracheva, Stella
THE NEUROBIOLOGY OF BLAST-RELATED BRAIN INJURY IN A RAT MODEL OF MTBI	Elder, Gregory A.
GLUCOCORTICOID FUNCTIONING IN OEF/OIF/OND VETERANS WITH MTBI AND PTSD	Flory, Janine D.
REHAB THERAPY ADJUNCT WITH A NEUROGENIC, MNEMOACTIVE, A-BETA-LOWERING COMPOUND	Gandy, Samuel E.
IMPACT OF MENTAL ILLNESS ON VETERANS' PALLIATIVE CARE ACCESS AND OUTCOMES	Garrido, Melissa
NOVEL THERAPEUTICS IN PTSD: A RANDOMIZED CLINICAL TRIAL OF MIFEPRISTONE	Golier, Julia
EFFECT OF HEAT EXPOSURE ON COGNITION IN PERSONS WITH TETRAPLEGIA	Handrakis, John P
NEUROBIOLOGICAL MECHANISMS OF REDUCED AD-NEUROPATHOLOGY BY TREATMENT OF DIABETES	Haroutunian, Vahram
MECHANISMS OF BACE1 DEGRADATION IN EXPERIMENTAL ALZHEIMER'S DISEASE THERAPEUTIC	Pasinetti, Giulio Maria
MULTIFAMILY GROUP TO REDUCE MARITAL CONFLICT AND DISABILITY IN VETERANS WITH MTBI	Perlick, Deborah A.
DISSECTING CIS REGULATION OF GENE EXPRESSION IN SCHIZOPHRENIA	Roussos, Panagiotis
MARKERS OF TRANSITION TO ALZHEIMER DISEASE IN VETERANS WITH MCI	Sano, Mary
WHITE MATTER ABNORMALITIES IN THE SCHIZOPHRENIA SPECTRUM	Siever, Larry J
CARDIOVASCULAR RF AND SUCCESSFUL COGNITIVE AGING IN VERY OLD MALE VETERANS	Silverman, Jeremy
DEVELOPMENT OF CARVEDILOL ANALOGS WITH ANTI-AGGREGATION ACTIVITY FOR TREATING AD	Wang, Jun
INCREASE IN BLOOD PRESSURE: EFFECTS ON COGNITION, MOOD AND LIFE QUALITY IN SCI	Wecht, Jill M.

Appendix C1

PGY-1 Didactic Curriculum						
	2015-16					
Mondays	1-2 pm 2-3pm					
7/6/2015	Documentation, Call and Inpatient Work: Drs. Johnson, Stork, Schmajuk	Treatment Planning Dsr. Stork, Schmajuk				
7/13/2015	Inpatient: Events and Documentation Drs. Stork/ Johnson	Teaching: Giving and Getting Feedback Drs. New, Stork				
7/20/2015	Inpatient Psychopathology 1: Depression, Mania, Suicidality Dr. Bachar	Medication Overview 1: Dr. Stork				
7/27/2015	Psychiatric Emer	rgencies: Dr. Schmelzer				
8/3/2015	Outpatient Medicine Orientation with Dr. Peccoralo (Starts at 12:00 PM)	From 1 to 2 PM: Discharge Resources and Plans Jacalyn Weinstein				
8/10/2015	Inpatient: Events and Documentation Drs. Stork/ Johnson	Inpatient Psychopathology 2: Psychoses Dr. Stork				
8/17/2015	Inpatient Psychopathology 3: Addiction and Drug Seeking Dr. Schuetz-Mueller	Medication Overview 2: Dr. Stork				
8/24/2015	Inpatient Family Meetings Courtney Flint, Roy Bachar	Medicine Consults: Medicine Chiefs + Dr. Schmajuk				
8/31/2015	Interviewing Dr. Rieder	Talking to Patients Dr. Rieder				
9/7/2015	Holiday Labor Day					
9/14/2015		: Learning, Reading, Searching; Dr. Rieder				
9/21/2015	Inpatient Psychopathology 4: Delirium and Dementia Dr. Schmelzer	Using Psychiatric Rating Scales Drs. Leibu, Frangou				
9/28/2015	Treatment Over Objection, Commitment: Dr. Appel	Antipsychotic Pharmacology Dr. Durango				
10/5/2015	Complex Cases: TOO, AOT, ACT, Commitment Dr. Bachar	Differential Diagnosis of Psychoses: Dr. Rieder				
10/12/2015	Neuropsychiatric Evaluation and Delirium Dr. Arroyo	Inpatient Groups Kerin Nadler				
10/19/2015	Nursing and Social Work: Illouise Murillo Jacalyn Weinstein					
10/26/2015	Hearing \	Voices: Dr. Stork				
11/2/2015	Diagnostic Criteria Review	Cogtnitive Rx for Psychosis: Yulia Landa				
11/9/2015	Chairman's Discussion: Dr. Goodman	Mental Health Services & Finances: Dr. Lim				
11/16/2015		notherapy: Dr. Simon				
11/23/2015		iew: Drs. New, Simon				
11/30/2015	Diagnosis in Psychiatry: DSM 5, RDo	CS, Etiology and Utility Drs. New and Burdick				
12/7/2015	Enjoyin	g NYC: Chiefs				
12/14/2015	Managing Stress: Dr. Ellen Vora					
12/21/2015	Holiday - Christmas					
12/28/2015	Holiday - New Year's					
1/4/2016	Reading Brain Scans: Dr. Martin Goldstein					
1/11/2016	Reading Brain Scans: Dr. Martin Goldstein					
1/18/2016	Reading Brain Scans: Dr. Martin Goldstein					
1/25/2016	Holiday - Martin Luther King Day					
2/1/2016	Neuropsychology: Dr. Jane Martin					

PGY-1 Didactic Curriculum 2015-16				
Mondays	1-2 pm	2-3pm		
2/8/2016	Neuropsychology: Dr. Jane Martin			
2/15/2016	Neuropsychology: Dr. Jane Martin			
2/22/2016	Holiday -	President's Day		
2/29/2016	My Toughest Cases (Attendings)	My Toughest Cases (Attendings)		
3/7/2016		k: Hearing Voices		
3/14/2016	My Toughest Cases (Attendings)	My Toughest Cases (Attendings)		
3/21/2016	My Toughest Cases (Attendings)	Ethical Issues in Clinical Psychiatry Drs. Cumper and Appel		
3/28/2016	Good Psychiatric Management of Borderline Personality Disorder Dr. Antonia New			
4/4/2016	Good Psychiatric Management of Borderline Personality Disorder Dr. Antonia New			
4/11/2016	Good Psychiatric Management of Borderline Personality Disorder Dr. Antonia New			
4/18/2016	Rating Scales: Drs. Leibu, Frangou			
4/25/2016	History of Psychiatry and Psychiatric Diagnosis Drs. Frangou My Toughest Cases (Attendings			
5/2/2016	Problem Solving Therapy Dr. Levine			
5/9/2016	Outpatient Evaluations: Process and Problems Antonia New and Corbett Schimming			
5/16/2016	Outpatient Evaluation and Treatment of Anxiety Disorders and Sleep Disorders Asher Simon			
5/23/2016	Outpatient Evaluation and Treatment of Depression and Suicidality Joseph Triebwasser and Evan Podalak			
5/30/2016	No Class - Memorial Day			
6/6/2016	Outpatient Evaluation and Treatment of Bipolar Disorders Mehmet Haznedar			
6/13/2016	Outpatient Evaluation and Treatment of Addictive Disorders, Primary and Co-morbid Michelle Widlitz and Felicity LaBoy			
6/20/2016	Outpatient Evaluation and Treatment of VA Geriatric Patients Corbett Schimming			
6/27/2016	Outpatient Evaluation and Treatment of Psychosis Eran Chemerinski			

Appendix C2

PGY2 Didactic Curriculum 2015-16						
Wednesday	Admin. Meeting 12- 12:25pm	Clinical Psychopharmacology 12:30-1:20pm	Psychotherapy 1:30-2:20pm	Phenomenology & Clinical Neuroscience 2:30-3:20pm	Social & Psychiatry Services 3:30-4:20pm	Process Group 4:30- 5:30pm
Course Dir.		Dr. New	Dr. Simon	Drs. New & Simon	Drs. Katz & Durango	Dr. Luloff
7/1/2015			VA ORIEN	TATION		
7/8/2015	Drs. New & Simon	Intro: General Principles of Clinical Psychopharmacology (Dr. New)	Listening and Talking to Patients (Asher Simon, MD)	Introduction: The Perspectives of Psychiatry (Hillel Grossman, MD)	Intro to the Psych ED (Craig Katz, MD)	Intro to Process Group (Dr. Luloff)
7/15/2015	Drs. New & Simon	Addictions #1: SUD Overview, Epidemiology and Treatment approaches; Alcohol Pharmacotherapy 1 (Dr. Richard Rosenthal)	Listening and Talking to Patients (Asher Simon, MD)	Teaching-the-medical- students (Dr. Stork)	Suicide assessment and intervention (Craig Katz, MD)	Process Group
7/22/2015	Drs. New & Simon	Addictions #2: Alcohol Pharmacotherapy 2 (Dr. Richard Rosenthal)	Listening and Talking to Patients (Asher Simon, MD)	Behavioral and Disease perspectives Hillel Grossman, MD)	Violence assessment and intervention (Craig Katz, MD)	Process Group
7/29/2015	Drs. New & Simon	Addictions #3: Smoking Cessation (Dr. Faye Chao)	Listening and Talking to Patients (Asher Simon, MD)	Listening and Talking to Patients (Asher Simon, MD)	Intro to C/L Psychiatry (Kim Klipstein, MD)	Process Group
8/5/2015	Drs. New & Simon	Addictions #4: Opioid Dependence Pharmacotherapy (Dr. Ed Salsitz)	Listening and Talking to Patients (Asher Simon, MD)	Dimensional and Life- Story Perspectives (Hillel Grossman, MD)	CL Emergencies (Akhil Shenoy, MD)	Process Group
8/12/2015	Drs. New & Simon	Motivational Interviewing pertaining to Medication Adherence (Dr. Paul Rinaldi)	Teaching-the-medical- students (Dr. Stork)	Descriptive Psychopathology (Symptoms): Fundamental Concepts	Delirium (Zorica Filipovic, MD)	Process Group
8/19/2015	Drs. New & Simon	Antidepressants 1: General Principles & SSRIs- Dr. New	Listening and Talking to Patients (Asher Simon, MD)	Listening and Talking to Patients (Asher Simon, MD)	Capacity Assessments (Kim Klipstein, MD)	Process Group
8/26/2015	Drs. New & Simon	Antidepressants 2: SNRIs & Serotonin Modulators (Trazodone, Vilazodone)	Listening and Talking to Patients (Asher Simon, MD)	Descriptive Psychopathology (Symptoms): Fundamental Concepts	Psychopharmacology in the Medically ill (Carrie Ernst, MD)	Process Group
9/2/2015	Drs. New & Simon	Antidepressants 3: Bupropion, Mirtazapine, & Managing Sexual Side Effects	Listening and Talking to Patients (Asher Simon, MD)	Descriptive Psychopathology (Symptoms): Pathology of Perception	The Difficult Patient (personality disorders in the medically ill) (Carrie Ernst, MD)	Process Group
9/9/2015	Drs. New & Simon	Antidepressants 4: TCAs & MAOIs	Listening and Talking to Patients (Asher Simon, MD)	Descriptive Psychopathology (Symptoms): Delusions and Other Erroneous Ideas	Psychiatric symptoms secondary to general medical conditions (Kim Klipstein, MD)	Process Group
9/16/2015	Drs. New & Simon	Antidepressants 5: Augmenting, combining, and emerging treatments	Listening and Talking to Patients (Asher Simon, MD)	Descriptive Psychopathology (Symptoms): Disorder of the Thinking Process	Psychotherapy in the medically ill (Kore Glied)	Process Group

		PGY2	Didactic Cu	rriculum		
			2015-16			
Wednesday	Admin. Meeting 12- 12:25pm	Clinical Psychopharmacology 12:30-1:20pm	Psychotherapy 1:30-2:20pm	Phenomenology & Clinical Neuroscience 2:30-3:20pm	Social & Psychiatry Services 3:30-4:20pm	Process Group 4:30- 5:30pm
9/23/2015	Drs. New & Simon	Antipsychotics 1: General Principles & FGAs	Models of the Mind: Cognitive Theory 1	Descriptive Psychopathology (Symptoms): Schizophrenic Language Disorder	Introduction to the Law (Dr. Appel)	Process Group
9/30/2015	Drs. New & Simon	Antipsychotics 2: SGAs	Models of the Mind: Cognitive Theory 2	Descriptive Psychopathology (Symptoms): Insight	Coercion (Dr. Katz)	Process Group
10/7/2015	Drs. New & Simon	Antipsychotics 3: Clozapine	Models of the Mind: Cognitive Theory 3	Descriptive Psychopathology (Symptoms): Disorders of Volition and Execution	Child Abuse (Dr. Billick)	Process Group
10/14/2015	Drs. New & Simon	Antipsychotics 4: Long- Acting Injectables & Treatment of Side Effects	Models of the Mind: Cognitive Technique 1	Descriptive Psychopathology (Symptoms): Affect and Emotional Disorders	Mock Civil Trial (Drs. Fayer and Katz)	Process Group
10/21/2015	Drs. New & Simon	Antipsychotics 5: Augmenting, combining, and emerging treatments	Models of the Mind: Cognitive Technique 2	Descriptive Psychopathology (Symptoms): Anxiety, Panic, Irritability, Phobia	Confidentiality (Dr. Katz and Heather Chamides)	Process Group
10/28/2015	Drs. New & Simon	Mood Stabilizers 1: General Principles & Lithium	Models of the Mind: Cognitive Technique 3	Descriptive Psychopathology (Symptoms): Disordered Self	(Dr. Medico-Legal Aspects of Suicide (Dr.Fayer)	Process Group
11/4/2015	Drs. New & Simon	Mood Stabilizers 2: Anticonvulsants & Antipsychotics	Models of the Mind: Cognitive Technique 4	Descriptive Psychopathology (Symptoms): Depersonalization	AOT (Dr. Garza)	Process Group
11/11/2015	Drs. New & Simon	Mood Stabilizers 3: Augmenting, combining, alternative, and emerging treatments	Models of the Mind: Cognitive Technique, 5, DBT	Descriptive Psychopathology (Symptoms): Personality and Temperament	Competence (Dr. Garakani)	Process Group
11/18/2015	Drs. New & Simon	Anxiolytics 1: Benzodiazepines	Models of the Mind: Cognitive Technique 6, DBT	Phenomenology of Complex Trauma	Criminal Law and Insanity (Gail Heatherly)	Process Group
11/25/2015			NO CLA	4 <i>SS</i>	ı	
12/2/2015	Drs. New & Simon	Anxiolytics 2: Antidepressants, GABAergics, Noradrenergics, & Buspirone	Models of the Mind: Cognitive Technique 7, DBT	Phenomenology of Complex Trauma	Malingering (Dr. Garakani)	Process Group
12/9/2015	Drs. New & Simon	Hypnotics 1: Overview of Insomnia	Models of the Mind: Psychodynamic Theory 1	Phenomenology of Complex Trauma	Disability (Dr. Kleinman)	Process Group
12/16/2015	Drs. New & Simon	Hypnotics 2: Nonbenzodiazepine Hypnotics, Melatonin modulators, Antihistamines, Orexin Antagonists, & Others	Models of the Mind: Psychodynamic Theory 2	Phenomenology of Complex Trauma	ETHICS: (Jacob Appel, MD, JD)	Process Group
12/23/2015			NO CLA			
12/30/2015			NO CLA	ASS		

		PGY2	Didactic Cu	rriculum		
Wednesday	Admin. Meeting 12-	Clinical Psychopharmacology	2015-16 Psychotherapy 1:30-2:20pm	Phenomenology & Clinical Neuroscience	Social & Psychiatry Services	Process Group 4:30-
	12:25pm	12:30-1:20pm		2:30-3:20pm Descriptive	3:30-4:20pm	5:30pm
1/6/2016	Drs. New & Simon	Stimulants 1: Amphetamines	Models of the Mind: Psychodynamic Theory 3	Psychopathology (Symptoms): Disorder of the Awareness of the Body	ETHICS: (Jacob Appel, MD, JD)	Process Group
1/13/2016	Drs. New & Simon	Stimulants 2: Non- Amphetamine Attention- Enhancers (Atomoxetine, Guanfacine, Modafinil)	Models of the Mind: Psychodynamic Theory 4	Descriptive Psychopathology (Symptoms): Obsessions and Compulsions	ETHICS: (Jacob Appel, MD, JD)	Process Group
1/20/2016	Drs. New & Simon	Special Topics 1: Modifying Psychopharmacology for Special Populations (Geriatric, Chlidren)	Models of the Mind: Psychodynamic Theory 5	Descriptive Psychopathology (Symptoms): Disturbance of Memory	ETHICS: (Jacob Appel, MD, JD)	Process Group
1/27/2016	Drs. New & Simon	Special Topics 2: Modifying Psychopharmacology for Special Populations (Pregnancy)	Models of the Mind: Psychodynamic Theory 6	Descriptive Psychopathology (Symptoms): Sleep	ETHICS: (Jacob Appel, MD, JD)	Process Group
2/3/2016	Drs. New & Simon	Special Topics 3: Pharmacogenomics	Models of the Mind: Psychodynamic Theory 7	Descriptive Psychopathology (Symptoms): Wrap-Up	ETHICS: (Jacob Appel, MD, JD)	Process Group
2/10/2016	Drs. New & Simon	Special Topics 4: Other	Models of the Mind: Psychodynamic Theory 8	Descriptive Psychopathology (Symptoms): Psychopathology and Diagnosis	ETHICS: (Jacob Appel, MD, JD)	Process Group
2/17/2016	Drs. New & Simon	Advanced Psychopharmacological Consultation: Resident Cases	Models of the Mind: Psychodynamic Theory 9	From Symptoms to Syndromes: History of Nosology and Classification and Historiography	From Symptoms to Syndromes	Process Group
2/24/2016	Drs. New & Simon	Advanced Psychopharmacological Consultation: Resident Cases	Models of the Mind: Psychodynamic Theory 10	From Symptoms to Syndromes	From Symptoms to Syndromes	Process Group
3/2/2016	Drs. New & Simon	Advanced Psychopharmacological Consultation: Resident Cases	Models of the Mind: Psychodynamic Technique	From Symptoms to Syndromes	From Symptoms to Syndromes	Process Group
3/9/2016	Drs. New & Simon	Advanced Psychopharmacological Consultation: Resident Cases	Models of the Mind: Psychodynamic Technique	From Symptoms to Syndromes	From Symptoms to Syndromes	Process Group
3/16/2016	Drs. New & Simon	Advanced Psychopharmacological Consultation: Resident Cases	Models of the Mind: Psychodynamic Technique	From Symptoms to Syndromes	From Symptoms to Syndromes	Process Group
3/23/2016	Drs. New & Simon	Advanced Psychopharmacological Consultation: Resident Cases	Models of the Mind: Psychodynamic Technique	From Symptoms to Syndromes	From Symptoms to Syndromes	Process Group
3/30/2016	Drs. New & Simon	Neuroanatomy Thomas Naidich	Models of the Mind: Psychodynamic Technique	Intermediate Phenotypes & Clinical Neuroscience	Intermediate Phenotypes & Clinical Neuroscience	Process Group

		PGY2	2 Didactic Cu 2015-16	rriculum		
Wednesday	Admin. Meeting 12- 12:25pm	Clinical Psychopharmacology 12:30-1:20pm	Psychotherapy 1:30-2:20pm	Phenomenology & Clinical Neuroscience 2:30-3:20pm	Social & Psychiatry Services 3:30-4:20pm	Process Group 4:30- 5:30pm
4/6/2016	Drs. New & Simon	Neuroanatomy Thomas Naidich	Models of the Mind: Psychodynamic Technique	Intermediate Phenotypes & Clinical Neuroscience	Intermediate Phenotypes & Clinical Neuroscience	Process Group
4/13/2016	Drs. New & Simon	Neuropsychology Kate Burdick	Models of the Mind: Psychodynamic Technique	Intermediate Phenotypes & Clinical Neuroscience	Intermediate Phenotypes & Clinical Neuroscience	Process Group
4/20/2016	Drs. New & Simon	Neuropsychology Kate Burdick	Models of the Mind: Psychodynamic Technique	Intermediate Phenotypes & Clinical Neuroscience	Intermediate Phenotypes & Clinical Neuroscience	Process Group
4/27/2016	Drs. New & Simon	Good Psychiatric Management (Dr. New)	Models of the Mind: Psychodynamic Technique	Intermediate Phenotypes & Clinical Neuroscience	Intermediate Phenotypes & Clinical Neuroscience	Process Group
5/4/2016	Drs. New & Simon	Good Psychiatric Management (Dr. New)	Models of the Mind: Psychodynamic Technique	Intermediate Phenotypes & Clinical Neuroscience	Intermediate Phenotypes & Clinical Neuroscience	Process Group
5/11/2016			EPIC TRAINING	FOR OPD		
5/18/2016	Drs. New & Simon	Good Psychiatric Management (Dr. New)	Picking up terminated and transferred cases (Asher Simon, MD)	Intermediate Phenotypes & Clinical Neuroscience	Intermediate Phenotypes & Clinical Neuroscience	Process Group
5/25/2016	Drs. New & Simon	Good Psychiatric Management (Dr. New)	Picking up terminated and transferred cases (Asher Simon, MD)	Intermediate Phenotypes & Clinical Neuroscience	Intermediate Phenotypes & Clinical Neuroscience	Process Group
6/1/2016	Drs. New & Simon	Picking up terminated and transferred cases (Asher Simon, MD)	Picking up terminated and transferred cases (Asher Simon, MD)	Intermediate Phenotypes & Clinical Neuroscience	Intermediate Phenotypes & Clinical Neuroscience	Process Group
6/8/2016	Drs. New & Simon	Receive sign-out on OPD patients	Receive sign-out on OPD patients	Receive sign-out on OPD patients	Receive sign-out on OPD patients	Process Group
6/15/2016	Drs. New & Simon	OPD Orientation	OPD Orientation	OPD Orientation	OPD Orientation	Process Group
6/22/2016	Drs. New & Simon	OPD Orientation	OPD Orientation	OPD Orientation	OPD Orientation	Process Group
6/29/2016	Drs. New & Simon	OPD Orientation	OPD Orientation	OPD Orientation	OPD Orientation	Process Group

Appendix C3

PGY-3 Didactic Curriculum 2015-16										
Thursday	OPD (1160) Rounds 9- 9:45am	Psychotherapies 1 10:05-10:55am	Psychotherapies 2 11:05-11:55am	Lunch 12- 12:40	Admin 12:45- 1pm	Neuro- Psychopharmac- ology 1-1:55pm	Cognitive Behavioral Therapy 2:05-2:55	Process Group 3:00- 3:50pm		
Course Dir.		Dr. Simon	Dr. Simon			Dr. New	Dr. Hirsch	Dr. Luloff		
7/2/2015			(OPD ORIEN	TATION					
7/9/2015	Dr. Bird	DE (Marianne Go		Lunch	Drs. New & Simon	Principles of Outpatient Psychopharmacology (adherence and safety), Dr. New	Introduction to CBT	Process Group		
7/16/2015	Dr. Bird	DBT (Marianne Goodman, MD)		Lunch	Drs. New & Simon	Principles of Outpatient Psychopharmacology (kinetics, dynamics, and interactions), Iosifescu	Overview of Theories	Process Group		
7/23/2015	Dr. Bird	DBT (Marianne Goodman, MD)		Lunch	Drs. New & Simon	Principles of Outpatient Psychopharmacology (using rating scales), Dr. Frangou	Key components to a session	Process Group		
7/30/2015	Dr. Bird	DE (Marianne Go		Lunch	Drs. New & Simon	Depression (initial eval), Dr. losifescu	Case conceptualization 1	Process Group		
8/6/2015	Dr. Bird	Bringing psychotherapy into your practice: converting cases (Michael Brus, Evan Leibu) Bringing How to use supervision (chiefs)		Lunch	Drs. New & Simon	Depression (TRD 1) Dr. losifescu	Case conceptualization 2	Process Group		
8/13/2015	Dr. Bird	Bringing psychotherapy into your practice: converting cases (Michael Brus, Evan Leibu)	How to use supervision (Tom Deprima)	Lunch	Drs. New & Simon	Depression (TRD 2) Dr.losifescu	Motivation 1	Process Group		
8/20/2015	Dr. Bird	How to use supe	ervision (chiefs)	Lunch	Drs. New & Simon	Depression (rating scales) Dr. Murrough	Motivation 2	Process Group		
8/27/2015	Dr. Bird	What Does Psychol (Asher Sin	* *	Lunch	Drs. New & Simon	Depression Dr. Murrough	Functional Analysis 1	Process Group		
9/3/2015	Dr. Bird	What Does Psychotherapy Look Like? (Asher Simon, MD)		Lunch	Drs. New & Simon	Bipolar Disorder: Depression Dr. Goldberg	Functional Analysis 2	Process Group		
9/10/2015	Dr. Bird	What Does Psychol (Asher Sin	• •	Lunch	Drs. New & Simon	Bipolar Disorder; Mania/Mixed Dr. Goldberg	Cognitive Restructuring	Process Group		
9/17/2015	Dr. Bird	What Does Psychol (Asher Sin		Lunch	Drs. New & Simon	Bipolar Disorder: Rapid Cycling Dr. Goldberg	Cognitive Restructuring	Process Group		

PGY-3 Didactic Curriculum 2015-16 **OPD** Cognitive **Process** Neuro-(1160)Lunch **Admin Psychotherapies 1 Psychotherapies 2 Behavioral** Psychopharmac-Group **Thursday** 12:45-**Rounds** 12-10:05-10:55am 11:05-11:55am 3:00-**Therapy** ology 9-12:40 1pm 2:05-2:55 1-1:55pm 3:50pm 9:45am Bipolar Disorder Drs. Medication Combining psychopharm with psychotherapy 9/24/2015 Dr. Bird Lunch New & Compliance and No Class No Class (Aneil Shirke, MD, PhD) Simon Tolerability Dr. Goldberg Drs. Combining psychopharm with psychotherapy **Process** 10/1/2015 Dr. Bird Lunch New & **Anxiety Disorders** Exposure I (Aneil Shirke, MD, PhD) Group Simon 10/8/2015 PRITE Drs. 10/15/201 Combining psychopharm with psychotherapy Process Dr. Bird Lunch New & **Anxiety Disorders** Exposure II 5 (Aneil Shirke, MD, PhD) Group Simon Advanced Mindfulness and Collaborative Care 10/22/201 Psychodynamic Process Dr. Bird Schema therapy **Anxiety Disorders** acceptance based Technique **Special Lunch** 5 Group approaches (Frank Baudry, MD) Advanced Drs. 10/29/201 Psychodynamic Process Dr. Bird Schema therapy Lunch New & **Anxiety Disorders** Schema Therapy 1 Technique 5 Group Simon (Frank Baudry, MD) Advanced Drs. Psychodynamic Process 11/5/2015 Dr. Bird Schema therapy Lunch **Anxiety Disorders** Schema Therapy 2 New & Technique Group Simon (Frank Baudry, MD) Advanced Drs. 11/12/201 Psychodynamic Process Dr. Bird Schema therapy? Lunch New & Insomnia **CBT** for Binge Eating Technique Group Simon (Frank Baudry, MD) Advanced Drs. 11/19/201 **Process** Psychodynamic Dr. Bird Schema therapy? Lunch New & Insomnia **CBT** for Binge Eating Technique Group Simon (Frank Baudry, MD) 11/26/201 No Class - Holidays 5 Advanced Drs. Psychodynamic Process 12/3/2015 Dr. Bird Brief treatment? Lunch New & **Personality Disorders CBT for OCD** Technique Group Simon (Frank Baudry, MD) Advanced Drs. 12/10/201 Psychodynamic Dr. Bird Brief treatment? CBT for OCD Lunch New & **Personality Disorders** Technique 5 Simon (Frank Baudry, MD) Advanced Drs. 12/17/201 Psychodynamic Process Dr. Bird Brief treatment? Lunch New & Aggression **CBT** for depression Group 5 Technique Simon (Frank Baudry, MD) 12/24/201 No Class - Holidays 5 12/31/201 No Class - Holidays 5

PGY-3 Didactic Curriculum 2015-16

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Thursday	OPD (1160) Rounds 9- 9:45am	Psychotherapies 1 10:05-10:55am	Psychotherapies 2 11:05-11:55am	Lunch 12- 12:40	Admin 12:45- 1pm	Neuro- Psychopharmac- ology 1-1:55pm	Cognitive Behavioral Therapy 2:05-2:55	Process Group 3:00- 3:50pm	
1/7/2016	Dr. Bird	Group Therapy (Philip Luloff)	Advanced Psychodynamic Technique (Frank Baudry, MD)	Lunch	Drs. New & Simon	Schizophrenia	CBT for depression	Process Group	
1/14/2016	Dr. Bird	Group Therapy (Philip Luloff)	Advanced Psychodynamic Technique (Frank Baudry, MD)	Lunch	Drs. New & Simon	Schizophrenia	CBT for Panic	Process Group	
1/21/2016	Dr. Bird	Group Therapy (Philip Luloff)	Advanced Psychodynamic Technique (Frank Baudry, MD)	Lunch	Drs. New & Simon	Schizophrenia	CBT for Panic	Process Group	
1/28/2016	Dr. Bird	Group Therapy (Philip Luloff)	Advanced Psychodynamic Technique (Frank Baudry, MD)	Lunch	Drs. New & Simon	Schizophrenia	CBT for Psychosis	Process Group	
2/4/2016	Dr. Bird	Transference-Focused Psychotherapy	Advanced Psychodynamic Technique (Frank Baudry, MD)	Lunch	Drs. New & Simon	Schizophrenia	CBT for Psychosis	Process Group	
2/11/2016	Dr. Bird	Transference-Focused Psychotherapy	Advanced Psychodynamic Technique (Frank Baudry, MD)	Lunch	Drs. New & Simon	Child and Adolescent Disorders	Schema therapy case	Process Group	
2/18/2016	Dr. Bird	Transference-Focused Psychotherapy	Advanced Psychodynamic Technique (Frank Baudry, MD)	Lunch	Drs. New & Simon	Child and Adolescent Disorders	Schema therapy case	Process Group	
2/25/2016	Dr. Bird	Transference-Focused Psychotherapy	Advanced Psychodynamic Technique (Frank Baudry, MD)	Lunch	Drs. New & Simon	Child and Adolescent Disorders	Review and Q&A	Process Group	
3/3/2016	Dr. Bird	Transference-Focused Psychotherapy	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Child and Adolescent Disorders	ETHICS: (Jacob Appel, MD, JD)	Process Group	
3/10/2016	Dr. Bird	Transference-Focused Psychotherapy	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Child and Adolescent Disorders	ETHICS: (Jacob Appel, MD, JD)	Process Group	
3/17/2016	Dr. Bird	Treatment of complex trauma (Daphne Simeon, MD)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Child and Adolescent Disorders	ETHICS: (Jacob Appel, MD, JD)	Process Group	
3/24/2016	Dr. Bird	Treatment of complex trauma (Daphne Simeon, MD)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Child and Adolescent Disorders	ETHICS: (Jacob Appel, MD, JD)	Process Group	
3/31/2016	Dr. Bird	Treatment of complex trauma (Daphne Simeon, MD)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Eating Disorders	ETHICS: (Jacob Appel, MD, JD)	Process Group	

PGY-3 Didactic Curriculum 2015-16

				15-10				
Thursday	OPD (1160) Rounds 9- 9:45am	Psychotherapies 1 10:05-10:55am	Psychotherapies 2 11:05-11:55am	Lunch 12- 12:40	Admin 12:45- 1pm	Neuro- Psychopharmac- ology 1-1:55pm	Cognitive Behavioral Therapy 2:05-2:55	Process Group 3:00- 3:50pm
4/7/2016	Dr. Bird	Treatment of complex trauma (Daphne Simeon, MD)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Eating Disorders	ETHICS: (Jacob Appel, MD, JD)	Process Group
4/14/2016	Dr. Bird	Treatment of complex trauma (Daphne Simeon, MD)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Pregnancy and Lactation	ETHICS: (Jacob Appel, MD, JD)	Process Group
4/21/2016	Dr. Bird	Family and Couples (Barbara Feld, CSW)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Pregnancy and Lactation	ETHICS: (Jacob Appel, MD, JD)	Process Group
4/28/2016	Dr. Bird	Family and Couples (Barbara Feld, CSW)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Geriatric	Intro to Social Psychiatry Course, The PORT study and Evidence Based Practices (Alejandra Durango, MD)	Process Group
5/5/2016	Dr. Bird	Family and Couples (Barbara Feld, CSW)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Geriatric	Person Centered Care and Recovery (Hunter L. McQuistion, MD)	Process Group
5/12/2016	Dr. Bird	Family and Couples (Barbara Feld, CSW)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Geriatric	Medicare and Medicaid: Historical and Practical Perspectives, (Penny J. Schwartz, DSW, LCSW-R)	Process Group
5/19/2016	Dr. Bird	Family and Couples (Barbara Feld, CSW)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Geriatric	Medicare and Medicaid: Historical and Practical Perspectives, (Penny J. Schwartz, DSW, LCSW-R)	Process Group
5/26/2016	Dr. Bird	Family and Couples (Barbara Feld, CSW)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Geriatric	Assertive Community Treatment (ACT) Teams and AOT (Milan Patel, MD)	Process Group
6/2/2016	Dr. Bird	Family and Couples (Barbara Feld, CSW)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Geriatric	Practicing Psychiatry in the Field with Homeless People, Part 1 (Van Yu, MD)	Process Group
6/9/2016	Dr. Bird	Family and Couples (Barbara Feld, CSW)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Substance	Practicing Psychiatry in the Field with Homeless People, Part 2 (Van Yu, MD)	Process Group
6/16/2016	Dr. Bird	Family and Couples (Barbara Feld, CSW)	Psychodynamic Continuous Case and Formulation (Linda Mullen, MD)	Lunch	Drs. New & Simon	Substance	Substance Abuse in LGBT population (focus on Crystal Meth) Joe Ruggiero, Ph.D.	Process Group

PGY-3 Didactic Curriculum 2015-16 OPD Cognitive **Process** Neuro-(1160) **Admin** Lunch Psychotherapies 1 **Psychotherapies 2** Behavioral Psychopharmac-Group Thursday 12:45-Rounds 12-10:05-10:55am 11:05-11:55am Therapy 3:00ology 12:40 9-1pm 2:05-2:55 1-1:55pm 3:50pm 9:45am The Goal of Work as a Psychodynamic Drs. Means to Family and Couples Continuous Case and Process 6/23/2016 Dr. Bird Lunch New & Substance Rehabilitation (Nancy (Barbara Feld, CSW) Formulation Group Young with guest Simon (Linda Mullen, MD) client) Psychodynamic **Supportive Housing** Drs. Family and Couples Continuous Case and Options in NYC Process 6/30/2016 Dr. Bird Lunch New & Substance (Barbara Feld, CSW) Formulation (Daniel J. Stern, Group Simon (Linda Mullen, MD) MSW, MA)

Appendix C4

PGY-4 Didactic Curriculum 2015-2016									
Tuesday	Admin 9:00- 9:30am	Psychopharmacology 9:30am-10:20am	Advanced Clinical Topics & Professional Development 10:30-11:20am	Grand Rounds 11:30am- 12:30pm	Advanced Clinical Topics & Professional Development 1:30-2:20pm	Psychotherapy: Continuous Case Conferences 3:30-4:20pm	Process Group 2:30 - 3:20pm		
7/7/2015	No Class	Psychopharmacology Joseph Goldberg	Sexuality and Treatment of Sexual Dysfunctions (Philip Luloff, MD)	Summer Roundabout	Current Controversies in Psychoanalysis Frank Baudry	Residents' Presentations of Individual Learning Plans (Drs. New & Simon)	Process Group		
7/14/2015	No Class	Psychopharmacology Joseph Goldberg	Sexuality and Treatment of Sexual Dysfunctions (Philip Luloff, MD)	Summer Roundabout	Current Controversies in Psychoanalysis Frank Baudry	Residents' Presentations of Individual Learning Plans (Drs. New & Simon)	Process Group		
7/21/2015	No Class	Psychopharmacology Joseph Goldberg	Sexuality and Treatment of Sexual Dysfunctions (Philip Luloff, MD)	Summer Roundabout	Current Controversies in Psychoanalysis Frank Baudry	Residents' Presentations of Individual Learning Plans (Drs. New & Simon)	Process Group		
7/28/2015		NOTE: TIME CHANGE: 8am-10:20am Brief Psychotherapy in a C-L Setting Dr.Milton Viederman	Sexuality and Treatment of Sexual Dysfunctions (Philip Luloff, MD)	Summer Roundabout	Current Controversies in Psychoanalysis Frank Baudry	Residents' Presentations of Individual Learning Plans (Drs. New & Simon)	Process Group		
8/4/2015	Drs. New & Simon	Psychopharmacology Joseph Goldberg	Sexuality and Treatment of Sexual Dysfunctions (Philip Luloff, MD)	Summer Roundabout	David Pollens: Psychoanalytic Process	CBT Continuous Case Conference Drs. Katzman, Brus	Process Group		
8/11/2015	No Class	Psychopharmacology Joseph Goldberg	Sexuality and Treatment of Sexual Dysfunctions (Philip Luloff, MD)	Summer Roundabout	David Pollens: Psychoanalytic Process	CBT Continuous Case Conference Drs. Katzman, Brus	Process Group		
8/18/2015	No Class	No Class	Fellowships Rieder, Kellner, Rosenthal, Albertini, Coffey	Summer Roundabout	US mental health care system Sharat Parameswaran	CBT Continuous Case Conference Drs. Katzman, Brus	No Class		
8/25/2015	No Class	Finance 101 for Residents Sanjay Patel, MD		Summer Roundabout	2. Financing US mental health care Sharat Parameswaran	CBT Continuous Case Conference Drs. Katzman, Brus	No Class		
9/1/2015	Drs. New & Simon	Psychopharmacology Joseph Goldberg	Job Searching Rieder, leibu, Welch, DePrima, DesJardins, Loh	Summer Roundabout	3. Managed care, quality, and quality improvement Sharat Parameswaran	CBT Continuous Case Conference Drs. Katzman, Brus	No Class		
9/8/2015	No Class	Psychopharmacology Joseph Goldberg	Sexual History Taking Dr. J Downey	Grand Rounds	4. Health care reform, parity, and integration Sharat Parameswaran	CBT Continuous Case Conference Drs. Katzman, Brus	Process Group		
9/15/2015	No Class	Resilience	Gender and Mental Illnesses Rieder, Mullen	Grand Rounds	Adolescent Continuous Case (Phil Herschenfeld, MD)	Resilience	Process Group		

PGY-4 Didactic Curriculum 2015-2016 **Advanced Clinical Advanced Clinical Psychotherapy: Process Grand Rounds** Admin **Psychopharmacology Topics & Professional Topics & Professional Continuous Case** Group Tuesday 9:00-11:30am 9:30am-10:20am **Development** 2:30 -Development Conferences 9:30am 12:30pm 10:30-11:20am 1:30-2:20pm 3:30-4:20pm 3:20pm **Sexual Attraction** Drs. Psychopharmacology and Arousal Psychopharmacology **Process** 9/22/2015 New & Grand Rounds Resilience Joseph Goldberg L. Mullen, R. Steven Wager Group Simon Rieder Neurobiology of Love, Adolescent Continuous Love and No Psychopharmacology Attachment, and **Process** 9/29/2015 Attachment **Grand Rounds** Case (Phil Class Joseph Goldberg Aggression 1 Group Herschenfeld, MD) L. Mullen (Drs. New and Perez) Neurobiology of Love, Psychopharmacology No Psychopharmacology Marriage Attachment, and **Process** 10/6/2015 **Grand Rounds** Class Joseph Goldberg L. Mullen Steven Wager Aggression 2 Group (Drs. New and Perez) Differences in Drs. Adolescent Continuous Women's Mental Health Continuous Communication Process 10/13/2015 New & **Grand Rounds** Case (Phil (Dr. Fitelson) R. Rieder, L. Psychodynamic Case Group Simon Herschenfeld, MD) Mullen Divorce No Hormones and Mood Psychopharmacology Continuous **Process** 10/20/2015 **Grand Rounds** L. Mullen, R. Class (Dr. Fitelson) Steven Wager Psychodynamic Case Group Rieder Drs. Perinatal Sexual History Adolescent Continuous Continuous **Process** 10/27/2015 New & Deparession/Anxiety 1 Taking **Grand Rounds** Case (Phil Psychodynamic Case Group Herschenfeld, MD) Simon Kristin Wesley Dr. J Downey Perinatal Male No Psychopharmacology Continuous **Process** 11/3/2015 **Grand Rounds** Deparession/Anxiety 2 homosexuality Steven Wager Class Psychodynamic Case Group Kristin Wesley Dr. J Downey Bipolar Disorder Through Adolescent Continuous Female No Continuous **Process** 11/10/2015 the Female Life Cycle: homosexuality **Grand Rounds** Case (Phil Psychodynamic Case Class Group Fitelson Dr. J Downey Herschenfeld, MD) Research in Women's Sexual History No Psychopharmacology Continuous **Process** 11/17/2015 Mental Health: Catherine **Grand Rounds** Taking Class Steven Wager Psychodynamic Case Group Monk Dr. J Downey Sexual History Adolescent Continuous No Psychopharmacology Continuous **Process** 11/24/2015 **Grand Rounds** Case (Phil Taking Class Joseph Goldberg Psychodynamic Case Group Herschenfeld, MD) Dr. J Downey Schema Therapy No Psychopharmacology Psychopharmacology Continuous **Process** 12/1/2015 Patricia Escudero Grand Rounds Class Joseph Goldberg Steven Wager Psychodynamic Case Group Rotman Office Practice: Adolescent Continuous Psychopharmacology Starting the Continuous No **Process** 12/8/2015 **Grand Rounds** Case (Phil Joseph Goldberg Class practice (Lauren Psychodynamic Case Group Herschenfeld, MD) Gorman, MD) Schema Therapy No Psychopharmacology Psychopharmacology Continuous **Process** 12/15/2015 **Grand Rounds** Patricia Escudero Class Joseph Goldberg Steven Wager Psychodynamic Case Group Rotman Office Practice: Adolescent Continuous Nο Psychopharmacology Contact with Continuous Process 12/22/2015 **Grand Rounds** Case (Phil Class Joseph Goldberg patients (Lauren Psychodynamic Case Group Herschenfeld, MD) Gorman, MD) 12/29/2015 No Class 1/5/2016 No Class Combining Psychopharm Schema Therapy Psychopharmacology Continuous No **Process** 1/12/2016 and Psychotherapy Patricia Escudero **Grand Rounds** Class Steven Wager Psychodynamic Case Group (Aneil Shirke, MD, PhD) Rotman

PGY-4 Didactic Curriculum 2015-2016

2015-2016										
Tuesday	Admin 9:00- 9:30am	Psychopharmacology 9:30am-10:20am	Advanced Clinical Topics & Professional Development 10:30-11:20am	Grand Rounds 11:30am- 12:30pm	Development 1:30-2:20pm	Psychotherapy: Continuous Case Conferences 3:30-4:20pm	Process Group 2:30 - 3:20pm			
1/19/2016	No Class	Combining Psychopharm a (Aneil Shirke, M		Grand Rounds	Adolescent Continuous Case (Phil Herschenfeld, MD)	Continuous Psychodynamic Case	Process Group			
1/26/2016	No Class	Combining Psychopharm and Psychotherapy (Aneil Shirke, MD, PhD)	Schema Therapy Patricia Escudero Rotman	Grand Rounds	Psychopharmacology Steven Wager	Continuous Psychodynamic Case	Process Group			
2/2/2016	Drs. New & Simon	Combining Psychopharm and Psychotherapy (Aneil Shirke, MD, PhD)	Office Practice: Challenging Cases (Lauren Gorman, MD)	Grand Rounds	Adolescent Continuous Case (Phil Herschenfeld, MD)	Continuous Psychodynamic Case	Process Group			
2/9/2016	No Class	Combining Psychopharm and Psychotherapy (Aneil Shirke, MD, PhD)	Schema Therapy Patricia Escudero Rotman	Grand Rounds	Psychopharmacology Steven Wager	Continuous Psychodynamic Case	Process Group			
2/16/2016	No Class	Combining Psychopharm and Psychotherapy (Aneil Shirke, MD, PhD)	Office Practice: Academic FPA (Akhil Shenoy, MD)	Grand Rounds	Adolescent Continuous Case (Phil Herschenfeld, MD)	Continuous Psychodynamic Case	Process Group			
2/23/2016	Drs. New & Simon	Combining Psychopharm and Psychotherapy (Aneil Shirke, MD, PhD)	Schema Therapy Patricia Escudero Rotman	Grand Rounds	Psychopharmacology Steven Wager	Continuous Psychodynamic Case	Process Group			
3/1/2016	No Class	Combining Psychopharm and Psychotherapy (Aneil Shirke, MD, PhD)	Office Practice: Visit to my office (Lauren Gorman, MD)	Grand Rounds	Ethics: Confidentiality & Disclosure (Jacob Appel, MD, JD)	Continuous Psychodynamic Case	Process Group			
3/8/2016	No Class	Combining Psychopharm and Psychotherapy (Aneil Shirke, MD, PhD)	Schema Therapy Patricia Escudero Rotman	Grand Rounds	Ethics: Surrogate/ Family Decision-Making (Jacob Appel, MD, JD)	Continuous Psychodynamic Case	Process Group			
3/15/2016	Drs. New & Simon	Combining Psychopharm and Psychotherapy (Aneil Shirke, MD, PhD)	Office Practice: (Aneil Shirke, MD, PhD)	Grand Rounds	Ethics: Cultural/Religious Minorities (Jacob Appel, MD, JD)	Continuous Psychodynamic Case	Process Group			
3/22/2016	No Class	Psychopharmacology (Joseph Goldberg)	Board Review	Grand Rounds	Ethics: Malpractice/ Good Samaritan Law (Jacob Appel, MD, JD)	Continuous Psychodynamic Case	Process Group			
3/29/2016	No Class	Psychopharmacology (Joseph Goldberg)	Board Review	Grand Rounds	Neurology Review (Silvana Riggio, MD)	Continuous Psychodynamic Case	Process Group			
4/5/2016		PSYCHOTHERAPY EXA	М	Grand Rounds	Psychotherapy Test Review (Linda Mullen)	Continuous Psychodynamic Case	Process Group			
4/12/2016	No Class	Psychopharmacology (Joseph Goldberg)	Board Review	Grand Rounds	Mentalization (Michael Garfinkle, PhD)	Continuous Psychodynamic Case	Process Group			
4/19/2016	No Class	Psychopharmacology (Joseph Goldberg)	Board Review	Grand Rounds	Mentalization (Michael Garfinkle, PhD)	Continuous Psychodynamic Case	Process Group			
4/26/2016	Drs. New & Simon	Psychopharmacology (Joseph Goldberg)	Board Review	Grand Rounds	Mentalization (Michael Garfinkle, PhD)	Continuous Psychodynamic Case	Process Group			
5/3/2016	No Class	Psychopharmacology (Joseph Goldberg)	Neurology Review (Silvana Riggio, MD)	Grand Rounds	Mentalization (Michael Garfinkle, PhD)	Continuous Psychodynamic Case	Process Group			
5/10/2016	No Class	What is Stressful? (Adriana Feder, MD)	Neurology Review (Silvana Riggio, MD)	Grand Rounds	Mentalization (Michael Garfinkle, PhD)	Continuous Psychodynamic Case	Process Group			
5/17/2016	Drs. New & Simon	Biology of Stress (Adriana Feder, MD)	Neurology Review (Silvana Riggio, MD)	Grand Rounds	Board Review	Continuous Psychodynamic Case	Process Group			

PGY-4 Didactic Curriculum 2015-2016 **Advanced Clinical Advanced Clinical Psychotherapy: Process** Admin **Grand Rounds Psychopharmacology Topics & Professional Topics & Professional Continuous Case** Group Tuesday 9:00-11:30am-9:30am-10:20am Development Development Conferences 2:30 -9:30am 12:30pm 10:30-11:20am 1:30-2:20pm 3:30-4:20pm 3:20pm Continuous Process 5/24/2016 No Class **Board Review Board Review Grand Rounds Board Review** Psychodynamic Case Group Continuous Process 5/31/2016 No Class **Board Review Board Review Grand Rounds Board Review** Psychodynamic Case Group Drs. New Continuous Process 6/7/2016 **Board Review Board Review Grand Rounds Board Review** & Simon Psychodynamic Case Group Continuous Process 6/14/2016 No Class **Board Review Board Review Grand Rounds Board Review** Psychodynamic Case Group Continuous Process 6/21/2016 No Class **Board Review Board Review Grand Rounds Board Review** Psychodynamic Case Group Continuous Process 6/28/2016 No Class **Board Review Board Review Grand Rounds Board Review** Psychodynamic Case Group

Appendix D

Matched Residents by Year

Note that all biographical information was current as of the time the resident matched at Mount Sinai.

Matched residents 2015

Matched residents 2014

Matched residents 2013

Matched residents 2012

Matched residents 2011

Matched residents 2010

Matched residents 2009

Matched residents 2008

Matched residents 2007

Matched residents 2006

Matched residents 2005

Matched residents 2004



PHYSICIAN-SCIENTIST RESEARCH TRACK



Jessica Ables, MD, PhD

MEDICAL: Icahn School of Medicine at Mount Sinai

PHD: University of Texas Southwestern School of Medicine

POST-DOC: Rockefeller University

UNDERGRADUATE: Southwestern University

Jess began her medical training and obtained her PhD in Integrative Biology at UT Southwestern before she moved to New York and completed her MD at Mount Sinai. Her doctoral thesis work explored signaling in adult neurogenesis, defining how Notch1 affects the generation of newly born neural progenitor cells in adult hippocampus and their differentiation and survival in the intact brain. Through this and subsequent work, she has become viewed as a go-to person by others needing assistance in neuroanatomical methodologies. Following graduation and prior to residency, she completed a post-doctoral research project at Rockefeller under Dr. Nathaniel Heinz, where she used BAC transgenic mice to characterize the structure and function of two novel cell populations in the interpeduncular nucleus, with implications for better understanding depression, anxiety, and addiction, including the somatic component of nicotine withdrawal. Jess has shown great ability as both an independent researcher and a collaborator and has published her work in numerous prestigious journals, including *Nature Neuroscience*, *Journal of Neuroscience*, *Nature Medicine*, *PNAS*, and *Biological Psychiatry*.

Sophia Kogan MD, PhD

MEDICAL: University of Massachusetts Medical School PHD: University of Massachusetts Medical School

UNDERGRADUATE: Tufts University

Born in St. Petersburg, Russia, Sophia moved to America when she was 4. As a college sophomore, she watched her first chromogenic reaction develop and marveled at the ability to detect a single protein and study its role in the complex process of organogenesis. At that moment, she decided to become a scientist. For her doctoral thesis in Molecular Medicine, Sophia worked under the mentorship of Michael Czech in the highly competitive area of metainflammation. She focused on the role of inflammation in diet-induced obesity and Type 2 Diabetes through studying the physiology of brown and white adipose tissue. She also investigated the role of inflammation and lipid droplet proteins in non-alcoholic fatty liver disease. Her work has shown novel roles for CD40 (attenuating adipose tissue inflammation and protecting against hepatic steatosis) that have been contrary to expectations and dogma and have raised important questions for the field. Sophia has published her work in the *Journal of Clinical Investigation, Endocrine-Related Cancer*, the *Journal of Human Hypertension*, and multiple times in the *American Journal of Physiology*. She is interested in studying the molecular mechanisms that underlie metabolic disorders in the psychiatric population, both primary and medication-induced.



GENERAL ADULT TRACK



Zebib Abraham, MD

MEDICAL: Weill Cornell Medical College UNDERGRADUATE: University of Maryland

The daughter of immigrants from the Eritrean civil war, Zebib hails from a background that has heightened her sensitivity to resource allocation, sense of social justice, and power of medicine and public health to improve quality of life. Consistently perceived as mature beyond her years,

Zebib received her college's highest undergraduate scholarship, covering all expenses for all four years, and graduated with honors concentrating in Neurology, Physiology, and English. At the University of St. Andrews, she bred worms to map their sex-trait determining gene mutations and studied cholinergic interneurons in the medulla of mice. Her considerable time spent in service, honing new skills in counseling and supporting others, and her passion for helping the world's population on a global scale have fueled her academic growth. Zebib has been an executive board member of Circle K International, worked to promote the development of mental health research in Mozambique, has been president of the Cornell Health Professions Recruitment and Exposure mentoring program for disadvantaged youth, and founded the Artists' Society at Weill Cornell.



Ralph (Parker) Fader, MD

MEDICAL: Rutgers, Robert Wood Johnson Medical School

UNDERGRADUATE: Brandeis University

Parker was awarded a considerable academic scholarship to Brandeis, and he worked nearly full-time throughout college as Manager of the Brandeis kitchen staff. He also obtained a university scholarship to cover his EMT training and spent three years volunteering in the Brandeis Emergency Medical Corps. He volunteered much of his free time serving as an LGBTQ youth counselor for the Queer Resource Center, which further fueled his passion for building social supports for underprivileged communities. Between college and medical school, Parker worked full time while volunteering dozens of weekly hours as a recruiter for the Center for HIV Educational Studies and Training. In medical school, he undertook a quality improvement study to examine possible discrepancies in time-to-treatment for Hispanic stroke patients. He has developed curricula to teach psychiatric concepts via film portrayals, has been a Gender and Sexuality Fellow of the American Medical Students Association, and he has been inducted into the Gold Humanism Honor Society.



Marissa Hudak, MD

MEDICAL: University of Colorado School of Medicine

UNDERGRADUATE: Emory University

Marissa's record of outstanding leadership, marked by creativity and persistence, has been evident throughout her work in quality improvement, research, and peer guidance. Her QI work, published in the *American Journal of Medical Quality*, investigated conflicts in the stroke alert

system and helped reduce time to treatment in the University Hospital by 45%. This work earned a spot on the AHA Target: Stroke Honor Roll and won the Society for Hospital Medicine's Award for Excellence in Teamwork in QI. She has educated other hospitals and presented at the International Stroke Conference. She was subsequently hired by the hospital as an independent contractor for QI, facilitating its progression to a Comprehensive Stroke Center. She plans on bringing to psychiatry her approach to transforming systems to improve patient care. Marissa also worked as a research coordinator for numerous NIH-funded studies: hypothermia in stroke, antiplatelet agents post-stoke, and potential immunological markers to identify adverse events in MS treatment. In college, Marissa studied assessments to validate subtypes of psychopathy in incarcerated men (published in *Personality Disorders*). Recently, she is studying edible-marijuana-induced psychosis (manuscript submitted to the *American Journal of Psychiatry*). She founded UColorado's psychiatry interest group and was elected Chair of the Western US region of Psych-SIGN, liaising with the APA.

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Anna Kim, MD

MEDICAL: New York University School of Medicine

UNDERGRADUATE: University of Chicago

Originally hailing from Memphis, Tennessee, Anna is a child of Japanese/Korean and French immigrants. She graduated Phi Beta Kappa from the University of Chicago, concentrating in Biology and Neuroscience. As an undergraduate and as part of an NIH Neuroscience and

Neuroengineering Program, she studied the genetic identity of premotor neurons in the mouse brainstem, focusing on Chx10 transcription factor involved in the development of key functions such as breathing and locomotion. She was also employed as a research coordinator throughout her undergraduate years, studying how nurses, nurse practitioners, residents, fellows, and attendings view patient mortality and morbidity in the neonatal and medical intensive care units; simultaneously, she studied related medical ethics, and her work was published in *Acta Paediatrica*. Also throughout her time at University of Chicago, she was General Editor and then Editor-in-Chief for the "Chicago Biological Investigator," an undergraduate research journal. In medical school at NYU, she investigated whether the effects of media exposure in low socioeconomic toddlers are associated with BMI at 3 years of age. While on the Bellevue Hospital Forensics inpatient unit, she researched the efficacy of intramuscular regimens in managing acute violence.



Teresa Lee, MD

 $\label{eq:medical} \textit{Medical: University of Texas Southwestern School of Medicine}$

UNDERGRADUATE: Rice University

Prior to college, Teresa was awarded the Most Valuable Student Scholarship from the Elks Foundation. Deeply invested in the arts at Rice, she published poetry, sang with the Rice Chorale, and served as the visual arts coordinator for Rice's Student Center, recruiting artists and

executing art shows. She was also the smallest-built women's Rugby player. Her research in college characterized blood vessels in the developing avian eye with a focus on corneal avascularity and was published in *Developmental Dynamics*. During a post-bac, she worked as a neuroscience lab manager at UPenn School of Medicine, where she published two first-author papers (*Neurology*; *Human Molecuar Genetics*) illustrating the ethnic diversity of genetic sequences in ALS. She was also recognized and awarded a scholarship from UPenn's Department of Fine Arts to study advanced ceramics at the nationally recognized Clay Studio in Philadelphia. In addition to extensive volunteerism in medical school, Teresa was President of AMWA, Board Officer of the a capella choir, and employed as a Manager of the Student Center. She recently completed a summer fellowship with HHMI, creating a system that would quantify the type of vector integration events of extrinsic Factor 9 in Hemophilia B mice.



Michael MacIntyre, MD

MEDICAL: Ohio State University College of Medicine

UNDERGRADUATE: Duke University

Michael concentrated in chemistry at Duke, researching the kinetics and thermodynamics of iron chelation from human transferrin by Neisseria gonorrhoeae. He was a teaching assistant in inorganic and organic chemistry, and as outreach he performed chemistry shows and

demonstrations in various contexts, ranging from elementary school classes and the North Carolina State Fair to weekly museum shows. In college he provided care for Spanish-speaking only victims of domestic violence at the Durham Crisis Response Center. Before medical school, Michael was employed as a Technician at the San Diego Eye Bank, where he was in charge of procuring, preserving, and processing ocular tissue from cadavers to be used for human transplantation and scientific research. Michael was awarded a scholarship through Ohio State's P4 Medicine Institute, allowing him time in medical school for an interdisciplinary analysis of research projects from genetics to exercise physiology, with a particular emphasis on incorporating evidence-based information into medical practice and creating a personalized life strategy wellness plan for each patient. Michael was also elected to liaise between the Ohio Psychiatric Physicians Foundation and medical students, developing enhanced recruitment. He has studied the incidence of antipsychotic use in patients with anxiety disorder diagnoses, and for 3 years in medical school, Michael was President of Clowning in Columbus.

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Lisa Salstein, MD

MEDICAL: University of Massachusetts Medical School

UNDERGRADUATE: Smith College

Lisa's interest in psychiatry began when she volunteered for a suicide prevention hotline in high school, and she has since consistently involved herself in psychiatric practice and research. She worked as a decisional trainer with prison inmates addressing problem-solving skills, as well as

an activities coordinator on the geriatric mood disorders and dementia units at McLean. Lisa has led a campus wide study to examine eating behaviors and perfectionism traits in dancers compared to other athletes. Between college and medical school, Lisa was a full time research assistant at the New York State Psychiatric Institute and at the Nathan Kline Institute, where she coordinated an NIMH study on the genetics of obsessive compulsive disorder and assisted in creating a new mouse model to study the neurobiology of secure infant attachment despite adversity (published in *Genes, Brain, and Behavior*). Previously, she had assisted in an NIMH study of borderline personality disorder. As leader of the psychiatric interest group, Lisa developed a mentorship program between an adolescent inpatient psychiatric facility and University of Massachusetts medical students.

Jasdeep Sandhu, MD, MPH

MEDICAL: University of Texas School of Medicine at San Antonio MPH: UT School of Public Health San Antonio Regional Campus UNDERGRADUATE: Texas A&M University

Graduating college with a degree in international studies, Jasdeep has had a longstanding interest in global health policy. Her field work has taken her to Costa Rica, Guatemala, Mexico, and impoverished settings in Texas. A leader in her community—in academics, service, and compassion— Jasdeep sits on the student board of the Center for Medical Humanities and Ethics, serves as mentor to junior medical students, was President of the San Antonio chapter of Physicians For Human Rights, and served as the sole student representative on a University of Texas multi-school interdepartmental committee focusing on sustainability. Jasdeep has recently been doing work supported by a grant from the CDC, studying Hepatitis C and its treatment in the baby boomer population. Focusing on barriers to care, she is analyzing imaging findings, disease severity indices, and the relationship between alcohol abuse, BMI, and liver function. Jasdeep also practices yoga and would like to investigate how mindfulness activities may be integrated as therapeutic modalities.



Katherine Skosnik, MD

MEDICAL: Boston University School of Medicine

UNDERGRADUATE: McGill University

Hailing from Vancouver, with a stint in Dubai, Katherine graduated McGill concentrating in Philosophy and Cell and Molecular Biology. Her interests are widespread, from the academic and mathematical to the human and compassionate. In college she was awarded a grant to study the

use of zero in ancient cultures, reviewing philosophical texts on the evolution of number systems, and researching primary texts from Mesopotamia, India, and Greece. Katherine is also passionate about personal narratives, being a voice for the underrepresented, and promoting physical and psychological safety. Working with the Berklee College of Music, she produced a music video, "Stolen Voices," that aims to raise awareness on the issue of consent and sex. She also co-directed the Vagina Monologues, co-chaired Medical Students for Choice, and chaired the psychiatry interest group. As an advisor in the "Healer's Art," she led students in developing skills and values to maintain humanism throughout a career in medicine. She was selected to present at the inaugural TEDxMcGill, which became one of the largest TEDx events in Canada.





Adjoa Smalls-Mantey, MD, DPhil

MEDICAL: Columbia University College of Physicians and Surgeons

DPHIL (PHD): University of Oxford and NIH

UNDERGRADUATE: University of Maryland, Baltimore County

scholarships for academics and leadership. As part of the HHMI/Meyerhoff Scholarship Program for all four undergraduate years, she conducted HIV pathogenesis-related research involving dimerization sites within the MLV genome and received the 2006 Goldwater Scholarship from the US Congress. She published her work in *Biochemistry* and the *Journal of Molecular Biology*. Receiving the highest possible priority score, Adjoa was awarded an individual NIH Fellowship grant to fund her MD/PhD training. Beginning at the NIH, she developed a soon-to-be sought after novel flow cytometry assay to measure cytotoxic activity of NK cells against HIV-1 infected CD4+ T cells. She published this and consequent research findings in the *Journal of Virology*. At Oxford Adjoa completed the work she started at the NIH. She also developed a method for generating neutrophils from human stem cells. Her independent research provided significant new insights into HIV and were published in *PLoS One*. While at Oxford, Adjoa participated in the Science Innovation Plus Programme, a highly selective business school training program for science graduate students. Adjoa was the graduate student catering director at Magdalen College at Oxford, Secretary of the Columbia P&S Black and

Adjoa was the top biochemistry student in college and received numerous prestigious



Rachel Tamaroff, MD

MEDICAL: SUNY Downstate Medical Center College of Medicine

Latino Student Organization, and the third black woman to complete a marathon on 7 continents.

UNDERGRADUATE: Cornell University

Graduating Cornell with a degree in Human Development, Rachel initially worked as a high school physics and physical science teacher, in addition to being 8th grade advisor and the Assistant Coach of the girls' soccer, basketball, and lacrosse teams. Awarded an Intramural

Research Fellowship at the NIH/NICHD, she worked with Marc Bornstein, Head of Child & Family Research, studying infant familiarization and fatigue, categorization and cognitive development, facial recognition, shape perception, brain development, movement mapping and learning, and mother-child interactions. Her work on obstacle avoidance in 9-month-old infants' reach to grasp is currently under review, and she has presented at the International Society for Developmental Psychobiology and the International Neuropsychological Society. Rachel attended Downstate on the Clinical Neurosciences Pathway and was President of the psychiatry interest group. She has most recently conducted research and presented her findings on how medical student attitudes toward psychiatric and non-psychiatric patients affect patient management.



Michael Yee, MD

MEDICAL: University of Chicago Pritzker School of Medicine

UNDERGRADUATE: University of Rochester

Graduating magna cum laude, Michael's interest in psychiatry developed during his collegiate exploration into social psychology as part of the Take 5 scholars program, in which he was granted a 5^{th} year free of tuition to pursue independent study and graduate level courses. In

medical school, he quickly demonstrated his commitment to leadership, education, service, and an attunement to diverse populations. At U of C, he joined the Medical Education Scholarship Track, through which he worked to improve the medical neurobiology course. He also served as a teaching assistant for multiple courses and obtained advanced training in teaching skills. Following his first year, Michael was selected to be a part of the Medical Students Training in Aging Research (MSTAR) Program, funded by the American Federation for Aging Research. He studied the time course of statins' efficacy in primary prevention and rational prescribing practices for geriatric patients with multimorbidity. The findings were presented first at the American Geriatrics Society and then published as an article in *Drugs and Aging*. He has been Co-president of Humanism in Medicine, Co-chair of the Asian Pacific American Medical Student Association, Co-president of Say Ahhh! a capella, and a mentor for beginning medical students at a Spanish and Polish speaking clinic.





Physician-Scientist Research Track

Alexander Charney, MD

UNDERGRADUATE: New York University, BA, Anthropology

MEDICAL: Icahn School of Medicine at Mount Sinai

POSTDOCTORAL FELLOWSHIP: Icahn School of Medicine at Mount Sinai

Eager to become a scientist since adolescence, Alex entered medical school as the first step toward a career in medical research. His enthusiasm continued and upon graduation, he made the decision to enter a postdoctoral fellowship and matriculate into a PhD program prior to residency; now starting a research-oriented residency, he will continue to pursue the curriculum required to obtain a PhD. Alex's research experience began 10 years ago as an intern at NIMH, where he studied the effects of prospective psychiatric medications on rhesus monkeys. He later worked as a research coordinator on Dr. Jeffrey Newcorn's ADHD trials, appreciating how physician-scientists can serve as the conduit where science and patient care come together. In medical school he was mentored in epidemiological research by Dr. Valentin Fuster, who further inspired Alex to combine scientific discovery and clinical mastery. When Dr. Pamela Sklar joined Mount Sinai, Alex found a mentor whose novel approach to studying the genetics of schizophrenia and bipolar disorder helped fashion the future of medical research. In Dr. Sklar's Division of Psychiatric Genomics, Alex has been a lead data analyst for the largest GWAS study for bipolar disorder to date (ICCBD). During his postdoc period, Alex also conceived of and developed the Living Brain Project, which will analyze brain tissue obtained from individuals living with severe neuropsychiatric illnesses, including Parkinson's disease, major depressive disorder, obsessive-compulsive disorder, and Tourette's syndrome. For this study, molecular, clinical, and neuroimaging data will be obtained from each participant to address questions such as the extent to which DNA in brain tissue differs from DNA in blood and whether the gene expression of post-mortem brain samples is comparable to that of living tissue. Alex has presented his work at the World Congress of Psychiatric Genetics and is currently writing up the work he has done on bipolar disorder for publication.





Physician-Scientist Research Track

Nigel Kennedy, MBBS, PhD, MSc

UNDERGRADUATE: University of Manchester, BS, Biochemistry GRADUATE (MSC): University of Manchester, Neuroscience GRADUATE (PHD): Imperial College London, Neurogenetics MEDICAL: University of London, St. George's Hospital

Nigel has had a longstanding fascination with neuroscience and psychiatry. Currently working as a neurosurgery specialty trainee in the UK, he previously obtained his graduate degrees conducting research in schizophrenia. His association study of potential pathogenic alleles in schizophrenia highlighted that genetic changes in neurodevelopmental pathways are important both in pathogenesis and for building a genetic haplotype most strongly associated with schizophrenia. In another project, using a novel gene capture technique based on RecA and the DIRECT method, he cloned and characterized a large trinucleotide repeat found to be overrepresented in DNA from patients with schizophrenia. Working with novel techniques in an immunohistochemistry study of human brain tissue, he stained for markers of neurodegeneration and showed an over-representation of inflammatory markers in patients with schizophrenia. He also developed a model system for imaging and identifying ligands as potential targets for clinical intervention in treating autonomic disorders, using immunofluorescent antibodies to the acetylcholine receptor in cultured rat dorsal root ganglia. As an undergraduate, he researched a lipid extrusion method to create multi-lamellar vesicles with surface-grafted polyethylene glycol, with the goal to create potential drug-delivery vehicles. Studying the scientific basis of psychiatric illness inspired him to become a clinician. During his clinical training and after, he became particularly interested in the use of surgical treatments, such as deep brain stimulation, for the treatment of previously intractable conditions. Hence his current position in neurosurgery and his forward-thinking commitment to a career in the research and practice of interventional psychiatry. He plans on working with Dr. Wayne Goodman and others involved in the current state-of-the-art DBS research at Mount Sinai.



PhD + Residency Track

Whitney McFadden, MD

UNDERGRADUATE: UC Berkeley, BA, Molecular Cell Biology and Neurobiology

MEDICAL: University of California San Diego School of Medicine

Having demonstrated a keen interest in the integration of basic science research, clinical research, clinical medical practice, and patient/public advocacy, Whitney is ideally poised to become the psychiatristscientist for whom our "PhD+" program was developed. Whitney was awarded a fellowship in the HHMI/Medical Research Scholars Program at NIMH between her MS2 and 3 years, where she conducted research under the mentorship of Dr. Joel Kleinman. Her first study used differential RNA expression as an intermediate phenotype and showed that a genetic variant affects coding for the alpha7-nicotinic acetylcholine receptor. The clinical manifestations of variants of this gene include cognitive deficits in episodic memory and learning, making it a possible target in high risk patients with psychiatric disease and cognitive symptoms. In another project also studying schizophrenia, she identified genetic risk variants for altered white matter neurons in the DLPFC using microarrays. The risk genes were found to have an affect on actin cell remodeling, phospholipid second messenger signaling, and zinc ion transport carriers, suggesting cellular mechanisms by which these aberrant white matter neurons may persist and contribute to altered circuitry responsible for symptoms. She has presented her findings at the cumulative MRSP symposium and at the Society for Biological Psychiatry; both projects have papers in development. Her current research interest lies in continuing to investigate genetic risk variants involving altered neuronal migration during neurodevelopment. In addition to her facility with research, Whitney has progressed through the ranks of the American Medical Student Association's leadership, first as UCSD Co-President, then Regional Director, then National Health Policy Coordinator, then Health Policy Chair. She helped develop a motivation scale for successful aging, served as Psychiatry Manager of the UCSD Student-Run Free Clinic, travelled as a summer health intern in Peru, and she is a club triathlete. Whitney is also an exemplary colleague and compassionate physician, traits recognized by her induction into the Gold Humanism Honor Society.



PhD + Residency Track - PGY-2 entry



Kenechi Ejebe, MD

UNDERGRADUATE: Carleton College, BA in Biology

MEDICAL: George Washington University School of Medicine

Born in Nigeria to a professor and a judge, Kenechi Gabriel Ejebe immigrated to Plymouth, Minnesota when he was 8 years old. He learned English in grade school ESL classes and eventually went on to compete in speech and debate tournaments in high school, and he has continued to excel in academic pursuits and leadership. Kenechi's academic interests center on psychiatric genetics, innovative medicines, and diagnostics. In college, he worked alongside Dr. Susan Singer, on research funded by the National Science Foundation, investigating the genetic regulation of inflorescence in plant-based systems. He was elected to the Sigma Xi chapter for his research contributions and was honored as the Student Commencement Speaker for the graduating Class of 2002. For 2 years after college, Kenechi conducted research under an Intramural Research Training Award at NIH with Dr. Henry Levin, studying yeast genetics and using yeast as a model system to characterize HIV reverse transcription; this work was published in the Journal of Virology. During medical school, Kenechi broadened his research interests to include social activism. He interned at the World Health Organization in Geneva and was co-Leader of Physicians for Human Rights at GW. He directed the GW Chapter of the Student National Medical Association (SNMA) and served on SNMA's National Board of Directors. These and other accomplishments lead to Kenechi's 2006 selection as 1 of 10 American Medical Association Minority Scholars in the country. In 2008 during his third year of medical school, Kenechi received a Sarnoff Foundation Research Fellowship and joined the lab of Dr. Sekar Kathiresan at MGH/Harvard and the Broad Institute of Harvard/MIT. Kenechi's focus was on statistical analysis of SNPs in common disease, and he led a GWAS study of approximately 8,000 African-American patients. Upon graduation from medical school, Kenechi joined the Kathiresan lab as a Research Scientist and in 2011 was recruited as a Senior Scientist to join Moderna Therapeutics, an RNA-based personalized medicine start-up company based out of Harvard and founded by Flagship Ventures. Moderna is pioneering an entirely new drug modality using mRNA therapeutics to produce, in vivo, human proteins or antibodies inside patient cells that are in turn active intracellularly or secreted into the serum. As a member of the founding scientific team, he was involved in duediligence activities, IP strategy/execution, and conducted medical needs assessments of potential IND candidates. In 2013, Moderna entered into an exclusive research agreement with AztraZeneca and Alexion Pharmaceuticals. Kenechi has co-authored over 9 peer-reviewed journal articles including in Nature (x2), Nature Genetics, PLoS Genetics (x2), and Human Genetics. He is also named as an Inventor on 12 patent pending applications. For part of the past year, Kenechi worked in Mount Sinai's Division of Psychiatric Genomics where, under Pamela Sklar and Kristen Brennand, he worked to establish disease models for schizophrenia using human induced pluripotent cells and investigated candidate genes of interest for biological follow-up using TALEN-based approaches. Currently a PGY-1 resident in psychiatry at Mount Sinai, Kenechi will be among the inaugural class for our NIH-funded PhD + Residency program.





Tiffany Christian, MD

UNDERGRADUATE: University of Michigan, BS, Psychology MEDICAL: Northwestern University The Feinberg School of Medicine

As a child in the first Hispanic family on the block, Tiffany was driven toward cultural reconnaissance. Always curious, she ambitiously sought out new experiences, like driving forty miles three times a week for her first job as a box office attendant at a historic film theater in Detroit. Listening, learning, and imagining became favorite pastimes, which she cultivated into a

full scholarship for academic excellence at the University of Michigan. Curiosity continued to motivate her, and psychiatry was not long behind. Much of her non-curricular work in medical school, and before, has involved studying the differential experiences of varied groups of patients in varied settings. She travelled to prisons across Michigan, inspiring creative projects and helping curate a gallery opening showcasing prisoner's artwork. As the treasurer of AMWA, she helped high school girls develop an interest in the health sciences. She's studied the obstacles faced by low-income families, especially in their interactions with Chicago's healthcare system. She studied therapeutic interventions for women with perinatal depression. Also curious about the approaches and experiences of different professionals working with similar patients, she collected and analyzed data comparing the assessments of children's mental health made by child psychiatrists to those of school psychologists; this project broadened to a study of discrepancies between help-needed and help-received in public school settings.



Samantha Cumper, MD

UNDERGRADUATE: University of Nebraska, BSE, Mechanical and International Engineering MEDICAL: Albert Einstein College of Medicine

The recipient of multiple collegiate awards and scholarships, including from NASA, Sam was slated to enter a career in international engineering. She coordinated committees on engineering applications for water sanitation, water obtainment, solar panels, and clean burning stoves, worked as an oilfield service intern, supported production in a precision machining facility, and helped to

characterize and model plasma properties to increase the efficiency of High Power Impulse Magnetron Sputtering to more efficiently deposit thin layers of metal onto surfaces. As the president of Engineers Without Borders, she led work leading to a project in rural Madagascar. She was the chapter president of the International Association for Exchange of Students for Technical Experiences. However, as Sam was deeply moved by the burdens of illness and poverty she encountered in international settings, she decided to enter medical school, with a focus on technological innovation. She initially matriculated into the MD/PhD program where she sought to develop artificial aptamers for diagnosing and treating Plasmodium falciparum malaria. However, reflecting on the monumental psychological impact of the global lack of basic needs, as well as local homelessness and rampant drug use in the South Bronx, she redirected her attention toward psychiatry, with a focus on global health and addiction. Sam won a Global Health Fellowship award to work in Uganda and recently worked with Mount Sinai's global mental health program in St. Vincent and the Grenadines.





Linda Drozdowicz, MD

UNDERGRADUATE: University of Connecticut, BS, Molecular & Cell Biology

MEDICAL: Mayo Medical School

The top liberal arts and sciences scholar in her university graduating class, Linda studied dopaminergic innervation of the subventricular zone in the murine brain and published in the *Journal of Neuroscience*. Linda is also a musician who started singing with professional choirs at age 10. She has performed in Carnegie Hall, Lincoln Center, and the Shubert Theater, as well as

gone on tours in South Africa, Germany, Sweden, and England, including a performance with Diana Ross. During medical school, she taught herself to play the ukulele and guitar and was hired as the opening act for multiple concerts at the Rochester Civic Theater. Linda's work was published by and honored with an award from AOA for her essay detailing her encounters playing ukulele for a patient. Linda has engaged in many research projects during medical school, including in Psychiatry, Ob/Gyn, Palliative Medicine, and Medical Education. Her work has been published in Contraception, The Journal of Reproductive Medicine, The Journal of Heart and Lung Transplantation, and Medical Science Educator, and she has presented at national and international conferences. She studied suicide scripts as a predictor of eventual lethality and recently published a synthetic review on psychiatric adverse effects of pediatric corticosteroid use. She led a workshop for adolescent girls at the South Sudanese Youth Conference focusing on self-care, sexuality, and education, as well as an unrelated men's domestic violence rehabilitation group. Linda is a mentor, a teacher, a "Clown Doc (in training)," and was a Spanish interpreter in Honduras and at the UConn Migrant Farm Worker Clinic.



Irene Epshteyn, MD

UNDERGRADUATE: Tufts University, BA, English MEDICAL: SUNY Downstate College of Medicine

Irene was born in Babruysk, Belarus. Now at Downstate, she has been awarded AOA and is a member of the Honors Track Advanced Neuroscience Pathway program. Prior to beginning medical school, Irene worked for 2 years as a medical assistant, phlebotomist, and patient care

coordinator at a medical practice in Brooklyn, taking histories, managing the front desk, and coordinating patients' continuity of care. During this time, she also worked in hospice care for team-management of terminally ill patients. In medical school, she conducted research with Dr. Jeremy Coplan, studying the effects of early life stress on cardiovascular parameters in nonhuman primates. In NYU's InSPIRES program, she interned under the mentorship of Dr. Dolores Malaspina, initiating a research project on the role of learned helplessness in schizophrenia. With no direct measure of learned helplessness in the battery of psychological tests for schizophrenia, she analyzed components of a cognitive assessment to identify a test which best approximates the phenomenon; she later adapted a learned helplessness scale for use in the schizophrenic population that Dr. Malaspina's team continues to apply. Irene is fluent in Russian. She raised money for and helped build a home for a family in rural Mexico. She practices yoga daily.





Jessie Hanna, MD

UNDERGRADUATE: Rutgers University, BS, Exercise Science MEDICAL: Rutgers, Robert Wood Johnson Medical School

Jessie is the first member of his family to enter college. In 2007, he founded the non-profit Sean Hanna Foundation in honor of his brother who passed away from cancer; he remains the Executive Director and is responsible for day-to-day operations, including developing business plans and overseeing staff, membership, budget, taxes, marketing, revenue generating activities,

company assets, and all other company resources. Jessie has led numerous blood and bone marrow drives/initiatives, and received multiple commendations. In 2007 he received the US Senate's National Jefferson Award for Public Service, and in 2010 the US Presidential Call to Service Award. He is currently a consultant working with the Rwandan Ambassador to the UN, as part of a team tasked with creating a pediatric cancer hospital in Kigali, Rwanda. He has been invited to the White House's Arab American Leader Summit. His commitment to service has continued to garner praise and distinction, leading to nearly a dozen additional awards and scholarships, including a tuition scholarship to medical school, where Jessie continued to flourish. He developed tools that teach psychiatry through plot and character analysis, and he developed and analyzed interactive modules to teach medical students fundamental concepts of disease progression through radiology; for this he received the Cum Laude Ribbon by The Society of Thoracic Radiology, and his work was published in *Medical Education*. He has given numerous presentations and written peer-reviewed publications in varied fields. Jessie has continuously maintained employment during his academic pursuits to provide support to his family, and he has been inducted into the Gold Humanism Honor Society.



Lisa Linde, MD

UNDERGRADUATE: Cornell University, BA, Biology

MEDICAL: SUNY Buffalo School of Medicine & Biomedical Sciences

Lisa will graduate AOA from SUNY Buffalo. One of her primary interests includes the clinical, educational, and administrative approaches to the LGBT population, with a goal to ameliorate the higher rates of depression, substance abuse, and suicide. In college, she was co-President of the Gay-Straight-Alliance, and her commitment to service continued in medical school as Vice President of

Community Service for the SUNY Buffalo AMA chapter, to which she brought a heightened focus on LGBT health in addition to community work. Most recently she began working with the Office of Medical Education to better incorporate unique LGBT health issues into medical education. Prior to medical school, she conducted research at Weill Cornell studying the role of oxidative stress in the development of preeclampsia. At Georgetown she investigated the role of specific genes involved in vasopressin-induced antidiuresis, and she helped develop a model to study cerebral salt-wasting in subarachnoid hemorrhage and cultured bone marrow cells to compare osteoclast levels in hyponatremic and normonatremic rats. She was an EMT in college, and lived with families in Guatemala and Guadeloupe. She played trumpet in the Cornell band throughout undergrad, performing at football, basketball, hockey, and lacrosse games.



Lea Marin, MD, MPH

UNDERGRADUATE: University of Pennsylvania, BA, Fine Arts GRADUATE: Icahn School of Medicine at Mount Sinai, MPH MEDICAL: Icahn School of Medicine at Mount Sinai

Lea entered Mount Sinai through the Humanities and Medicine Program and the dual MD/MPH program. She has been described as the "ideal blend of humanities and science, of medicine and art," having been a leader in these areas throughout her medical school career. She founded, produced, and acted in Mount Sinai's production of The Vagina Monologues, raising more than \$30,000 for charities working to end violence against women. She founded V-Day at Mount Sinai. She founded the Sinai History of Medicine Society. She designed community health fairs, mentored students, taught children, curated the student art exhibition, and was Editor-in-Chief of Mount Sinai Mosaic: Art and Literary Magazine. For her MPH, she interned at the NYC Department of Health and Mental Hygiene, where she studied psychological and physical exposures from 9/11. She also evaluated health care educational needs of 10,674 community leaders from 56 East Harlem organizations; her results informed the curriculum of The Mount Sinai Community Roundtable: a 12-month course aimed at improving public health in East Harlem. Lea won the Humanities and Medicine Program Design Award, the Dean's Office Medical Student "Renaissance" Award, and the Student Council Award of Excellence. She is experienced in American Sign Language.



Brenda Ratemo, MD

UNDERGRADUATE: Xavier University, BS, Natural Science MEDICAL: Geisel School of Medicine at Dartmouth

Brenda grew up in Nairobi, Kenya where she witnessed first-hand the global stigma against mental illness. Over the course of her academic career, these experiences have led her to become increasingly involved in community outreach activities. As an undergraduate, she was awarded a Brueggeman Fellowship, which awarded her time to conduct independent research on the Kenyan health care system. This and other public health and humanity-focused projects led her to be the

recipient of multiple awards, many for leadership. In medical school, she was on the board of the Student National Medical Association, which involved her in further outreach activities, both in the community as well as among minority medical students. One of only a few students awarded an Albert Schweitzer Fellowship, she developed a program for elementary school students struggling to learn English. Brenda has published work—Beyond race and place: Distal sociological determinants of HIV disparities—in PLoS One, and she has conducted research on baby flamingoes in the Cincinnati zoo to identify respective parents. She is interested in developing a project to investigate ECT in Kenya.





Casey Smith, MD, JD

UNDERGRADUATE: University of Pennsylvania, BA, Psychology

Law: New York University School of Law, JD MEDICAL: Icahn School of Medicine at Mount Sinai

Growing up in Pittsburgh, Casey received a Presidential Scholarship to UPenn, where he joined Martin Seligman in studying the effect of diathesis and stress in interpersonal and achievement domains. Since that time, he has been continuously successful, initially as a corporate developer during a computer company's period of greatest expansion and IPO. Next came law school at NYU where he was Dean's Scholar. As a Litigation Associate at Latham & Watkins LLP, he focused on securities fraud, insider trading, money laundering, and drug trafficking. At Heller Ehrman LLP in San Francisco, Casey focused on commercial class actions, consumer fraud, and false advertising, while supervising and mentoring junior attorneys. Casey has given much of his time in pro bono work: successfully representing Tibetan Buddhists in asylum proceedings, petitioning for orders of protection for battered women, obtaining asylum for torture survivors, securing visas for trafficked children, protecting voters' rights, and founding his firm's relationship with Immigration Equality to represent applicants in sexual-orientation and HIV-status based asylum proceedings. With a longstanding commitment to providing service for individuals in crisis and finding his pro bono work the most satisfying, he made the difficult decision to change careers. In medical school Casey has continued to be a leader guided by compassion and was honored with the Gold Humanism Award. Recently, his academic interest has centered on medical students' exposure to patient suicide, hypothesizing individual students' differing levels of investment, maturity, and sensitivity, and whether and how to involve these students in post-suicide reviews and discussions. Casey serves on Mount Sinai's admission and promotions committees, and he runs marathons.



Che-Yu Jeffrey Tai, MD

UNDERGRADUATE: Yale university, BA, Psychology MEDICAL: Icahn School of Medicine at Mount Sinai

Jeffrey is a man of exceptionally broad talents and experiences. He is not only academically outstanding and a speaker of four languages, he also embodies a generosity of service as well as strong leadership and mentorship. Prior to medical school, Jeffrey explored a career in business as a hedge fund market researcher, analyzing the trucking, water, and bedding industries. He also spent

time as a sales and trading analyst at Morgan Stanley Hong Kong, researching companies in Asia ex-Japan for investment opportunities, monitoring merger arbitrage opportunities, and analyzing the renewable energy industry. He brought his business acumen to the Business in Medicine Group at Mount Sinai, and his ability to spot patterns to his research work in the Aging and Metabolism Lab at Mount Sinai, where he identified mediators of the protective effects of dietary restriction in a C. elegans model of Huntington's disease, providing novel targets for treatment. He has researched the effect of masked semantic relatedness on memory and cognition, and has synthesized 10,000 medical records looking for demographic predictors of adherence to medical treatment of TB in Asian-Americans. He founded the Huns Classical Arms Group, instructing students in classical weapons training, including sword, shield, spear, and bow, and he led team members in national and regional tournaments. He spent a summer in the US Marine Corps Officer Candidates School in Quantico, VA, as a Platoon Leaders Class Officer Candidate; he led a squad as fire team leader, worked to coordinate company actions, and trained in military leadership, military history, and strategy. He has a 2nd degree black belt.





Sara Wildstein, MD

UNDERGRADUATE: Macaulay Honors College at Queens College, BA, Art History and Honors in Math and Natural Science

MEDICAL: Albert Einstein College of Medicine

As a 4-year Howard Hughes Research Fellow, Sara investigated the contribution of neural activity to neuronal lifespan. Studying deaf and normal-hearing zebra finch songbirds, she found that neurogenesis in the song motor pathway correlated with the rate and extent of recovery from

Botox-induced paralysis of the vocal muscles, and that deafening decreases neuronal incorporation in the caudomedial nidopallium. Her work was published in the Journal of Neuroscience and Behavioral Brain Research. She has investigated corneal collagen crosslinking for progressive keratoconus and ectasia using riboflavin/dextran and hypotonic riboflavin. At Mount Sinai, before medical school, she studied how mutations in myocyte channel gating contribute to catecholaminergic polymorphic ventricular tachycardia. For her contributions to research as well as her overall academic success, Sara received many high honors, including the Chancellor's Awards for Academic Excellence & for Outstanding Leadership & Community Service, the University Scholar Award, the Jonas Salk Award for Scientific Research, and was honored with presenting the Baccalaureate Address at her college graduation. Most recently, she has been studying quality of life before and after bariatric surgery, specifically related to patient coping mechanisms, including analysis of "phantom fat," body image, and perception of self and relationships after weight loss. Sara is founder and president of the Albert Einstein division of Students 4 Growing Interest For Transplantation, and she has studied abroad in the Galapagos and in Paris.





Physician-Scientist Research Track

Drew Kiraly, MD, PhD

UNDERGRADUATE: Drew University, BA in Neurobiology, Magna

GRADUATE: PhD in Neuroscience, University of Connecticut School of Medicine

MEDICAL: University of Connecticut School of Medicine

A four-year college Presidential Scholar, member of multiple honor societies, and president of various undergraduate societies, Drew also played varsity lacrosse. He began his research career studying synaptic serotonin in SERT knockout mice, and soon moved to work with Dr. Jane Taylor at Yale, investigating animal models of drug addiction, chronic stress, and depression. He has received numerous awards for his research, including the Outstanding Scientific Presentation at the UConn Annual Neuroscience Symposium, and he was chosen as a supported fellow on a Department of Neuroscience NIH training grant for 2 years. To support his further doctoral work, Drew received a very prestigious F30 grant from the National Institutes on Drug Abuse for his proposed study of the roles of Kalirin-7 and the nucleus accumbens in cocainesignaling. Attempting to understand why the loss of one single gene affecting the organization of the actin cytoskeleton had the effects it did on anxiety-like behavior, fear conditioning, and sensitization to cocaine, Drew completed his doctoral dissertation in lab of Dr. Betty Eipper, characterizing the PSD-localized Rho-GEF Kalirin-7 in the mouse brain and investigating its role in learning and addictive-like behaviors, as well as neuronal morphology and NMDA receptor signaling. Using Kalirin-7 knockout mice (Kal7KO), experiments included modeling of cocaine abuse, contextual learning, anxiety, and characterization of dendritic spine changes before and after cocaine treatment. He determined a direct interaction between the Kalirin-7 protein and the NR2B subunit of the NMDA receptor which was critical for the behavioral abnormalities and NMDA receptor trafficking seen in the Kal7KO mice. His post-dissertation ongoing work includes investigating cocaine self-administration behaviors in Kalirin-7 knockout mice, quantitative phosphorylation changes in Kalirin-7 from mice treated with acute or chronic cocaine or amphetamine, and breeding floxed Kalirin-7 conditional knockout mice with mice expressing Cre-recombinase under control of the Dopamine-1 receptor or Dopamine-2 receptor promoter. Comprising his 15 published peer-reviewed journal articles. Drew has first author papers in *Biological* Psychiatry, Journal of Neuroscience, Journal of Proteome Research, and ACS Chemical Neuroscience. He has co-authored papers in Biological Psychiatry, Psychopharmacology, BMC Neuroscience, Psychopharmacology, Journal of Neuroscience, Genes, Brain & Behavior, Molecular Pharmacology, and RNA. He has presented his work at numerous national conferences, including many years' of posters at Society for Neuroscience. Not only is Drew an accomplished researcher, he is an outstanding teacher and public speaker. During his PhD training years, he was repeatedly selected to speak at sessions designed to attract new students, and several of his protégés have since transferred their career paths to neuroscience.





Physician-Scientist Research Track

Kenechi Ejebe, MD

UNDERGRADUATE: Carleton College, BA in Biology

MEDICAL: George Washington University School of Medicine

Born in Enugu, Nigeria to a professor and a judge, Kenechi immigrated to Plymouth, Minnesota when he was 8 years old. Despite first learning English through ESL classes, he eventually went on to compete in speech and debate tournaments in high school, and he has since excelled in academic pursuits and leadership. During college summers, Kenechi worked on an independent research project funded by the National Science Foundation, examining the genetics of legume inflorescence architecture. He was awarded the Larson International Fellowship during his junior year and traveled to Southern China and Hong Kong to investigate how traditional dietary systems play a role in culture. As a college senior, he earned first-place honors at the Harvard World Model UN Conference in Belo Horizonte, Brazil, and he was selected to be Carleton College's Class of 2002 Commencement Speaker. After college, Kenechi spent 2 years as an Intramural Training Award Fellow at NIH where he characterized the function of a critical enzyme in HIV, publishing his work in the *Journal* of Virology. In medical school, Kenechi enrolled in the Global Health Track and spent his first summer as an intern at the World Health Organization in Geneva, Switzerland. There he worked with the Prevention of Mother-to-Child Transmission of HIV/AIDS team to develop guidelines for baseline assessment and implementation of programs to prevent HIV infections in infants and young children. At GW med school, he served as the chapter co-Leader of Physicians for Human Rights and organized a healthcare disparities conference featuring former Health & Human Services Secretary Dr. Louis Sullivan as keynote speaker. He was co-President of the GW chapter of the Student National Medical Association for 2 years and on SNMA's national Board of Directors for 1 year. He chaired the International Health Committee and coordinated international medical missions to Kenya and Guatemala. These and other accomplishments led to Kenechi's selection as an AMA Minority Scholar; he was 1 of 10 students in the country to receive this \$10,000 prize. After his third year of medical school, Kenechi was awarded a Sarnoff Cardiovascular Research Fellowship, and spent a year at Massachusetts General Hospital where he conducted a genome-wide association study testing single nucleotide polymorphisms for association to several phenotypes in approximately 8,000 African-American patients. He has coauthored papers in Nature (x2), Nature Genetics, PLoS Genetics (x2), and Human Genetics. For part of the past year, Kenechi worked in Mount Sinai's Division of Psychiatric Genomics where, under Pamela Sklar, he worked to establish disease models for schizophrenia using human induced pluripotent cells and investigated candidate genes of interest for follow-up work from genome-wide association studies.





Jesse Astwood, MD

UNDERGRADUATE: CUNY Brooklyn College, BA in History, Phi Beta Kappa

MEDICAL: SUNY Downstate College of Medicine

Jesse entered medical school through the highly competitive CUNY/SUNY combined BA/MD program, where his adept curiosity led to his graduating medical school in the top of his class. With interests and activities ranging from gardening, cooking, and media analysis to paleontology, criminology, and sociobiology, he has written on the psychopathology inherent in superhero and

apocalyptic stories. He also has dissected and reconstructed whale and other marine mammal skeletons in Mount Sinai's evolutionary biology laboratory. He has been responsible for a culinary after-school program for at-risk inner city high school kids, post-produced animated films, and made his way as a weekly humor columnist.



Claire Brandon, MD

UNDERGRADUATE: Capital University, BA in Biology, *Summa* MEDICAL: Wright State University School of Medicine

Winning an aptly named Human Development Award early in her training, Claire was elected President of her school's American Medical Women's Association, Officer of the American Medical Association, Committee Chair of the American Medical Student Association, and four-times re-elected as the rep to the Honor Code Committee. She has studied the attitudes of residents in various

specialties toward borderline personality disorder with an aim to identify possible education deficits in training, and she has written CME teaching tools in peer-reviewed online indexes. She has also published findings on the various aspects of genetically-modified foods in the US and Latin America, noting inappropriate labeling on commonly consumed products. A lifelong musician, she has served as her congregation's head violinist for nearly a decade.



Judy Burke, MD

UNDERGRADUATE: Bryn Mawr College, BA in Music MEDICAL: SUNY Downstate College of Medicine

Graduating with a degree in music, Judy found a career path first working at the US Department of State as an IT consultant, then as an online programmer, then spending a number of years supporting daily operations of multiple small construction subcontractors, and finally owning and operating a small eponymous construction-subcontracting firm which performed demolition and concrete

installation projects. Judy subsequently entered medical school in the four-year Clinical Neurosciences Pathway, where she assumed ongoing leadership as a multi-year president of the psychiatry student interest group, regional chair of PsychSIGN, and three-year editor of the student literary and arts publication. Pursuing her interest in geriatric psychiatry, she has studied the impact of changes in home care delivery systems on caregiver burden and patients' neuropsychiatric symptoms. Judy has played violin in many small orchestras, and for over a decade has played fiddle in a country rock band.





Kara Gulewicz, MD, MA

UNDERGRADUATE: Cornell University, BA in Neurobiology, *Magna* MEDICAL: Combined MA/MD, Washington University in St. Louis School of Medicine

Receiving honors in nearly every course throughout medical school, Kara has a distinguished history of academic success, research, and writing. In college, she researched sleep and memory in humans, before turning her attention to female hamsters' behavior and neural activation: she wondered whether captivity could lead to inter-species mating. She published this work in *Behavioral Neuroscience* and

the Journal of Zoology. Early in medical school, Kara published on alopecia produced by sustained signaling in follicle matrix cells. She later studied regulatory variants in atopic dermatitis, receiving a Masters Degree and publishing in the Journal of Investigative Dermatology and in the Journal of Allergy and Clinical Immunology. Kara was selected as a Theme Issue Editor for the AMA's Journal of Ethics, Virtual Mentor. She focused on how physicians can ethically approach patients' use of complementary and alternative medicine, eliciting contributions from skeptics and proponents, including Deepak Chopra and Skeptic magazine. She was recently invited to give a grand rounds presentation at Wash U on the nature of an expert witness.



Alfredo Gutierrez, MD

UNDERGRADUATE: Rice University, BA in Psychology MEDICAL: Baylor College of Medicine

Alfredo has a longstanding record of leadership, community service, working with underserved populations, and facilitating student wellness. In addition to his role with the College Assistance Peer Program helping students with mental, emotional, and health issues, he has held executive positions in the Hispanic Association for Cultural Enrichment at Rice and the Latino Medical Student Association

(LMSA) at Baylor. He helped construct a women's resource center in Guatemala, and as 1 of 10 students awarded a fellowship by the Center for Civic Engagement at Rice, he worked for the Amazon Community and Indigenous Health Program in Ecuador. Between college and medical school, Alfredo worked full-time at the Children's Nutrition Research Center, analyzing the effects of a school-based weight management program on Hispanic middle school students. He elaborated upon this work and developed a manual to assist elementary schools in incorporating health intervention programs. As a medical student, Alfredo participated in Baylor's Underserved Community Track and created informational videos on STIs and contraception for the Baylor Teen Health Clinic. He is fluent in Spanish.





Theresa Mauro, MD

UNDERGRADUATE: Canisius College, BS in Biology, *Summa* MEDICAL: Georgetown University School of Medicine

In college, Theresa was recognized as the top student in biology. Long interested in developing systems to provide care to the underserved, she led a co-ed international business fraternity, cultivating a lasting partnership with the local community to provide mentors for underserved children. She has worked in drug and alcohol rehabilitation for adolescents, developed relaxation training for girls aging out of foster

care, and presented at Washington D.C.'s National Summit of Clinicians for Healthcare Justice as well as the Annual Conference on Intercultural Relations. Bringing her interests to bear on delivery of mental health services, she has examined how cultural beliefs contribute to mental health help-seeking disparities among racially and ethnically diverse youth, with a goal to eventually implement programs to meet the needs of these populations. Also an outstanding clinician, her recorded clinical exams in medical school were chosen as a model for training upcoming students. Throughout her studies, Theresa has been employed as a science tutor, a physical therapy technician, and a manager at Starbucks.



Travis Meadows, MD

UNDERGRADUATE: Emory University, BA in Chemistry and Women's Studies MEDICAL: Medical University of South Carolina School of Medicine

Travis graduated early from Emory, where he was recognized as one of the top 25 students who demonstrated promise for the future. He received multiple service awards for his work with students in the community as well as for leadership of his peers, and he was nominated to be Emory's NAACP Man of the Year. In medical school, Travis continued to excel as a leader and was selected as a Presidential

Scholar for his commitment to interdisciplinary discussion and collaboration exploring complex social, political, and humanitarian issues. Travis was a peer mentor in MUSC's Office of Diversity, a mentor to male African-American high school and college students interested in careers in medicine, and he served as a faculty advisor for 25 high school students enrolled in the intensive National Youth Leadership Forum on Medicine. As a senior medical student, Travis was selected to for an elective in Psychiatry at Mount Sinai, sponsored by the Visiting Elective Program for Students Underrepresented in Medicine (VEPSUM). He was also awarded the American Psychiatric Association Minority Student Travel Award.



Justin Meyer, MD

UNDERGRADUATE: Boston University, BA in Biology and Psychology, *Magna* MEDICAL: State University of New York Upstate Medical University

Graduating medical school in the top of his class, Justin has been recognized for excellence in clinical care, leadership, compassion, and a dedication to service that has been lauded by both his faculty and peers. He was elected to the Gold Humanism Honor Society, received multiple Dean's Letters of

Commendation for his academic work, was chosen to represent medical students' interests at the LCME Student Self Study Committee for AAMC accreditation, and was chosen as a Resident Assistant to counsel peers with academic or social issues. He held executive positions in the Psychiatry Interest Group and the Student Interest Group in Neurology, and he worked to ignite local high school students' interest in the brain. He tutored extensively in Biochemistry, Microbiology, Pharmacology, and Pathology. Faculty members have noted that they would choose him to treat their loved ones.





Katherine Pier, MD

UNDERGRADUATE: University of Pennsylvania, BA in Psychology, Summa

MEDICAL: Icahn School of Medicine at Mount Sinai

An active teacher, organizer, leader, and writer, Kate entered Mount Sinai through the Humanities and Medicine Program. As Editor-in-Chief of Mount Sinai's art and literature magazine, she reinvigorated readership and funding. She helped pioneer Mount Sinai's first production of Vagina Monologues and organized fundraising for antiviolence/anti-abuse campaigns. She has been a mentor to first-year

students, a tutor/TA in six classes, and a weekly seminar leader in Art and Science of Medicine. As president of the psychiatry student interest group, she devised a highly attended event featuring psychiatry, cosmetic plastic surgery, and cosmetic dermatology, and she is now investigating the prevalence of body dysmorphic disorder in patients undergoing cosmetic procedures. Working in Eric Nestler's lab, she presented findings on ketamine as a novel antidepressant for stress-induced pathology in mice, and she published a first author case report in the *American Journal of Geriatric Psychiatry* on ECT for depression misdiagnosed as dementia. Kate lived in Argentina for a year before medical school, working in sales and designing ESL classes for orphans in Buenos Aires.



Rishi Sawhney, MD

UNDERGRADUATE: University of Texas Austin, BA in Finance

MEDICAL: Baylor College of Medicine

Rishi has excelled in service and leadership. He was president of the UT chapter of Circle K International, for which he won the Most Outstanding President Award and his chapter the Most Outstanding Chapter Award, for the Texas-Oklahoma district. He created an alliance between Texas School for the Deaf and schools for the deaf in Mali, which included winning a funding grant from the

Clinton Global Initiative. He further bridged his healthcare and business knowledge while interning at Gerson Lehrman Group. In medical school, Rishi founded and was co-president of Primary Care Progress, recruiting faculty members, receiving grants, and connecting students with quality improvement projects across the city. He was class rep for 3 years and delegate to the AMA. He served as Region 3 (TX, OK, KA, LA, AK, MS) Chair for the AMA's annual conference and as Vice Chair of a National Standing Coordination Committee. He worked to develop the curriculum for Baylor's Medicine and Management Elective as well as a series of lectures for students on psychiatry clerkships, and he has been mentor to a dozen first year students. Rishi has researched the relationship between testosterone/cortisol levels and motivation/actions in game theory experiments.





Kevin Zhang, MD

UNDERGRADUATE: University of Southern California, BA in Biology

MEDICAL: Baylor College of Medicine

Moving from China to the US at 5, Kevin grew up in New Mexico, Minnesota, and numerous points in between. In college, he was named a Renaissance Scholar for his ability to excel in widely different academic realms. He evaluated progenitor cell retinal transplantation in rats and published his work in the *Journal of Neuroscience Methods*. His faculty and peers chose him to develop a supplemental

curriculum to the core physics course at USC, and he taught 4 sessions per week for 150 students. He also taught physics to gifted high school students and nutrition to underserved middle schoolers. He co-founded an organization to coordinate a healthcare trip to El Salvador and created a lasting USC presence in the country; the organization eventually involved over 22 members per year. He has spent summers in the Middle East, China, and Thailand to gain a greater understanding of global affairs. Fluent in Chinese, he rotated in internal medicine at Jiao Tong University's Hospital in Shanghai. Awarded a merit scholarship to Baylor, Kevin continued his record of excellence on varied fronts, including completing research leading to publications in the *American Journal of Ophthalmology, Cornea, Journal of Glaucoma*, and *Dermatology Online*. He enjoys writing music and has developed a psychology and relationships social network site.



Rachel Zhuk, MD

UNDERGRADUATE: Stanford University, BA in Philosophy MEDICAL: Icahn School of Medicine at Mount Sinai

Rachel is a leader with a commitment to caring for vulnerable populations. She planned and co-led trainings in group communication and leadership for Palestinian, Israeli, and American teenage women, later translating her experiences into a novel course she created at Stanford. After college, she worked in healthcare policy at the National Center for Children in Poverty where she examined public

assistance programs, presenting her work to advocates and policy-makers. In medical school, she was one of 12 students competitively selected for a longitudinal ambulatory care rotation spanning the 3rd year. This experience informed further leadership work in Mount Sinai's student-run free clinic in which she was a teaching senior, co-coordinator for HIV testing, and one of the student founders of the rapid HIV testing program. She created and delivered HIV counseling training to students and managed staffing, materials, and interface with the general clinic during the program's first year. She has presented scholarly work related to the clinic at Medicine Grand Rounds and nationally at the annual meeting of the Society for General Internal Medicine. She has also been an active leader in advancing medical students' knowledge of complementary and alternative medicine. She has researched CAM's role in palliative care for children with cancer and has contributed to Mount Sinai's recently accepted application to the Consortium of Academic Health Centers for Integrative Medicine. She was the president of Students for Integrative Medicine and the curriculum director of an AMSA-sponsored rotation in Alternative Medicine. She is a yoga instructor and has studied traditional Chinese medicine at the Yunnan Provincial Chinese Medicine Hospital.





Incoming PGY-2 Resident

Kimberly Schreiber, MD

UNDERGRADUATE: Loyola University, BA in Psychology, Cum Laude

MEDICAL: Loyola University College of Medicine

INTERNSHIP AND RESIDENCY: Obstetrics and Gynecology at Lenox Hill Hospital

Kimberly comes to us having completed 2 years of an Ob-Gyn residency. Kim was born and raised in Chicago, and took an early interest in studying the mind, writing her honors thesis on adolescent conduct disorder and ameliorative parental behavior training. After several years of full-time cancer research followed by volunteering in the far reaches of Appalachia, she worked full-time for 4 years as a counselor in an inpatient psychiatric unit, initially with geriatric patients and then with acutely ill adults. She ran group therapies, mastered crisis-intervention techniques for use with violent patients, and served as a task force representative to improve patient care. She was subsequently awarded a Harvard internship to train in aging-related research, and she soon published work on delirium (*Journal of Clinical Outcomes Management*) and on postoperative cognitive decline after cardiac surgery (*Acta Anaesthesiologica Scandinavica*). In her clinical clerkships, she experienced an unforeseen passion for obstetrics and pursued an Ob-Gyn residency with a goal to provide a psychiatrically-informed approach to women's health. However, practicing psychiatry persisted as an unmet aspiration, and it is our good fortune that she's now returning to her longstanding interest in mental health care.





Amelia Nebenhaus

UNDERGRADUATE: Wesleyan University, BA in Classics MEDICAL SCHOOL: Mount Sinai School of Medicine

From Wesleyan and with a brief stint at the Intercollegiate Center for Classical Studies in Rome, Amy entered Mount Sinai through the Humanities and Medicine Program. She has had success in both her dedication to service and in teaching and curricular development. She organized the largest student-run event at the medical center and chaired a 20-person steering committee to provide health education and resources to the East Harlem community. She has held leadership positions in various educational areas, including recruiting faculty to teach in an after school program she coordinated and whose curriculum she designed, and being named Head of Teacher Training for the Sexual Health Group at Mount Sinai. This is in addition to her multiple concurrent roles as mentor, tutor, and TA. True to her seemingly native ability to lead, Amy was the coxswain and Captain of the Wesleyan Women's Varsity Crew team.



Amy Glick

UNDERGRADUATE: Columbia University, BA in Psychology

MEDICAL SCHOOL: Jefferson Medical College

Amy has balanced a passion for adventure, an academic inquisitiveness, and a thoughtful curiosity of the impairments of the mind and brain. In college, she was a manager at an historic acoustic folk music venue, a leader for 3-day long canoeing trips, and a first-responder for the Israeli Red Cross. She studied primate cognition in Columbia's Behavioral Psychology lab and collected data on the spatial performance of NMDA knock-out mice in Eric Kandel's lab. She designed a curriculum for art, science, and English literature while teaching at a bilingual school in southwestern Honduras, and she worked side-by-side with members with mental illnesses in a clubhouse setting. Adding administrative activities into the mix, Amy sat on the Steering Committee of her school's student-run clinic for the uninsured.





Brian Fuchs, MPH

UNDERGRADUATE: Harvard University, BA in Economics, *Magna Cum Laude* GRADUATE: Columbia University Mailman School of Public Health, MPH

MEDICAL SCHOOL: Harvard Medical School

Brian graduated Harvard having been named a Harvard College Scholar, a John Harvard Scholar, and a Justice Brandeis Scholar. He has a long record of leadership, research success, and work with the disabled. As a college senior and for 4 years after, he served as a director of the National association for the Visually Handicapped. After college Brian studied psoriasis and eosinophilic fasciitis in the Mount Sinai Department of Dermatology, where he co-authored multiple chapters and peer-reviewed articles. Subsequently, while in an MPH program at Columbia, he co-authored a peer-reviewed article on vision loss in pseudoxanthoma elasticum. In medical school, Brian founded and was the president of the Benjamin Rush Society, also serving on its national board that includes chapters at 15 other schools. Brian was a representative on the Student Governing Council of the Massachusetts Medical Society committee on disaster preparedness and public health. Additionally, his work on several research projects concerning children with intellectual disability living in residential care centers in Israel has resulted in his co-authoring over ten articles and book chapters.



Jake Rosenberg

UNDERGRADUATE: University of Pennsylvania,

Wharton School, BS in Economics and Health Care Management

School of Engineering & Applied Science, BAS in Health Care Systems

MEDICAL SCHOOL: SUNY Downstate College of Medicine

Jake's interests have ranged along academic, artistic, and systems-based economic explorations and applications. Jake studied economic policy at UPenn and worked in the Firearm Injury Center analyzing how to reduce intentional injury and improve outcomes. After graduation, he took a position as the sole financial analyst for the \$85M affiliation contract between NYU School of Medicine and Bellevue Hospital. At the time, Jake also spent his nights crafting songs and performing in clubs. Realizing that psychiatry could meld his interests, Jake entered medical school, directed a nutrition fair, and presided over the local Medical Artists Guild. He created a foundation to oversee the collection and donation of student microscopes rendered obsolete in the school's transition to a computer based histology curriculum, and he collaborated with local non-profit agencies to ship the donated equipment to Mexico, Haiti, and Africa, where the microscopes are now used in local health clinics. Jake has helped develop a new curriculum for Downstate, has studied at the Hong Kong University of Science and Technology, and is the son of a psychiatrist.





Jennifer O'Keeffe

UNDERGRADUATE: Tulane University, BS in Neuroscience, Summa Cum Laude

MEDICAL SCHOOL: Albert Einstein College of Medicine

Prior to matriculating at Albert Einstein, Jennifer graduated in the top 15 students of her college class, earning awards for being most distinguished in community service and academic merit. She has received 4-year merit-based academic scholarships to college and medical school, the latter for demonstrated leadership, service to the community, and academic and research excellence. Elected by her peers to serve as Community Service Chair for the AMA, Jennifer organized community events and led AMA meetings with other officers to encourage community service. She is also driven by research interests. She has performed craniotomies on rats, injecting their brains with a modified herpes virus to facilitate brain pathway tracking for future research, and at Tulane she developed an honors thesis from her research on muscarinic receptors in homogenized rat brains. After her first year at Einstein, she was awarded a grant to work in pediatric cardiothoracic surgery, was the first-assistant in several premature infant patent ductus arteriosus repairs, and was the primary author on a clinical research-based case report; "An Interesting Vascular Ring." To round out the picture, during summer and winter breaks, she worked as a Medical Assistant for a clinic on Long Island, often working at the front desk to become familiar with insurance reimbursement and patient coverage information. The American Academy of Child and Adolescent Psychiatry selected her to be featured in an upcoming monthly journal.



Ilana Jerud, MA, MPH

UNDERGRADUATE: University of Pennsylvania, BA in Psychology

GRADUATE: Columbia University Mailman School of Public Health, MPH

GRADUATE: University of Pennsylvania, MA in Bioethics

MEDICAL SCHOOL: Jefferson Medical College

Ilana's ability to bring people together for humanitarian pursuits has been a fixture throughout her educational career. She was an emergency medical technician throughout high school, before subsequently founding the University of Pennsylvania's medical emergency response team. She founded, organized, and raised funds for a yearly festival that brings physicians, dentists, and other health care professionals together to provide free health check-ups and nutritional education for children. She organized a fundraiser that raised money for an entity that connects American students with Ugandan students in an effort to share knowledge about AIDS, and she organized the first concert in a tour to raise additional money for the organization. She organized and marketed a 600-person fundraiser to support disaster relief after the Haiti earthquake. She is currently an organizer for a methadone maintenance program, working to advocate for continued access to methadone therapy and lobbying against proposed state legislation limiting payment for methadone treatment. Ilana is fluent in Hebrew and will have completed two Masters degrees at graduation from medical school.



Laura Powers

UNDERGRADUATE: Harvard University, BA in Sociology MEDICAL SCHOOL: Mount Sinai School of Medicine

Laura entered Mount Sinai through the Humanities and Medicine Program. At Harvard, Laura found a drive to study and work in community service, where she began to focus her attention on working with children and adolescents. From her early experiences as a tutor and mentor, she grew to become director at different community-based programs, including one working to foster a sense of community and cultural identity among Boston's Native American youth and empowering future leaders from that community. In medical school, Laura has worked with the Child Life Department to develop a new Medical Student Experience component of the program, facilitating student participants' integrating medical learning with service experience. Furthering her interest and efforts in outreach, Laura has been working with the Department of Child and Adolescent Psychiatry at Mount Sinai to design a protocol studying the prevalence of psychiatric illness in Mount Sinai's Pediatric Hematology/Oncology clinic. Her commitment to service has earned her recognition in college and medical school, and she's been the recipient of awards for dedication, creativity in service, and this year's outstanding graduating student in psychiatry.

Olanrewaju Dokun



UNDERGRADUATE: Brown University, BA in Psychology & Philosophy MEDICAL SCHOOL: Mount Sinai School of Medicine

Born in a rural Nigerian village and fluent in Yoruba, Lanre is driven to psychiatry to help open doors for people who are often marginalized and forced into the fringes in the hopes that they may realize their potentials. At Brown, Lanre dedicated himself to service, helping to create and coordinate programs to provide advising and support for struggling students. He has worked as a research assistant on numerous projects, including studies looking at the relationship between serious mental illness and HIV, and those concerning adult developmental disorders. He also taught social skills to adults with Autism Spectrum Disorders. At Mount Sinai, Lanre played a vital role in introducing mental health care to the student-run clinic for the uninsured, where he has held administrative, managerial, and provider positions. Lanre is currently studying the role and impact of diversity on the quality of medical education for minority medical students and physicians, including the perceived effect of diversity and race on career progress, goals, and the delivery of medical care.





Mariana Schmajuk

UNDERGRADUATE: Duke University, BS in Psychology MEDICAL SCHOOL: Boston University School of Medicine

Born in Buenos Aires, Argentina, and a native Spanish speaker, Mariana grew up with a love of music, playing piano and giving concerts in which she soloed. Her interest in neuroscience began with high school projects at Duke University and continued through college when she worked at Duke's Center for Cognitive Neuroscience. She designed, executed, and analyzed experiments using ERPs to investigate response inhibition in normal adults, creating a model to demonstrate how such mechanisms might be translated in ADHD. Her work was published as a first authored paper in *Neuropsychologia*. Mariana delved further into research during an Intramural Research Training Fellowship at NIMH under Ellen Leibenluft, in which Mariana examined the pathophysiology of pediatric bipolar disorder, studying attention, memory function, emotional response and regulation, reward processing, reaction time, and motor inhibition. She presented at multiple conferences and is a co-author on multiple publications, including 2 in *Biological Psychiatry*, 2 in *American Journal of Psychiatry*, and another in *Development and Psychopathology*. She has also worked in the Center for Neural Science at NYU, using electron microscopy to study the distribution of acetylcholine muscarinic receptors across the visual cortex in Rhesus macaques. Mariana is on the Executive Committee of the Clinical Neuroscience Society.



Nicholas Stevens

UNDERGRADUATE: University of Oregon, Clark Honors College, BS in Biology

MEDICAL SCHOOL: SUNY Downstate College of Medicine

The recipient of multiple academic honors and scholarships, Nicholas graduated college with honors and distinction. For some time, he had been drawn to cognitive neuroscience, and his undergraduate thesis, "Identifying Core Consciousness in Animals," examined neuroscience from a broad and largely philosophical perspective. Continuing his interest in such domains, Nicholas received a Fulbright Scholarship and joined a neuropsychology laboratory at the Freie Universität in Berlin that uses fMRI and EEG to study language processing as a means to explore the neural correlates of emotions and decision making. His Fulbright focused on experimentation into the scientific and philosophical underpinnings of psychiatry, and he entered medical school to further study cognitive neuroscience in the applied context of alleviating suffering. Nicholas' interest in psychiatry reflects a gradual evolution from early philosophical and scientific interests in the human mind into a matured desire to apply this knowledge to improving clinical care. Nicholas has played cello since the fourth grade and has been a member of various chamber groups as well as the University of Oregon Symphony Orchestra. He is fluent in German.





Rachel Fischer

UNDERGRADUATE: Stony Brook University, BS in Biochemistry, Summa Cum Laude

MEDICAL SCHOOL: New York University School of Medicine

Rachel showed a flair for science since high school when she was a semifinalist for the Siemens/Westinghouse competition and the Intel Science Talent Competition. Her research involved signal transduction pathways and antigens in pancreatic cancer, which ultimately led to her isolating and cloning monoclonal antibodies in college. Rachel's accomplishments and leadership in this and other basic science research earned her scholarships and awards, including being selected as a senior WISE mentor. In medical school at NYU, she furthered an interest in helping many of those marginalized by society, from serving as an advertising director for the Special Olympics, to working to prevent deaths from opiate overdose. She created a program to educate patients in safer drug use and how to administer naloxone; a controversial topic in medicine and policy, Rachel took this as an occasion to study Physician Attitudes on Naloxone Overdose Prevention. She has worked in Bangkok with an international scientific-military collaboration which is on the cutting edge of research in tropical medicine and infectious disease. Rachel minored in cinema and cultural studies, has played guitar, bass, and drums since age 16, and has been in multiple bands, playing shows around the Northeast, and recording demos.



Stacy Henderson

UNDERGRADUATE: Washington and Lee University, BA in Psychology

MEDICAL SCHOOL: Jefferson Medical College

Stacy's enthusiasm for and prior life in teaching has influenced much of her work in medicine. During her years as a high school science teacher in Teach for America, Stacy worked with some of the most difficult student populations in the country. With these students, she founded and coached an Odyssey of the Mind program, and further developing her interest in child and adolescent psychiatry, her work involved implementing a strategy that prioritized restoring trust between students and teachers while holding students accountable for their actions. She also trained some of these students to run in the Philadelphia Marathon and other such races. In medical school, Stacy has developed educational curricula for both children and adults, including directing patient programs in medical literacy and programs in art for women on methadone living in a halfway house. Her work comparing medical students' responses to counseling patients about Shaken Baby Syndrome with their performance in the counseling task itself has been presented at several regional and national meetings.





Ivan Mauricio Chavarria-Siles, MD, MS (PhD in process) Physician-Scientist Research Track

UNDERGRADUATE & MEDICAL SCHOOL: Universidad de Costa Rica GRADUATE SCHOOL: University Francisco de Vitoria, Madrid, Spain, MS in Biochemistry

To date. Ivan has had a very successful career in molecular psychiatry research. After medical school, while a neuroscience research fellow in Madrid, he completed a Masters degree in endocannabinoid-modulated biochemistry studving the molecular mechanisms of neuroinflammation in an animal model of acute brain infection. This work was published in the Journal of Neuroscience. His interests then broadened to a new research question, concerning the direct brain effects of genes associated with psychiatric disorders. Pursuing this interest, he received a Fogarty International NIH fellowship grant to support his postdoctoral research in psychiatric genetics at the University of Texas Health Sciences Center at San Antonio. His laboratory work focused, among other things, on investigating the role of a novel TGIF mutation associated with schizophrenia, which led to a first author manuscript in Molecular Psychiatry. Additionally, he has published both first-author and co-authored papers in the American Journal of Medical Genetics, and another first-author paper in Cerebral Cortex, describing how genes encoding heterotrimeric Gproteins are associated with grey matter volume variations in the medial frontal cortex. Having recently spent some time working as an Instructor of Biochemistry and Genetics at the University of Costa Rica School of Medicine, Ivan received an offer to start a research program in Imaging Genetics at the Vrij University in Amsterdam, where he is currently, applying statistical genetics approaches to MRI imaging phenotypes of candidate genes of brain/psychiatric disorders. He is fluent in Dutch and Spanish.



Piergiuseppe Fedele, MD

Physician-Scientist Research Track

UNDERGRADUATE & MEDICAL SCHOOL: Libera Universita 'Vita Salute S. Raffaele' Milano, Italy

Giuseppe graduated summa cum laude from medical school, having received a prestigious meritbased scholarship. Soon after, he moved to Harvard's Dana-Farber Cancer Institute as a research fellow in molecular pathology where he further developed his academic research skills. Less than a year after joining the lab, he published his work in a co-first author manuscript in PNAS. In this research, he employed a neuroscience technique—organotypic slice cultures—and applied it for the first time to the pharmacodynamics profiling of human tumors. This system has now been widely adopted by other scientists and is set to create significant translational implications for cancer patients. He also analyzed and demonstrated the unequivocal utility of fatty acid synthase as a powerful prognostic biomarker in prostate cancer, and he has elucidated the role of AMP-activated kinase in tumorigenesis using a genetic mouse model of metabolic syndrome. This work has been published in Nature Medicine, Science Signaling, Laboratory Investigation, Cancer Cell, Cancer Research, and the Journal of Clinical Oncology. Giuseppe has served as a reviewer for multiple scientific journals, including Cell Metabolism, Cancer Research, and the American Journal of Pathology. More recently, Giuseppe has begun a study comparing patterns of psychotropic use in long term cancer survivors versus cancer-naive controls. This work has furthered his fascination with the mind, leading him to reflect upon questions at the intersection of neuroscience, philosophy, psychology, and psychiatry. Specifically, his interests lie in neuroscientifically and clinically exploring the essence of psychic "normality," the nature of creativity and artistic temperament (a classical pianist, he is a student at the New England Conservatory of Music in Boston), the definition of intelligence, and the origins of consciou

INCOMING RESIDENTS 2011





<u>Tobias Halene, MD, PhD</u> (Physician-Scientist Research Track)

UNDERGRADUATE & MEDICAL SCHOOL: Westfalische Wilhelms-Universitaet GRADUATE SCHOOL: PhD in Neuroscience, Aachen University PhD in Anesthesiology, University of Muenster

Tobias was trained as a physician scientist in Germany and Italy. For his German doctoral thesis, he studied the neural basis of opioid analgesia. During his first year of psychiatry residency in Germany, Tobias received a scholarship from the International Research Training Group to study the brain-behavior relationship of emotion in schizophrenia and autism—a joint project between the University of Aachen and the University of Pennsylvania. Based on this experience, Tobias sought a post-doctoral position with Steven Siegel to study the function of NMDA receptors in a mouse model of schizophrenia using event-related potentials. He also developed and led projects examining the effects of nicotine on evoked potentials, fear conditioning, and social behavior in mice. While in these roles, Tobias developed a keen interest in becoming an academic psychiatrist with a translational focus spanning clinical care, clinical research, and basic science. As a project manager at the UPenn Transdisciplinary Tobacco Use Research Center, he worked on a number of human clinical research studies to determine the effects of nicotine agonists and a COMT inhibitor on brain activity and cognitive function. He was also project manager for PET studies and for an fMRI study of brain response to anti-tobacco public service announcements. In a short 2 years, Tobias's work as a post-doc was highly productive, resulting in four first-author publications, some of which involved his comprehensive evaluation of the electrophysiological and behavioral consequences of NMDA receptor hypofunction in mouse models of schizophrenia. He also studied the potential role of phosphodiesterase inhibitors as therapeutic drug targets in schizophrenia and the effects of predator odor on sensory processing in mice. Tobias also co-authored four additional papers, bringing his total peer-reviewed publications to 11. As he soon realized that his passions lay in being a wellrounded physician-scientist able to practice and research in both the United States and Europe, he felt the calling to complete residency training while continuing to pursue his research interests. Tobias is fluent in German, English, and has some proficiency in Spanish, Italian, and French.

INCOMING RESIDENTS 2011





<u>Joseph Mayer, MD</u> (Physician-Scientist Research Track)

UNDERGRADUATE: Stanford University, BS in Biological Sciences

MEDICAL SCHOOL: Columbia University College of Physicians and Surgeons

Joseph's facilities lie in many different areas, from information technology and business savvy to data analysis and translational research. At Stanford, Joseph studied under Sapolsky and Schatzberg, designing experiments investigating the effects of stress and trophic factors on the brain. Following his winning a year-long research grant in which he studied substance P antagonists and neurogenesis in the adult brain, he spent several years as a junior researcher and research consultant in the labs of Ron de Kloet and Marian Joels in the Netherlands. He successfully obtained funding for a chronic stress-depression model in animals to examine the effects of stress and HPA-axis dysfunction on the brain at cellular and genetic levels; this translational work has been submitted for publication in Hippocampus. He also used this model to investigate the effects of RU486 on neurogenesis, resulting in a first-author publication in the Journal of Neuroendocrinology and a co-authored article in the European Journal of Neuroscience. While in the Netherlands, Joseph co-founded Ivy Circle Netherlands, a community of Dutch alumni clubs of North American universities. From the first activity he organized—combining a talk by the head of Google Europe with a fundraiser for Hurricane Katrina victims—the organization today comprises over 1500 members from a dozen American universities. Joseph also started his own business: finding a gap in the Dutch wireless infrastructure, he proposed a novel solution and gained support to launch an Amsterdam-based wireless startup to build non-cellular wireless networks in Dutch cities, for use by government, hospitals, first responders, enterprise, and consumers. This was the first such network in the country, and its success led to contracts throughout the country's largest university and port cities. In his first year of medical school, Joseph partnered with a colleague and two professors to co-found a company focused on detecting critical anomalies in datasets. They developed a patent-pending algorithm to apply outlier detection tools to healthcare data, and collaborated on a pilot program for electronic medical record privacy protection. Joseph is fluent in Spanish, Dutch, and conversational in Italian.

INCOMING RESIDENTS 2011





Yadira Alonso, MD

UNDERGRADUATE: University of Miami, BS in Psychology MEDICAL SCHOOL: Temple University School of Medicine

Born in Cuba, Yadi came to Miami at the age of nine as a political refugee. Thus sparked her longstanding interest in directing public services, now realized in the many organizations which she has either helped found or in which she has held leadership positions. Prior to medical school, she co-founded a free clinic for women and children victims of domestic violence. Initially funded through grants, the clinic subsequently grew, under Yadi's direction, into an affiliation with the University of Miami Miller School of Medicine, where it now exists as a teaching community health center for medical student clerks. She has been president of the Community Service Organization and president of a child-mentoring program, both in Philadelphia. A mentor to minority students, she was the regional coordinator for the Latino Medical Students' Association, and she co-chaired and developed the curriculum for her school's medical Spanish course. She was also president of the psychiatry interest group for several years. She is fluent in Spanish and American Sign Language.



Jesse Costales, MD

UNDERGRADUATE: Pomona College, BA in Neuroscience

MEDICAL SCHOOL: Keck School of Medicine of the University of Southern California

From serving as mentorship chair of a committee assisting medical students financially, academically and professionally, to tutoring abused children and working in mobile clinics in rural Ecuador, Jesse has balanced leadership, academics, and service to his community. Over the past two years, Jesse has been involved in multiple research projects, including studying the effects of preoperative MDD on post-transplant prognosis, the over-prescription of antipsychotics for non-psychotic but depressed men in a public sector clinic, and how the conditioned preferences of amphetamine-injected rats respond to ceftriaxone administration. He also spent a scholarship-funded research year studying Barrett's Esophagus, the quality of life post-esophagectomy, the self-dilatation of strictures after esophagectomy, and the impact of Nissen fundoplication on aneuploidy, resulting in a publication in the *Journal of the American College of Surgeons*. A double black belt, Jesse has studied various forms of martial arts since the age of 6. Jesse also has extensive experience and training in the management of hazardous waste. Most recently, he trained employees for a project inspecting all storm drains in the Los Angeles and Orange counties, and he was contracted to produce a 500-page analysis of the solid waste accumulation in street and freeway storm drains. He is fluent in Spanish.

INCOMING RESIDENTS 2011





Thomas DePrima, MD

UNDERGRADUATE: Harvard University, BA in Biology, *Cum Laude* MEDICAL SCHOOL: University of Miami Miller School of Medicine

Thomas has been a classical percussionist since the age of nine, and at 12 he twice performed for Sesame Street. He has also performed at Carnegie Hall, Lincoln Center, the Kennedy Center, and in 35 countries; his audience has included royalty and heads of state. Thomas has focused on the healthcare of underserved communities. As cofounder and manager of the student-run outreach of the UM Miller of Medicine, he brought free healthcare to communities in need, and as the government liaison for medical students, he worked with local government agencies to foster medical students' involvement in health policy. Thomas is also interested in professional development, and he cofounded the Ethics and Humanities Pathway at University of Miami. He is currently performing a prospective study assessing the degree of "empathy erosion" over the course of third-year clerkships, and whether the structure of medical school during the first two years plays an important role. He is also working on a study examining the frequency of comorbid ODD, CD, anxiety, and depression in children with ADHD and assessing whether pediatric guidelines adequately screen for these conditions.



Simon Desjardins, MD

UNDERGRADUATE: University of Massachusetts Dartmouth, BA in Music Performance, *Cum Laude* MEDICAL SCHOOL: Albert Einstein College of Medicine

After his college concentration in African American Music and West African Drumming, Simon spent time on an award scholarship studying traditional drumming and dancing in Ghana. Stemming from these experiences, he was driven to international medicine and providing care to impoverished populations. Prior to starting medical school, Simon was an ER technician before studying at the Center for AIDS Research in Providence, RI, focusing on HIV infection in refugees and in jail populations, resulting in co-authored papers in the *International Journal of Infectious Disease* and the *Journal of the Acquired Immune Deficiency Syndrome*. In medical school, Simon studied tropical medicine in rural clinics in Mexico, co-organized the social medicine course at Einstein, and was co-chair of the student group Physicians for a National Health Program. His experiences with traumatized chronic patients led him to realize that his greatest impact might come from providing psychiatric care, and for the past year, Simon has been working in Herbert Lachman's molecular research lab developing in vitro models for schizophrenia using induced pluripotent stem cells, growing neurons from patients with schizophrenia. Simon has won several awards for his music and has performed at large hip-hop and jazz events focused on community development. He was selected by his peers for induction into the Gold Humanism Honor Society.

INCOMING RESIDENTS 2011





Brandon Johnson, MD

UNDERGRADUATE: University of Texas Austin, BS in Biomedical Engineering MEDICAL SCHOOL: University of Texas Southwestern Medical School

Brandon has a dedicated focus on facilitating care for underserved communities. He chaired the mental health screening component of the UT Southwestern medical student-run free clinic, and he was heavily involved in the American Medical Student Association since the start of medical school. In his first year, he served as the LGBT advocate for his school's chapter of AMSA. As a second year student, he served as AMSA's chapter secretary, successfully organizing a regional conference focused on healthcare for underserved communities and attracting attendees from nearly two dozen other medical schools. He also organized community health fairs geared toward lower socioeconomic families. He was awarded a scholarship recognizing outstanding engineering students.



Marc Lener, MD

UNDERGRADUATE: University of Pennsylvania, BA in Biological Basis of Behavior MEDICAL SCHOOL: George Washington University School of Medicine and Health Sciences

For 5 years before medical school, Marc was an award-winning full-time high school science teacher in Georgetown, D.C. Shortly after he began his teaching career, a stint at the NIH studying Pain and Neurosensory Mechanisms led to his growing interest in psychiatric research, and while continuing to teach full-time, he joined Thomas Hyde's team working under Daniel Weinberger at NIMH. Since 2003, he has been involved in ongoing research studying the clinical signs and symptoms and neurobiological basis of schizophrenia. He has co-authored articles in *Brain* on handedness, heritability, neurocognition, and brain asymmetry in schizophrenia as well as in the *British Journal of Psychiatry* on the relationship of frontal release signs in schizophrenic patients. He has a first-authored work in the process of submission. He has also received research grants to study medical education, and he has published on Canadian medical students' perspectives on the value of basic science lectures as well as presented on the impact of multiple choice questions on learning. Marc is a former collegiate swimmer and water polo player and is nearly fluent in Spanish.

INCOMING RESIDENTS 2011





Daniella Loh, MD

UNDERGRADUATE: Columbia University, BA in Psychology MEDICAL SCHOOL: New York University School of Medicine

Early on in her academic career, Daniella pursued basic science research in endocrinology, focusing on adipocytes and food intake regulatory mechanisms involving gene regulation and early cellular differentiation. She also worked on projects involving the effects of leucine on obesity and metabolism in mice as well as the role of leptin signaling in peripheral tissues. Her work culminated in publications in *Endocrinology* and in *Diabetes*. Simultaneously, she began work to increase mental health resources for the Asian community in New York, including work on city-wide mental health conferences. Furthering her interest in the cultural aspects of psychiatry, she is currently completing work on a study examining the psychosocial predictors of depression in coronary artery disease patients in Bangkok, Thailand. Similarly, she is interested in cultural stigma against mental health care, including examining the role shame plays in contemplating and attempting suicide.



Sara Lozyniak, MD

UNDERGRADUATE: Cornell University, BA Biology, *Magna Cum Laude*MEDICAL SCHOOL: State University of New York Upstate Medical University

Sara has a long history of caring for people burdened by serious and chronic illnesses. She has worked in hospice care, and she has been a patient care technician in dialysis clinics. That she sings in 5 languages and that her idea of a refreshing vacation is a two-week glacier hike in Alaska reflects her attitude toward challenges. Such personal attributes garnered the attention of the President of her medical university who appointed her as one of three student ambassadors to the community. She was also tasked with interviewing applicants to the medical school. Recently, she was elected as one of only a handful of National Education Coordinators for the American Medical Student Association, charged with developing AMSA's educational programming. Stemming from her interest in the care of patients with chronic diseases, she was the president of the Healthcare in Transition group, tasked with educating students about coming financial changes to medical care. An avid ballroom and swing dancer, Sara is also a certified SCUBA divemaster and has studied the distribution of common crabs in the waters off Maine and their implications for intertidal food webs.

INCOMING RESIDENTS 2011





Nathaniel Mendelsohn, MD

UNDERGRADUATE: Harvard College, BA in Classics-Latin, Magna Cum Laude

MEDICAL SCHOOL: Albert Einstein College of Medicine

The son of a psychiatrist, Nathaniel has had a longstanding interest in understanding human nature, which he has pursued from a variety of vantage points. He was awarded four years of scholarships at Harvard and received the award for best Latin thesis, "Book 2 of the Aeneid: The Influence and Function of Tragedy." While in college, he worked as an associate editor of the popular Let's Go travel series, covering the northeastern US and eastern Canada. He has held jobs at MTV in which he worked on a documentary about aspiring politicians, at a production company working on the documentary film, "Heir to an Execution," and at a company specializing in documentaries. Prior to medical school, he researched the role of neurogenesis in the treatment of depression, using animal models. He also examined obesity-related health problems of patients treated in a community-based mental health clinic, highlighting the need for developing culturally-sensitive interventions in urban settings, culminating in a peer-reviewed journal article. He has been awarded numerous fellowships to attend conferences around the world focusing on international health care, and he has been the session coordinator for Einstein's student-run free clinic.



Andrew Mitton, MD

UNDERGRADUATE: Fordham University, BA in Philosophy, Summa Cum Laude

MEDICAL SCHOOL: School of Medicine at Stony Brook University

Andrew received the prize for the top student majoring in philosophy as well as a four-year Dean's Scholarship for academic excellence. He was the founder and executive program director of the Youth Peacebuilders Network, engaged in local community-building initiatives and collaborative international peace projects. His membership includes youth in 5 countries. He has represented YPN at the United Nations, has developed extensive training modules in conflict resolution, leadership, and peacebuilding taught in workshops in the United States, the Canadian Arctic, and Europe, and has presented his work to the US Embassy in Sarajevo and the Bosnian War Crimes Tribunal. His work has led to additional NGO consultant positions in which he was tasked with developing peacebuilding curricula focused on narrative exploration and negotiation/leadership skills and such for youth exposed to terrorism. He organized youth-led training interventions for schools in Bermuda facing challenges of racial and socio-economic integration. For the past 15 years, Andrew has been a sailor with extensive race experience on the East Coast, including having crewed on an open ocean race between Bermuda and Nova Scotia. He is fluent in jazz trumpet.

INCOMING RESIDENTS 2011





Alison Welch, MD

UNDERGRADUATE: Northwestern University, BA in Psychology, *Cum Laude* MEDICAL SCHOOL: State University of New York – Upstate Medical University

A classical ballerina, Alison was one of only a few dancers chosen to study professionally at the School of American Ballet in Lincoln Center. In addition, she has multiple scholastic accomplishments, in the form of scholarships, honors, and fellowships, including being nominated by her peers for the Gold Humanism in Medicine Award. In college, she was one of only two students honored for combined achievements in academic, artistic, philanthropic, and extracurricular pursuits. Having left the world of ballet for medicine, Alison has consistently found import in furthering women's academic and professional achievements. She helped orchestrate conferences publicizing and honoring the first woman to receive a medical degree (in 1849), and she functioned as a representative charged with securing funding for the American Medical Women's Association. She was also awarded multiple fellowships including studies in forensic psychiatry, after which she was accepted to present her findings at the World Psychiatric Association conference in Florence, Italy. Interested in using her experiences to usher in academic growth, she is currently working on a project looking into the effects of feedback on medical student evaluations of psychiatry resident teaching.





Benjamin Angarita, MD
Physician-Scientist Research Track

UNDERGRADUATE: Williams College, BA in Latino Studies

MEDICAL SCHOOL: Weill Cornell Medical College

Ben Angarita's facilities lie in many different areas, from institutional politics and business savvy to translational research and child psychiatry. He has been president of his class, president of the Boricua Latino Health Organization, team leader of the NYC firefighters skin bank, and the recipient of the prestigious Jeanne Spurlock child and adolescent psychiatry research award. Between college and medical school, he co-founded the company Visual Introspections, which developed the prototype of a game which helps parents teach their children about personal finance and sexual behavior. Building on a background in which he mapped the neurobiology of startled fish, he subsequently worked with BJ Casey in studying the effect of a polymorphism in the BDNF genotype and early psychosocial stress on anxiety. His preliminary results show that a greater number of early psychosocial stressors are needed to produce a higher amount of anxiety in the Val/Val genotype than in the Val/Met genotype. This increased sensitivity of the Val/Met genotype to anxiety symptomatology is exaggerated with increased levels of psychosocial stress. He presented his findings at the Annual Meeting of the American Academy of Child and Adolescent Psychiatry. He is fluent in Spanish.



Le-Ben Wan, MD, PhD
Physician-Scientist Research Track

UNDERGRADUATE: University of Pennsylvania, BA in Molecular Biology, Summa Cum Laude

MEDICAL SCHOOL: University of Pennsylvania School of Medicine

GRADUATE SCHOOL: University of Pennsylvania School of Medicine, PhD in Cell and Molecular

Biology, Genetics, and Gene Regulation

Ben has had a stellar scientific career. Beginning his genetics research in college, he characterized a mutation affecting inner ear development in Zebrafish, receiving distinction within his major. After college, he spent one year at the NIH, where he modified the ferritin gene for potential use as a transgenic MRI marker in cell lineage and gene therapy studies. His doctoral thesis in medical and graduate school was undertaken in Dr. Marisa Bartolemei laboratory, where he examined the in vivo functions of CTCF, a nuclear protein hypothesized to regulate long-range transcriptional silencing by influencing higher-order chromatin structure. Using RNA-inhibition in mice, Ben found that maternal stores of the protein are essential for early embryonic development. His work was the first to describe global developmental and transcriptional functions of CTCF, some of which was quite unexpected. His research was published in a first-author paper in *Development* and was selected as the feature article for that issue. Ben was awarded an NIH training grant to fund several years of his research. Continuing his focus on genomic imprinting and epigenetic regulation during mouse oogenesis and early embryogenesis, his current work seeks to delineate the effect of maternal factors during pregnancy on behavior in offspring.





Rachel Berkowitz, MD

UNDERGRADUATE: University of Pennsylvania, B.A. in Biology

MEDICAL SCHOOL: Columbia University College of Physicians and Surgeons

Rachel has been interested in the brain and behavior since high school when she worked in the laboratories of Eric Kandel and Christian Gilliam studying transgenic mouse models of schizophrenia and autism. She also did volunteer work for the NYC branch of the National Alliance for the Mentally Ill (NAMI). Her published paper in Reviews in Neuroscience ("The Human Dimension: How the Prefrontal Cortex Modulates the Subcortical Fear Response") is based on ideas she developed during college. After college she worked in the sleep research laboratory of David Dinges and presented her work on a cognitive assessment tool for astronauts at a national sleep conference. During medical she focused her attention on neurology with particular interest in movement disorders, but also found time to analyze a large Medicaid data set to determine whether the CATIE study on the treatment of schizophrenia has had an impact on physician prescribing behavior. A paper based on this work is now in press in the Journal of Clinical Psychiatry. After two years of a neurology residency at New York-Presbyterian Hospital/Weill Cornell Medical College, Rachel decided to switch to psychiatry. Rachel is also an accomplished viola player and downhill skier.



Michael Brus, MD

UNDERGRADUATE: University of Pennsylvania, BA in Political Science MEDICAL SCHOOL: University of Washington School of Medicine

With a longstanding interest in public and community psychiatry since before medical school, Michael Brus spent several years in the trenches, employed as a clinical case manager with a caseload of about 65 chronically mentally ill adults, half of whom suffered from schizophrenia and/or addiction. He also worked as a floor worker in one of Seattle's largest homeless shelters, providing mental-health outreach, distributing hygeine and food supplies, and enforcing rules of conduct. While in medical school, he was awarded a monetary grant for international public health research which he used to provide in-class HIV education to over 1,000 12th-grade students at four public and private schools in rural southern India. Michael is also an avid swing dancer and a writer, having been an Assistant Editor at Slate Magazine and the web-content editor at the University of Washington School of Medicine.





Yuriy Dobry, MD

UNDERGRADUATE: University of California, Berkeley, BA in Molecular and Cell Biology MEDICAL SCHOOL: Sackler School of Medicine - New York State American Branch

Dr. Dobry has extensive experience in basic science research. During college, he worked for two years in a research laboratory investigating bone marrow transplantation. After graduation, he joined the UCSF neuroscience laboratory as a full-time researcher, participating in parallel projects: one focusing on dopaminergic toxicity on substantia nigra neurons and the other in studying neuronal protein trafficking, the results of which were published in *Neuron*. After graduating from medical school a year ago, he worked as a post-doc supervising studies investigating synaptic vesicle recycling and neurotransmitter release suspected to be involved in schizophrenia, as well as experiments seeking to elucidate communications between neurons and astrocytes. He is fluent in Russian, enjoys global politics, and makes stained-glass art in his free time.



Robert Jaffe, MD

UNDERGRADUATE: University of Michigan, BS in Brain, Behavior, and Cognitive Science MEDICAL SCHOOL: Georgetown University School of Medicine

Continuing an interest first realized in college when he began working as an advocate to end violence against women, Robert has led various groups throughout his undergraduate and medical careers. At Georgetown Robert was the co-president of Medical Students for Choice, a non-profit organization dedicated to ensuring that women receive the full range of reproductive health care choices. Feeling that these choices were underrepresented in the medical school and in students' training, he has undertaken a successful lobbying campaign to allow interested Georgetown medical students the opportunity to work with abortion providers—a first for this medical school. He also worked with the Human Sexuality course directors to incorporate comprehensive education about contraception and abortion. He is an enthusiastic football fan, a drummer, and is interested in golf, space, and the history of the universe.





Adam Karz, MD, MSc

UNDERGRADUATE: University of California, San Diego, BA in History, BS in Cell Biology

GRADUATE SCHOOL: University of California, San Diego, MS in Biology

MEDICAL SCHOOL: Sackler School of Medicine - New York State American Branch

In his educational career, Adam has made a name for himself in the capability he has in communicating, with peers, students, and with patients. He has been a teacher for most of his premedical school years, teaching courses as varied as Organic Chemistry, The History of Mental Disease in the 19th-Century, United States History in the 18th-Century, and Biochemistry-Nutrition. His masters work was centered on Bio-informatics, in which he clustered protein domains in a novel, non-biased approach to study large data sets in the realm of cellular signaling. This process was applied to seven genomic screens involving various modes of cell migration across multiple species. Through this work, statistically significant functional classes of proteins were discovered, as he illuminated a valuable tool in understanding complex signaling networks.



Evan Leibu, MD

UNDERGRADUATE: Simon's Rock College of Bard, BA in Psychology and Biology

MEDICAL SCHOOL: University at Buffalo State University of New York School of Medicine &

Biomedical Sciences

Evan took a non-traditional route through his academic career, entering college at the age of sixteen. From his double-major there (practically foreshadowing his becoming a psychiatrist), his academic potential continued to flourish. After college, he spent several years at Cold Spring Harbor laboratories as a research technician, and his work resulted in two papers published in peer-reviewed journals. In medical school, Evan's continued determination led to his receiving a scholarship and several Dean's Letters of Commendation as well as being elected Vice president of the Buffalo Chapter of the American Medical Association-Medical Student Section. His success in medical school has earned him induction into AOA, and he was consistently prized for his clinical attention and acumen, earning honors in every rotation.





John Leikauf, MD

UNDERGRADUATE: University of California, Berkeley, BA in Cultural Anthropology

MEDICAL SCHOOL: Mount Sinai School of Medicine

Beginning with his studies in cultural anthropology, John has shown a passion for making significant humanistic contributions to his peers, patients, and chosen subjects. He has been a class representative and/or a coordinator for a multitude of medical school activities, ranging from several community-care and international health projects, to student interest groups and environmental programs like Greening Mount Sinai. For his clinical care, leadership, compassion, and dedication to service, John was inducted into the Gold Humanism in Medicine Honor Society. He has co-authored several peer-reviewed journal articles, including one first-author paper delineating how inner-city senior citizens view their illnesses; this latter paper was the result of work funded by a scholar grant he was awarded, and it's poster won distinction as one of the top presentations at the American Geriatrics Society annual conference.



Violeta Nistor, MD

UNDERGRADUATE AND MEDICAL SCHOOL: University of Medicine and Pharmacy Carol Davila

Violeta originally matched into the General Adult Psychiatry program at North General Hospital, and upon that hospital's precipitous closure, she was able to transfer her residency position to Mount Sinai as a PGY-1. Violeta was born in Romania and is a graduate of the University of Medicine and Pharmacy Carol Davila in Romania. After relocating to the United States with her son, she was self-employed for many years caring for the chronically and terminally ill. She has an extensive volunteer record in and out of the medical sphere, and most recently she worked as an extern in the child and adolescent psychiatric unit at the Westborough State Hospital in Massachusetts. Her professional interests include geriatric and community psychiatry. She enjoys spending time with her family and friends, gardening, mystery novels, and theater.





Erica Rapp, MD

UNDERGRADUATE: Columbia University, BA in Spanish Language and Literature

MEDICAL SCHOOL: New York University School of Medicine

A Shakespearean actor who taught herself to play piano in 5th grade, Erika has a long track record of leadership, especially in community and public health. In college she became a certified rape crisis counselor and treated many acutely traumatized patients over nearly 2 years. After college, while working in research, she was also a financial counselor and case manager for an organization which provided financial assistance to women wishing to terminate pregnancies but unable to pay for the procedure. In her laboratory work, while managing a colony of over 1000 mice and overseeing budgeting, she investigated the role of the adenosine-A2A receptor in neurodegeneration in Parkinson's Disease and co-authored a paper in the *Annals of Neurology*. In medical school, she was a coordinator at the student-run free clinic and co-coordinator for the Community and Public Health Institute co-sponsored by the American Medical Student Association. Most recently she has undertaken a study with Dolores Malaspina on comorbid panic and schizophrenia and will be presenting her findings at the annual APA meeting.



Timothy Rice, MD

UNDERGRADUATE: Yale University, BS in Biology, with Distinction

MEDICAL SCHOOL: Columbia University College of Physicians and Surgeons

Timothy is a born contributor. At Yale, he became a weekly docent, leading schoolchildren on art gallery tours, and he created a novel program to bring art activities to pediatric inpatients. Timothy has been a teacher, a proctor, a resident advisor, and a founder of various humanitarian endeavors. He created a weekly Saturday seminar in medicine and human physiology to engage at-risk adolescents and augment the public school curriculum. In medical school, he secured an American Psychiatric Foundation Grant to support bringing culturally competent psychiatric care and services to Columbia's free student-run primary care clinic. He also integrated the clinic into New York City's mental health service network. He was elected by his class to be the medical student representative to Addiction Illness: Medical Solutions, and he was responsible for broaching topics relevant to the mental health of his class and for providing informal peer counseling and formal referrals around issues of addiction and substance abuse. For his interests and activities, he earned an award for the student who best exemplified the intersection of psychiatry, the arts, and the outdoors.





Betsy O'Brien, MD

UNDERGRADUATE: Yale University, BA in Psychology, Cum Laude

MEDICAL SCHOOL: Mount Sinai School of Medicine

A nationally ranked junior tennis player for six years, Betsy was recruited to play tennis at Yale and played varsity her first year in college. While there, she pursued an interest in psychology and public health, designing and teaching a parenting program to parents at high-risk for domestic violence and child abuse. She also worked with children with conduct disorder and/or ADHD as part of a cognitive therapy study. Following college Betsy worked for Lehman Brothers for two years, where she focused her analysis on public data networking companies, advised investors about stock picks in the data networking market, and coordinated and attended trade meetings with CEOs. In medical school, Betsy returned to her involvement in women's mental health, ultimately being elected president and director of Mount Sinai's chapter of the American Medical Women's Association. Concurrently, she furthered her community-care focus, receiving a fellowship award for community-orientated research and service, allowing her to work with the Mount Sinai Department of Health Policy, studying weight loss education among low-income minority patients.



Amy Shehata, MD

UNDERGRADUATE: Fordham University, BA in Natural Science, Cum Laude

MEDICAL SCHOOL: New York University School of Medicine

Caring for children and developmental research are the common threads which run through Amy's background of diverse experiences. She has been an elementary school tutor and mentor, and while in college she worked as a caregiver for a three-year-old with a Pervasive Developmental Disorder. Simultaneously, she gravitated toward scientific pursuits and was one of only two students to receive a prestigious basic science research award after she elucidated the role for heat shock proteins in the thermal biology of horseshoe-crab embryos and larvae. After college, she was again on the front-lines as an office manager for a practice specializing in pediatric language delay. Bringing her professional experience to medical school, she was elected the class representative to the Professional Development Committee, where she discussed the skills necessary for recognizing and analyzing conflicts between the values of professionalism and the daily pressures of medical school training. She also entered NYU's Honors Research Program, incorporating herself into the intellectual life of a research group and investigating the role hedgehog signaling plays in nail- and digit-tip development. She was president of NYU's psychiatry interest group, and she is fluent in Egyptian Arabic.





Jacob Appel, MD, JD

UNDERGRADUATE: Brown University, B.A. in English and American Literature, and History MEDICAL SCHOOL: Columbia University College of Physicians and Surgeons

Dr. Appel is a medical ethicist, an attorney, a university professor, a journalist, and a writer of plays and short stories. He holds a JD from Harvard Law School and masters degrees in European History (Brown), American History (Columbia), and Creative Writing (NYU), all prior to beginning medical school. He is currently working on a PhD thesis on the history of American Medicine and Psychiatry (Columbia). While in medical school, he continued to teach bioethics at Brown and Columbia and published 25 works of fiction as well as papers in the field of bioethics. He has won the teacher of the year award at Brown as well as awards for his short stories and fiction.



Hansel Arroyo, MD

UNDERGRADUATE: University of Puerto Rico Mayaguez, B.S., with Honors in Biology MEDICAL SCHOOL: Universidad Central del Caribe

Hansel originally matched into the adult psychiatry program at St. Vincent's Medical Center in downtown Manhattan, and upon that hospital's precipitous closure, he was able to transfer his residency position to Mount Sinai as a PGY-2. Hansel was born and raised in Puerto Rico, where he quickly developed a profound interest in psychiatry, human behavior, and the arts. Through an extensive history of community volunteer work with youth and the indigent, and leadership responsibilities spanning from his pre-undergraduate years through residency, he has exercised his ethics of kindness and sympathy. In medical school he served as his class Vice President and Psychiatry/Behavioral Medicine class Representative and Coordinator. He has participated in Grand Rounds presentations on the effects of dialysis on psychiatric illness, and as part of his personal pursuits has played starring theatrical roles as a member of the college theater group. He is bilingual in English and Spanish.



Drew Bianchi, MD

UNDERGRADUATE: State University of New York, at Albany, B.A. Psychology and Anthropology MEDICAL SCHOOL: State University of New York at Buffalo School of Medicine

Following a longstanding curiosity about the mind, Dr. Bianchi has travelled the globe pursuing this knowledge. Combining interests in psychology and anthropology, he has studied abroad in the Madagascar rainforest, the Australian outback, and the rainforests of Northern Bolivia where he researched the behavioral ecology of monkeys. He has additionally pursued research on dysthymic disorder. His other interests have ranged from mentoring adolescents to accomplishments as musician.





Megan Crochet, MD

UNDERGRADUATE: The George Washington University, B.A. *magna cum laude* in American Studies MEDICAL SCHOOL: Drexel University College of Medicine

Prior to medical school, Dr. Gould began her work in community service, most intensively with teenage mothers as well as with special-needs children. Her solid leadership ability combined with her interest in the emotional quality of the educational environment have led to her multiple teaching roles in medical school and her being recognized by the faculty as a Medical Scholar. She is interested in child and adolescent psychiatry.



Claudine Egol, MD

UNDERGRADUATE: Binghamton University, B.S. in Accounting MEDICAL SCHOOL: Creighton University School of Medicine, Nebraska

With a background in business, Dr. Egol has served in many leadership positions in medical school. She was elected vice-president and then president of the Creighton Medical Student Body, coordinator of the Honor Code Committee, and coordinator of multiple other medical school groups as well as community-based projects, including developing a program to provide influenza vaccines to underserved populations. She is interested in a career in academic psychiatry involving education and clinical supervision.



Kyle Lapidus, MD, PhD
Physician-Scientist Research Track

UNDERGRADUATE: Harvard University, B.A. magna cum laude in Biology / Mind, Brain, and Behavior

MEDICAL AND GRADUATE SCHOOL: Albert Einstein College of Medicine

At Harvard, Dr. Lapidus combined circadian behavior research with volunteer work for the homeless. Coming to Mount Sinai psychiatry residency's Physician Scientist research track, Dr. Lapidus earned his PhD at Einstein, where he furthered his interest in studying the basic biological correlates of how the internal and external environments influence thought and mood. He worked with Robert Singer on a RNA binding protein ZBP1, utilizing transgenic mice and tumor cell lines to investigate cell motility and metastasis. Additionally, he has worked in the laboratory of Eric Kandel, studying neuronal plasticity and the molecular bases of behavior, learning, and memory, again through the use of transgenic mice. He has several publications in leading journals.





Andrei Moroz, MD

UNDERGRADUATE: Temple University, magna cum laude in Biological Anthropology

MEDICAL SCHOOL: Temple University School of Medicine

In medical school, Dr. Moroz played leadership roles in multiple projects focusing on education, humanism in medicine, and the effects of the therapeutic relationship on patients' states of mind, clearly defining his interest in places where medicine and the humanities interact. He was crucial in helping to develop a curriculum for a new Medical Humanities Scholars Program, and his work is being used to obtain funding for the venture. Additionally, he was involved in the development of a center for Medical Humanities and Urban Bioethics.



Sanjay Patel, MD

UNDERGRADUATE: University of Chicago, B.A. in Economics

MEDICAL SCHOOL: Mount Sinai School of Medicine

Dr. Patel has an impressive track record of community volunteer leadership and teaching responsibilities throughout his undergraduate and medical school careers. In addition to receiving grants to teach inner city children, as a co-director of the University of Chicago Student Teachers organization (a non-profit teaching body), he received the President's Award for Student Volunteer Services bestowed by Michelle Obama. He won Mount Sinai's Award for Outstanding Service to the medical school for his work with the admissions committee, as well as the school's Leadership Award and several awards for his poetry. His interest in child and adolescent psychiatry has been recognized with the Beatrix Hamburg Medical Student Training Fellowship. Prior to beginning medical school he held a position with the Boston Consulting Group, among the nation's leading business development groups.



Diana Samuel, MD

UNDERGRADUATE: Virginia Commonwealth University, B.A. in Psychology, minor in business

MEDICAL SCHOOL: Virginia Commonwealth University School of Medicine

Diana originally matched into the General Adult Psychiatry program at St. Vincent's Medical Center in downtown Manhattan, and upon that hospital's precipitous closure, she was able to transfer her residency position to Mount Sinai as a PGY-2. At a young age Diana was already demonstrating great interest in the study of human behavior and psychopathology, which moved her to study psychology as an undergraduate. Her leadership skills have been marked by her being voted Vice President of the American Medical Student Association in her medical school in which she advocated for student rights, organized lecture series and fund raisers, and promoted unity among the student body. Being well rounded in both the sciences and community work, Diana nurtured her interest for academics and teaching by being involved as a co-leader teaching junior medical students clinical and basic medical knowledge. During her free time she enjoyed working as an EMT, traveling abroad and also working out. She is bilingual in English and Malayalam.





Marianna Shimonova, MD

UNDERGRADUATE: University of Washington, B.S. in Neuroscience

MEDICAL SCHOOL: University of Washington

Dr. Shimonova began pursuing her interest in psychiatry prior to medical school, being awarded a Howard Hughes Research Internship and publishing 4 papers on the neuropsychology and hormonal effects of aging and dementia. She has further interests in philosophy, ethnicity, and medical ethics, which she spent a year studying in a seminary in Israel. She is an accomplished musician, having studied piano and singing



<u>Laili Soleimani, MSc, MD</u> *Physician-Scientist Research Track*

UNDERGRADUATE & MEDICAL SCHOOL: Tehran University of Medical Sciences POSTGRADUATE STUDIES: University of Toronto

Dr. Soleimani is coming to Mount Sinai psychiatry residency's Physician Scientist research track. Having initially left Iran to pursue research training and the biological substrates of behavior, she recently completed a masters degree in Neuroscience from the University of Toronto where she studied with John Roder and published her findings on the molecular correlates of a depression-like phenotype in transgenic mice. While at Toronto, she won several departmental awards from the Institute of Medical Sciences, and while in Iran, she ranked among the top national students for the Talented and Gifted Students school, scoring 72nd out of 350,000 on the national university entrance exam. She has also recently co-authored a chapter on suicide prevention.



Caitlin Stork, MD

UNDERGRADUATE: Harvard University, B.A. *magna cum laude* in Comparative Study of Religion MEDICAL SCHOOL: University of Michigan Medical School

During her undergraduate career, Dr. Stork spent two years working as a mental health specialist on a locked inpatient unit, leading to her thesis study of perceived religious experiences and delusional psychoses. This was followed by her beginning work on the neurochemistry and neuroimaging of severe mental illness, out of which she produced a highly-cited first-author publication featured on the cover of *Molecular Psychiatry* and another paper in *Biological Psychiatry*. At medical school her diverse interests continued, with a focus on international and religious stigma against mental illness, and her leading independent medical student groups on medical service trips to address global issues of advocacy and access.





Hiwot Woldu, MD

UNDERGRADUATE: Graceland University, B.S. *summa cum laude* in Biology and Chemistry MEDICAL SCHOOL: University of Pittsburgh School of Medicine

As an undergraduate valedictorian and president of her class, Dr. Woldu then went on to pursue research in a program on Cardiovascular Sciences at the University of Toronto where she has won awards for her master's project studying over-expression of human Endothelin-1 in mice. This research has been submitted for review prior to publication. At Pittsburgh, working with David Brent, she produced another paper on medication adherence in adolescent depression. Throughout college and medical school, she has engaged in and coordinated a vast number of community-based projects with underserved and disadvantaged populations, for which she has won multiple awards.





Emily Aron, M.D. attended Cornell University for her undergraduate degree, majoring in *Human Development and Family Studies*, and Georgetown for her medical degree. She was awarded a NIMH Intramural Research Award in medical school to examine ADHD, and she has been published in the AACAP Journal on the topics of infant anxiety and maternal panic disorder. She also wrote a now published brief on Medicare Part D while working with the Association of Clinicians for the Underserved at Georgetown.



Joseph Cerimele, M.D. attended Case Western Reserve University for his undergraduate degree, majoring in both *Psychology and Biochemistry*. He attended the University of Cincinnati College of Medicine for his M.D. An advocate for social responsibility, he was president of the Physicians for Social Responsibility and has worked as an educator with both children and geriatric populations. He has one paper in review and one recently accepted for publication on metabolic syndrome, as well as a previous book review publication.



Paul Glass, M.D. received his B.S. from the University of Florida in Microbiology and Cell Science. His next degree was a Masters of Health Administration from the University of North Carolina, and was followed by work in health care institutions including Blue Cross. He also worked as a Emergency Medical Technician, and decided to return to UNC for medical school. At UNC he has done research on Emergency Room overcrowding, taught about heart disease to middle school students, and developed a vigorous interest in photography.



Ellen Goldstein, M.D. received a B.A. from Yale University, where she studied English and photography and spent a summer riding a bicycle across the United States to raise money and awareness for Habitat for Humanity. During medical school at Columbia University College of Physicians and Surgeons, she completed a Doris Duke Clinical Research Fellowship, where she used neuroimaging techniques to study the biologic phenomena of remitted depression. She was awarded Teacher of the Year for tutoring first-year medical students in physiology, and she was awarded the Barbara Liskin Memorial Award for Excellence in Psychiatry. Ellen has interests in yoga, meditation, Traditional Chinese Medicine, and non-pharmacologic approaches to treating mood disorders. Ellen comes to Mount Sinai having transferred from the now-closed adult psychiatry program at St. Vincent's Medical Center in downtown Manhattan.



Kenneth Hung, M.D. attended Harvard for his undergraduate degree, majoring in *Biology*, and Cornell for his medical degree. He is interested in social justice has dedicated himself to the study of and advocacy for marginalized subpopulations, including work with burn victim children and the visually-impaired. He has also studied and worked with several distinct refugee populations, including spending a research summer in Beijing on a Weill Cornell International Fellowship studying the Chinese pediatric healthcare system.





Mary LaLonde, M.D., Ph.D. attended Carnegie Mellon for her B.S. (Biological Sciences) and SUNY Stonybrook for both her M.D. and Ph.D. (Molecular and Cellular Biology). A member of the AOA, she has several publications and posters involving Phospholipase D, and she has been awarded two separate NIH scholarship awards. Currently her research has taken her into child psychiatry with Judith Crowell, M.D. She has also been involved with education for many years, including teaching at her medical school and developing curricula.



Teresa Lim, M.D. attended McMaster University for both her B.S. (in *Biochemistry*) and her Masters of Science (in *Medical Science: Hematology*). She attended Albert Einstein for her M.D. Her accomplishments range across disciplines, including research work in microbiology (which yielded two poster presentations), work as an author of a psychiatric case report submitted for publication, and two distinct roles in the publication of *USMLE Rx Step 1* (primary student authorship in Psychiatry Section and student editor in Biochemistry Section).



Mariana Markella, M.D. attended Semmelweis University in Budapest, Hungary for her M.D., after which she did a fellowship at Beth Isreal Renal Research Institute. In 2007, she began working with Jeffrey Newcorn, M.D. in the Child and Adolescent Psychiatry Division conducting research in ADHD and fMRI. She has been extremely productive in her role on this research team, assisting in all aspects of the research, from dealing with IRB protocols, recruitment, and screening to overseeing data analysis and submitting manuscripts.



Maria de las Mercedes Perez Rodriguez, M.D., Ph.D. Born in Spain, Mercedes won a national prize for her high school studies, and first came to the United States for a summer course at UCLA. Her 6 year Medical School was at the Autonoma University of Madrid. There she developed a strong interest in research, and has pursued this both in Spain and in the USA. She completed her PhD studies at the Autonoma University, on biological markers of suicide, and has authored or co-authored over 20 publications in this area.



Panagiotis Roussos, M.D., Ph.D. attended the University of Crete for his MD, his Masters (Neurosciences), and his Ph.D. (Psychiatric and Behavioral Genetics). His Ph.D. work was on the effect of genetic polymorphisms known to affect prepulse inhibition circuitry in schizophrenia. An accomplished researcher with several publications (including several in-press) in journals such as Biological Psychiatry and Psychopharmacology. In addition, he has been awarded several times for his academic achievements.





Eli Shalenberg, M.D. attended the University of California Berkeley, where he wrote his thesis on economic and political factors limiting access to HIV treatments in South Africa, and subsequently worked on a drug discovery project for Malaria. While in medical school at University of California San Diego he became fascinated by mental illness and the explanatory dualism offered by Psychiatry. He won an NIH Training Grant to assist with an fMRI study of depressed adolescents and later designed an educational resource for high risk youth. He is currently interested in forensic psychiatric issues related to dangerousness/recidivism and criminal responsibility. Eli originally matched into the adult psychiatry program at St. Vincent's Medical Center in downtown Manhattan, and upon that hospital's precipitous closure, he transferred his residency to Mount Sinai as a PGY-3.



Devendra Thakur, M.D. attended Pennsylvania State University his B.S. degree in Premedicine, and the University of South Carolina School of Medicine for his MD studies. At South Carolina he was extremely active in voluntary activities, including organizing and speaking for PsychSIGN, teaching on health issues in elementary and middle schools, and working as a Peer Advocate on mental health and substance abuse issues with his medical student colleagues. He is fluent in four languages.



Jessica Wiegand, M.D. attended Tulane University for her undergraduate degree in Neuroscience, and Louisianna State University School of Medicine for her M.D. Although she began in an M.D., Ph.D. track, hurricane Katrina destroyed years of her work, and so she had to abandon her Ph.D. She has been awarded many academic honors, including the Beta Beta Award for Outstanding Honors Thesis in Biology and the Arnold Gerrall Award for Outstanding Academic Achievement in Neuroscience.



Amanda Wilson, M.D., J.D. attended Samford University for her B.A. (English Literature), Cumberland School of Law for her J.D., and NYU for her M.D. A member of the AOA, she has a short stint in research in ADHD and fMRI (leading to a publication in NeuroImage), as well as a demonstrated passion for volunteerism working with patients with AIDS, hepatitis, and underprivileged populations throughout the world (ie. Russia, China, France, Vancouver). She has taught Law in China, and she has a strong interest in psychoanalytic literature.



MOUNT SINAL SCHOOL OF MEDICINE

Mount Sinai School of Medicine Department of Psychiatry

RESIDENT	UNDERGRADUATE INSTITUTION MEDICAL SCHOOL	MEDICAL SCHOOL
Olivia Carrick, M.D.	Smith College	West Virginia University School of Medicine
Christine Chang, M.D.	University of California – Berkeley	University of Colorado School of Medicine
Yelena Kalitenko, M.D.	Brooklyn College	State University of New York – Downstate
Sasha Massachi, M.D.	Brandeis University	University at Buffalo School of Medicine
Kelly Morton, M.D.	University of Tennessee	East Tennessee State University School of Medicine
Lindsay Moskowitz, M.D.	Cornell University	State University of New York - Upstate
Andrew Rosendahl, M.D., Ph.D.	Syracuse University	University of Miami School of Medicine
Naomi Schmelzer, M.D.	Massachusetts Institute of Technology	Mount Sinai School of Medicine
Emily Steinberg, M.D.	Cornell University	George Washington University School of Medicine
Michelle Tricamo, M.D.	Cornell University	State University of New York – Downstate
Sophia Wang, M.D.	Harvard College	Mount Sinai School of Medicine



MOUNT SINAI SCHOOL OF MEDICINE

Mount Sinai School of Medicine Department of Psychiatry

RESIDENT	UNDERGRADUATE INSTITUTION	MEDICAL SCHOOL
Roy Bachar, M.D.	University of Buffalo	University of Buffalo School of Medicine
Sharon Batista, M.D.	Harvard College	Mount Sinai School of Medicine
Daniel Culliford, M.D.	New York University	New York University School of Medicine
Joanna Gedzior, M.D.	Yale University	State University of New York Upstate School of Medicine
Veronica Hackethal, M.D.	Harvard University	Columbia University College of Physicians and Surgeons
Kathleen Jung, M.D.	Smith College	Stony Brook University School of Medicine
Kevin Lam, M.D.	Cornell University	State University of New York Upstate School of Medicine
Luis Ripoll, M.D.	Brown University	University of Florida College of Medicine
Michele Wang, M.D.	University of California at San Diego	University of California at San Francisco (UCSF)
Lora Wolk, M.D.	Binghamton University	State University of New York Upstate School of Medicine
Meredith Wong, M.D.	George Washington University	George Washington University School of Medicine



MOUNT SINAI SCHOOL OF MEDICINE

Mount Sinai School of Medicine Department of Psychiatry

RESIDENT	UNDERGRADUATE INSTITUTION	MEDICAL SCHOOL
Howard Bliwise, M.D.	Haverford College	Albert Einstein College of Medicine
Catherine Daniels-Brady, M.D.	Northwestern University	University of Illinois at Chicago School of Medicine
Noah DeGaetano, M.D.	Wesleyan University	Mount Sinai School of Medicine
Ruth Geller, M.D.	Haverford College	University of Rochester School of Medicine
Lisa Heuer, M.D.	Cornell University	Mount Sinai School of Medicine
Matthew Hopperstad, M.D.	University of Washington	Mount Sinai School of Medicine
Alicia Hurtado, M.D.	Columbia University	Mount Sinai School of Medicine
Ilana Kulman, M.D.	Columbia University	Mount Sinai School of Medicine
James Murrough, M.D.	Emory University	Tufts University School of Medicine
Jocelyn Soffer, M.D.	Yale University	Yale University School of Medicine
Lawrence Young, M.D.	Georgetown University	Cornell Weill Medical College





MOUNT SINAI SCHOOL OF MEDICINE

Mount Sinai School of Medicine Department of Psychiatry

RESIDENT	UNDERGRADUATE INSTITUTION	MEDICAL SCHOOL
Uri Cohen, M.D.	California State University - Fresno	University of California - San Francisco (UCSF)
Jennie Johnson, M.D., Ph.D.	University of Pennsylvania	New York University School of Medicine
Glen Davis, M.D.	Hamilton College	Cornell Weill Medical College
Garrett Deckel, M.D., Ph.D.	Barnard College Princeton University (Ph.D. in Philosophy)	University of Pennsylvania
Alejandra Durango, M.D.	Johns Hopkins University	University of Pennsylvania
Martin Evers, M.D.	Fordham University	Mount Sinai School of Medicine
Allison Grolnick, M.D.	University of Maryland	UMDNJ - Robert Wood Johnson
Timothy Gustafson, M.D.	Williams College	University of Pennsylvania
Matthew Rottnek, M.D.	Vassar College	Mount Sinai School of Medicine
Alan Schlechter, M.D.	Wesleyan University	Mount Sinai School of Medicine
Phillip Seibell, M.D.	Monmouth University	UMDNJ - Robert Wood Johnson

Appendix E

Selected Resident Publications, 2008-2014

2014

- Kolevzon A, Angarita B, Bush L, Wang AT, Frank Y, Yang A, Rapaport R, Saland J, Srivastava S, Farrell C, Edelmann LJ Buxbaum JD. Phelan-McDermid Syndrome: Practice Parameters for Medical Assessment and Monitoring. J Neurodev Disord. 2014;6(1):39.
- Samuel D, Angarita B, Igboeli B, Woldu H. Four International Residents' Perspectives on Working Overseas as Part of Residency Training: Liberia, Myanmar, and Saint Vincent/Grenadines. Annals of Global Health. 2014 March - April;80(2):143-145.
- Appel JM. Scouting for the Reaper. Black Lawrence Press, 2014
- Appel JM. Phoning Home. University of South Carolina Press, 2014
- Appel JM. Einstein's Beach House. Pressgang, Butler University, 2014
- **Appel JM**, Vaidya S. "Ethical Dilemmas in Psychiatric Evaluations in Patients with Fulminant Liver Failure." *Current Opinion in Organ Transplantation*. April 2014.
- Shenoy A, **Appel JM**. "Ethical Challenges of the Electronic Medical Record," *Cambridge Quarterly of Healthcare Ethics* (forthcoming)
- Garakani A, Shalenberg E, Burstin SC, Weintraub Brendel R, Appel JM. Voluntary psychiatric
 hospitalization and patient-driven requests for discharge: a statutory review and analysis of
 implications for the capacity to consent to voluntary hospitalization. *Harvard Review of Psychiatry*. Harv Rev Psychiatry. 2014 Jul-Aug;22(4):241-9.
- Appel JM. Nonconsensual Blood Draws and Dual Loyalty," Journal of Health Care Law & Policy. Symposium. 2014. 17, 129
- Appel JM. "Reflections on the Silent, Insidious Writer Shortage of the 21st Century," English Kills Review (2014)
- Appel JM. "Striving for Adequacy," *Talking Writing*. (2014)
- Appel JM. "The Children's Ballot," Brain Child. (2014)
- **Appel JM**. "Physiological Form Meets Psychological Space: Elizabeth Graver's Four Dimensional Stories," *Fiction Writers Review*. (2014)
- Appel JM. "Steal This Idea," *Passages North* (2014)
- Appel JM. "Megan Boyle & the Dawn of Post-Confessional Literature," Necessary Review.
 (2014)
- Appel JM. "Rock Bottom in Hager Heights," The Ledge (2014)
- Appel JM. "Ashton Main's Wayward Daughter," The Ledge (2014)
- **Appel JM**. "Dessert with Judge Crater," The Ledge (2014)
- Appel JM. "A First Transgression," Yale Journal for the Humanities in Medicine (2014)
- **Appel JM**. "Accelerating through Purple," J Journal (2014)
- Appel JM. "Next of Kith," Hunger Mountain (2014)
- Appel JM. "Under the Glass Bottom Boat," North Dakota Quarterly (2014)
- Appel JM. "The Almost Fairytale of the Stepmother's Palate," Literary Juice (2014)
- Appel JM. "The Children's Lottery," The Literary Review (2014)
- Brus MJ, Solanto MV, and Goldberg JF. Adult ADHD vs. Bipolar Disorder in the DSM-5 Era: A Challenging Differentiation for Clinicians. J Psychiatr Pract. 2014 Nov;20(6):428-37
- Bancel S, Chakraborty T, de Fougerolles A, Elbashir S, Matthias J, Roy A, Whoriskey S, Wood K, Hatala P, Schrum J, Ejebe K, Ellsworth J, Guild J. Modified Polynucleotides for the Production of Proteins Associated with Human Disease. January 9, 2014. US Patent Application 20140010861. http://www.google.com/patents/US20140010861

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Appendix F

Selected Resident Awards, 2009-2014

2009 - 2015

Yadira Alonso, MD

2013-2015 APA/SAMHSA Minority Fellowship

Jacob Appel, MD, JD, MA

- 2009 Reynolds Price Short Fiction Award
- 2009 9Thirty's Annual "How It Could Be" Award
- 2009 Nastuk, Seegal & Hsu Award for Best Collaborative Research
- 2009 New Millennium Fiction Prize
- 2009 Newborn Theatre Award
- 2009 Notechtheatre Playwriting Prize
- 2009 Perigee Prize for Fiction
- 2009 Robert Olen Butler Prize
- 2009 Santa Fe Writing Project's "Best Story of 2009"
- 2009 The Writers Place Prize
- 2009 Writer's Digest Grand Prize
- 2010 Best American Play with Regional Premiere
- 2010 Elizabeth George Foundation Grant
- 2010 Ohio State University Prize for the Short Story
- 2010 Shortlisted for Best American Non-required Reading
- 2010 Shortlisted for Best American Short Stories
- 2010 Shortlisted for Pushcart Prize
- 2010 Tobias Wolff Award for Fiction
- 2011 Best American Play with Regional Premiere
- 2011 BigThink Ethics Fellowship
- 2011 Elly Award (Best California Play)
- 2011 GAP (Group for the Advancement of Psychiatry) Fellowship
- 2011 Hidden River Arts Playwriting Award
- 2011 McGinnis-Ritchie Award for Fiction (Southern Methodist University)
- 2011 Shortlisted for Best American Essays
- 2011 Shortlisted for Best American Mystery Stories
- 2011 Walker Percy / New Orleans Review Fiction Prize
- 2011 William Faulkner Award for the Literary Essay
- 2012 Rappeport Fellowship from American Academy of Psychiatry and the Law (AAPL)
- 2012 New Millennium Writings Award for Fiction
- 2012-2013 Hudson Prize for First Story Collection
- 2013 Dundee International Book Award
- 2013 Rubery International Book Award
- 2013 Ledge Prize for Fiction

2013 Nimrod-Harman Award for Fiction from Tulsa University

2013 Writer's Digest Writing Award

Benjamin Angarita, MD

2011 American Academy of Child and Adolescent Psychiatry Educational Outreach Award

2011 Mount Sinai Graduate Medical Education Grant

2011-2013 APA/SAMHSA Minority Fellowship

2012-2014 NIH Clinical Research Loan Repayment Award for Individuals from Disadvantaged Backgrounds

2013 APA/Janssen Resident Psychiatric Research Scholar

2013 APA Research Colloquium for Junior Investigators

2014 Laughlin Fellowship, American College of Psychiatrists

Sharon Batista, MD

2009 APIRE/Janssen Resident Psychiatric Research Scholars Program

Michael Brus, MD

2014 Career Development Leadership Award, Anxiety and Depression Association of America

Joseph Cerimele, MD

2011 Editor-in-chief award, American Journal of Psychiatry Residents' Journal

Ivan Chavarria-Siles, MD (PhD candidate)

2014 NIMH Outstanding Resident Award

2014 NIMH Brain Camp

2014-2016 Leon Levy Fellowship

Olanrewaju Dokun, MD

2013-2015 APA/SAMHSA Minority Fellowship

2014 Medical Student Teaching Award. Icahn School of Medicine at Mount Sinai

Drew Kiraly, MD, PhD

2013 Bloomberg Psychiatry Award, UConn School of Medicine

2015 NIMH Outstanding Resident Award

Kyle Lapidus, MD, PhD

2010 APA Research Colloquium for Junior Investigators

2010 APIRE Janssen Resident Psychiatric Research Scholars Program

2010 Fellowship for Workshop on Clinical Trials in Psychopharmacology, ASCP

2010 NARSAD Young Investigator Award

2011 NIMH Outstanding Resident Award

2011 NIMH Brain Camp Invitee

2011 APIRE Janssen Resident Psychiatric Research Scholars Program

2011 Career Development Institute for Bipolar Disorder

2011 Graduate Medical Education Travel Award

2012 APA Research Colloquium for Junior Investigators

Marc Lener, MD

2014 APA Research Colloquium for Junior Investigators

2014 New York State Psychiatric Association Scientific Paper Contest, Third Place

2014 NIH Travel Grant for Training in fMRI Course at the University of Michigan

2015 2nd Prize in the 2015 NY County Resident-Fellow Research Awards for "Cortical Abnormalities and Association with Symptom Dimensions Across the Depressive Spectrum"

2015 Society of Biological Psychiatry Travel Award

Teresa Lim, MD, MSc

2010 The Arnold P. Gold Foundation Humanism and Excellence in Teaching Award

Lea Marin. MD

2015 Gold Humanism Honor Society Resident Teaching Award

Mariana Markella, MD

2009 Excellence in Patient Care Award, The Mount Sinai Hospital 2010 Excellence in Patient Care Award, The Mount Sinai Hospital

Stacy McAllister, MD

2014 Medical Student Teaching Award, Icahn School of Medicine at Mount Sinai

Travis Meadows, MD

2015 APA/SAMHSA Minority Fellowship

James Murrough, MD

2009 NARSAD Young Investigator Award

2009 Laughlin Fellow, American College of Psychiatrists

2009 Fellowship for Workshop on Clinical Trials in Psychopharmacology, ASCP

2010 New York State Psychiatric Association Resident Research Award, First Place

Sanjay Patel, MD

2010 American Academy of Child and Adolescent Psychiatry Educational Outreach Award

Mercedes Perez-Rodriguez, MD, PhD

2010 Poster selected 30 Top Posters, Society of Biological Psychiatry

2010 Travel Award to attend the APA/SOBP meetings

2010 AADPRT International Medical Graduate (IMG) Fellowship Award

2010 APA New York County District Branch Resident Research Award

2011 Laughlin Fellowship, American College of Psychiatrists

2011 APA Research Colloquium for Junior Investigators

2011 AADPRT Pre-meeting Scholarship Award

2011 APA New York County District Branch Resident Research Honorable Mention

2011 ACNP (American College of Neuropsychopharmacology) Travel Award

2011 Travel Award, Critical Research Issues in Latino Mental Health Conference

2011 New York State Psychiatric Association Annual Scientific Paper Contest, 1st Prize

2012 Career Development Institute for Psychiatry Participant

Katherine Pier. MD

2015 Editor-in-chief, American Journal of Psychiatry Residents' Journal

Timothy Rice, MD

2014 American Psychoanalytic Association Fellowship

Luis Ripoll, MD

2009 American Psychoanalytic Association Fellowship

Anna Rosen, MD

2009 Fellowship in Psychoanalysis, New York Psychoanalytic Society & Institute

2010 Fellowship in Psychoanalysis, Columbia University

Panos Roussos, MD, PhD

2010 NIMH Outstanding Resident Award

2010 NIMH Brain Camp Invitee

2010 New York State Psychiatric Association Scientific Paper Contest, First place

2010 International Society of Psychiatric Genetics, Young Investigator Travel Award

2011 APA Research Colloquium for Junior Investigators

2012 APA Research Colloquium for Junior Investigators

2012 Society of Biological Psychiatry, Domestic Travel Fellowship Award2012 New York State Psychiatric Association Resident Research Award, First Place

Rishi Sawhney, MD

2015 Resident Teacher of the Year

Laili Soleimani, MD, MSc

2011 APA Research Colloquium for Junior Investigators

2012 Geriatric Mental Health Foundation (GMHF) Honors Scholar

Emily Steinberg, MD

2009 Fellowship in Psychoanalysis, New York Psychoanalytic Society & Institute

2009 Travel Award, Eastern Group Psychotherapy Society

2010 Travel Award, American Group Psychotherapy Association

Caitlin Stork, MD

2011 Arnold P. Gold Foundation Humanism and Excellence in Teaching Award

2012 Laughlin Fellowship, American College of Psychiatrists

Le-Ben Wan, MD, PhD

2012 NIMH Outstanding Resident Award

2013 Society of Biological Psychiatry Travel Award Recipient

2013 NIMH Brain Camp Invitee

2013 Career Development Institute for Bipolar Disorder

2013 AADPRT Brain Scholar

Sophia Wang, MD

2009 NIMH Outstanding Resident Award

2009 NIMH Brain Camp

2009 APA Research Colloquium for Junior Investigators

2009 APIRE/Janssen Resident Psychiatric Research Scholars Program

2009 New York State Psychiatric Association's Resident Research Award, 3rd place

2010 NIMH Brain Camp

2010 American Association of Geriatric Psychiatry, Geriatric Mental Health Foundation Honors Scholar 2010 National Institute of Aging Summer Institute Participant

Hiwot Woldu, MD

2012 AADPRT Ginsberg fellowship

Appendix G1

Illustrating Life at Mount Sinai As a PGY-1 Psychiatry Resident



Linda Drozdowicz, MD

My Background

Hello, applicants! My name is Linda. I was raised in Orange, CT, with a Brooklyn-ite podiatrist and a Polish physicist for parents, as well as some sisters, dogs, and a flock of overweight backyard chickens. Most of my free time during childhood and adolescence was spent gallivanting around the country and the world with various singing groups. I went to college at the University of Connecticut, where I split my time between running a spunky women's cappella group, cajoling stem cells in petri dishes into differentiating at will, and sometimes studying. I graduated from UConn *summa cum laude* with a B.S. in Molecular & Cell Biology. From there I decided to branch out beyond the great state of Connecticut, and I chose to attend medical school at the Mayo Clinic in blustery Rochester, MN. To stay balanced during medical school, I taught myself to play the ukulele and proceeded to spend hours each week playing and singing for patients around the hospital. Some of these concerts took place in the psychiatric hospital, where I eventually discovered and fell in love with the field of Psychiatry, specifically Child & Adolescent Psychiatry.

Why I Chose Mount Sinai

To be completely honest, I initially had no interest in doing residency in NYC. I had never lived in a big city, and I thought there was no way I would enjoy or be able to afford living in THE big city. However, I knew about the strength of Sinai's Psychiatry residency from the professional grapevine, and I just had to apply. On the day of my interview, I emerged from the subway and saw beautiful Central Park right in front of me. Birds were chirping, children were playing - the only thing missing was a rainbow. This was not the NYC that I imagined! The interview day confirmed the rumors that I had heard. Mount Sinai was an exceptional program. The residents I met appeared to be very happy, well-adjusted people, who worked hard but still found time to enjoy the city and maintain their hobbies. I found out that most of them lived in nice, affordable, subsidized housing, a concept akin to finding a unicorn in NYC. The program directors were kind and charismatic, cracking jokes that made them seem human

despite formidable academic resumes. I found out that the curriculum allows for career exploration early on in residency – Forensics and Child Psychiatry are built into the intern year – and it especially caters to those interested in Child Psychiatry, giving the option of doing inpatient Pediatrics intern year instead of Internal Medicine. In the end I chose Sinai because I felt that I could develop my professional skills in a renowned, yet warm and supportive, program. The icing on the cake was that Mount Sinai is located in (and I may be biased here...) the greatest city on earth.

My Schedule and Life as a First-Year Resident

As a PGY-1 on Monday mornings, I wake up in my spacious subsidized apartment, make some coffee, and drink it while I take my adorable, newly adopted dog for a walk. Today I have a shift in the Psychiatric ER, but first I will go to "Overnight Rounds" with my co-residents and the Program Director. At Overnight Rounds, the night float intern (or "The Night's Watch" as I like to say) discusses any major events/issues that occurred overnight. We then discuss ways to handle those situations in the future, often with helpful insights from the more senior residents. There is free coffee.

After being educated and caffeinated for half an hour, I head over to the Psychiatric ER to start my shift. As an intern in the Psych ER, I have the privilege of seeing patients who are acutely ill, doing full psychiatric evaluations and gathering collateral information from family members, community mental health staff, etc, in order to formulate an optimal plan for the patient's care. This is a great way to get acquainted with the hospital and the greater mental healthcare system in the city. The attendings review each patient with me, doing personalized teaching as we go. At the end of the shift, I sign out any remaining work to the next intern, and head home.

Once per week we have PGY-1 didactics, a two-hour class in the afternoon. These sessions cover relevant topics for interns—everything from reviewing basic psychopathology and medications, to going over the proper protocols for admitting patients on call. Didactics have the ancillary benefit of allowing you to hang out with your co-residents, who range in quality from awesome to mind-blowing. In addition to the PGY-1 didactics, teaching sessions are available almost every day of the week during the lunch hour. These include "DBT Rounds," "Formulation Rounds," and Grand Rounds. If you want to learn, this is a great place to train!

As for off-service rotations, I have now spent a month on both Inpatient Pediatrics and Outpatient Medicine. I was never treated as "lesser" during these rotations due to being a Psychiatry intern. In fact, I found that the attendings and residents alike were very respectful of Psychiatry, and they often looked to me for insights into psychiatric concerns in their patients. The off-service rotations offer a nice foundation in medicine that comes in handy on-call.

Speaking of call—the call schedule is very reasonable at our program. Depending on the rotation, I have taken call from 0-4 times per month. There is substantial support for residents on call here—there is an attending in the Psychiatric ER at all hours of the day and night, so you can always call them or just walk down there if you're unsure of how to handle an issue.

Intern year has been challenging but fun so far, and I'm looking forward to my future rotations! Would I choose this program again? Absolutely.

Appendix G2

Illustrating Life at Mount Sinai As a PGY-2 Psychiatry Resident



Alfredo Gutierrez, MD

My Background

Hi, my name is Alfredo, and I'm a second year resident at The Mount Sinai Hospital. I was born and raised in El Paso, Texas and moved to Houston to attend Rice University where I majored in psychology. I continued my studies in Houston and went to Baylor College of Medicine, specifically planning to go into psychiatry. During my rotations, my interest in pediatrics grew, which complicated my decision about what specialty to finally pursue. However, I was fortunate enough to experience multiple electives in both psychiatry and pediatrics and realized that my true passion was in combining the two and pursuing Child and Adolescent Psychiatry.

Why I Chose Mount Sinai

I had originally planned to stay in Houston for residency and actually only applied to programs in NYC as an excuse to visit the city. Even with a (rare) blizzard coming down, my experience during my interview at Mount Sinai completely changed my mind. The chance to experience distinct specialties early in training was particularly exciting, one of which was through a Child and Adolescent unit during the first year. Additionally, the welcoming feeling I got from the residents at the mixers showed the strong relationships they had formed with each other as well as the support that was provided by the program. My first year at Mount Sinai confirmed my initial impression, and I could not be happier about my decision.

Life as a Second Year Resident

The didactics this year are probably one of my favorite parts of second year so far. Being able to spend a whole afternoon focusing only on expanding my knowledge base has been a great experience, and I look forward to learning so much more. I have also been able to spend a month at a substance abuse clinic, which has provided a different perspective and a nice change from inpatient psychiatry. The attending psychiatrists on the units have continued to be excellent and to provide both learning and research experiences to supplement the clinical work. The call schedule during this year is exceptional! You only have 12 scheduled call days, which means 3 weeks per month with no call!! This has given me even more time to take advantage of all the city has to offer, like attending concerts and music festivals, trying out new restaurants, going for runs in Central Park, and going to museums. And it has even given me time to leave the city to explore the beaches during the summer and go apple picking during the fall. I look forward to the rest of the year and my experiences here!

Appendix G3

Life at Mount Sinai As a PGY-4 Psychiatry Resident



Simon Desjardins, MD

My Background

Hello! My name is Simon. As a fourth-year psychiatry resident at Mount Sinai, I was one of the chief residents. I was born and raised in Westport, Massachusetts. As an undergraduate, I majored in jazz performance and ethnomusicology with a concentration in African Drumming and Dancing. After college, I decided to become a doctor with the intention of caring for individuals with infectious diseases in underdeveloped nations. I went back to school, did a post-baccalaureate program, and attended medical school at the Albert Einstein College of Medicine of Yeshiva University in New York. I fell in love with psychiatry during medical school. In my spare time I enjoy surfing, playing music, reading psychiatry books (nerdy, I know), spending time with friends, and exploring New York City.

Why I Chose Mount Sinai

I chose Mount Sinai because I was unsure of which direction I would take in the broad array of opportunities available in psychiatry. I wanted a program with plenty of research opportunities, a robust clinical experience, and a wealth of didactics and clinical experiences available to me, including an opportunity to learn about a variety of types of psychotherapy. I felt Sinai was very strong clinically and academically with incredible faculty and bright, driven residents. I also loved the location!

My Schedule

PGY4's at Sinai get a lot of elective time—more than 8 months. You can spend the majority of your year pursuing your interests in the field before the constraints of a fellowship or a full-time job take over.

How am I spending my days this year? I split my time into four main categories, 1) Masters in Business Administration (MBA), 2) clinical work, 3) chief duties, and 4) elective projects. Halfway through my PGY2 year I formulated a plan to pursue my interest in hospital administration. I decided to start an MBA program in Hospital Administration at Baruch College. I proposed the idea to the directors of the program (Dr. Rieder and Dr. Simon), and they couldn't have been more supportive. I started the MBA third year, so that my PGY4 year would coincide with the second year of the MBA. Class is on Tuesday and Thursday nights from 6pm to 9pm. I try to finish my clinical responsibility by 5pm on Tuesdays and Thursdays to make it to class on time. I get to class on time 95% percent of the time, and the 5% of the time that I'm late, it is very rarely due to clinical responsibilities (trains in NYC can be unpredictable!).

Clinically, I'm pursuing a few different interests. I am very much interested in doing long-term psychotherapy with patients with personality disorders, and therefore I am doing an elective in Transference Focused Psychotherapy (TFP) with Dr. Fatih Ozbay, the Medical Director of the World Trade Center Mental Health Clinic. I see one patient in TFP, twice a week, with one hour of weekly supervision.

I am also interested in couples and family therapy. I have a couples case at the Bronx VA and a family case at Mount Sinai. I see my family case on Tuesday mornings and my couples case on Wednesday mornings. I have group couples/family supervision on Mondays from 2:45 to 4:15pm with Barbara Feld, LMSW. Barbara is a true expert in the field, with years of experience and expertise. She has a pearl for almost any clinical situation.

I am also continuing two very interesting psychodynamic cases. I see both cases on Wednesday afternoons, and I have a separate supervisor for each case. I see one supervisor on Thursday afternoons and the other on Friday mornings. There are always fascinating readings to be done for each case.

I was fortunate to be chosen as one of the three chiefs this year. Each chief has a certain responsibility, and mine is to be the VA chief for the whole year and the active Sinai chief for the last 4 months of this year. Things have been running smoothly this year, thanks to the hard work of my fellow chiefs. Fingers crossed that it stays that way!

Lastly, I fill the remaining hours of each day with a few projects related to the MBA. I am doing an elective with Jeffrey Farber, MD (Medical Director of Mount Sinai's Accountable Care Organization), looking at insurance companies' denial of inpatient psychiatric claims. I am also formulating a research project with Dr. Sabina Lim and a fellow resident.

Life as a Fourth Year Resident

In a nutshell, life as a fourth-year resident is fantastic. They save the best for last!

That's about it! Hope you find this helpful, and I hope to meet you all during this year's interview season!

Appendix G4

Illustrating Life at Mount Sinai As a Physician-Scientist Track Psychiatry Resident



Tobias Halene, MD, PhD

My Background

My name is Tobias. I was born and raised in Germany. My path to Mount Sinai ran as follows: Military service → Medical School in Italy and Germany → Psychiatry resident at RWTH Aachen University → PhD at the University of Pennsylvania → Post-doc at the University of Pennsylvania → Published sufficiently to reach Asher's and Ron's awareness threshold for IMGs (International Medical Graduates)

 \rightarrow Interview \rightarrow Match \rightarrow Bingo!

I chose the field of psychiatry because it allows me to understand my patients like no other specialty would. I chose to do research because the neurobiology of the brain is the last frontier in medicine. My clinical and research interests are complementary aspects of my development as a scientist and psychiatrist.

In my spare time, I enjoy my life as a father of 3 sons in a "better" New York called Park Slope, Brooklyn. I'm also waiting for George Martin to finish the 6th novel of Game of Thrones.

Why I Chose Mount Sinai

It was difficult for me to choose among the top 3 programs on my rank list. Here is what made me choose Mount Sinai:

- Duration and application process: Some research tracks are 5-year programs; others only allow you to apply after you've matched. I wanted to apply straight to a research track without further applications. I also thought that four years seemed long enough. There are still fellowships after that...
- Critical mass: Mount Sinai has an amazing research portfolio. If you are interested in research, you can find a mentor in almost any area of neuroscience and develop your project here. There are some brilliant minds, and you can pick their brains.

• My impression during the actual interview day: The line-up of interviews made me feel that this program was genuinely interested in my application. I found it helpful that I could meet with the additional scientists I had expressed interest in, and I made use of a 2nd visit to make my final decision.

Life as a Fourth Year Physician-Scientist Resident

- This year I have so much time for research! I work in Schahram Akbarian, MD, PhD's lab on Mondays, Thursdays, and Fridays. There's no "typical" day the lab, and the emphasis of my work slowly shifts over the course of the year. My research focus involves working with monkey brain tissue to understand the role of subcortical white matter neurons that have been reported to be increased in number and density in a subset of patients with schizophrenia and related disorders. Several techniques help me to do my research, from flow cytometry (FACS) over fMRI image analysis to RNA isolation, conversion, pre-amplification, and qPCR; I am eager to unravel the molecular fingerprint of white matter neurons which will hopefully lead to a better understanding of their origin and function.
- Continuing education and time to catch-up with my classmates: On Tuesdays, I enjoy lectures, talks, and seeing my classmates, as most of us have a very individualized schedule in our 4th year.
- Continuing patient care: On Wednesdays, I continue to treat outpatients at the VA. I see patients individually and co-facilitate a group for veterans with PTSD and substance abuse. It is one of the highlights of my week to have autonomy in treating my patients, while having the benefit of great supervision. The relationship with patients that has grown over months of working together is incredibly rewarding. In addition, I've met a former post-doc of Kelly Wilson (one of the co-developers of Acceptance and Commitment Therapy), and we are planning an ACT psychotherapy group for the 2nd half of the academic year.

Appendix G5

Illustrating Life at Mount Sinai As a PhD+ Track Psychiatry Resident



Kenechi Ejebe, MD

My Background

Hi everyone! My name is Kenechi and I am a second-year psychiatry resident at Mount Sinai. I was born in Nigeria and moved to Minnesota at the age of 8. I completed undergrad at Carleton College and then medical school at George Washington University. During medical school I participated in a Sarnoff Research fellowship in Boston and after medical school pursued additional research opportunities at the Massachusetts General Hospital. I was also involved in starting a life science company focused on commercializing messenger RNA therapeutics based in Cambridge, MA. I have always been fascinated with mental illness and was drawn to Mount Sinai's Psychiatry program because of the entrepreneurial spirit that I sensed, the dynamic clinical experiences available, and Mount Sinai's deep commitment to translational research.

Why I Chose Mount Sinai

I chose Mount Sinai because of its outstanding academic reputation, the wonderfully diverse and outgoing group of residents, the research opportunities, and the forward-thinking program leadership. I found the faculty members to be approachable and passionate about their work. I also liked the fact that the majority of the clinical sites where I would be doing my rotations would be fairly near each other, cutting down on commute times and expense. I feel privileged to be part of such a supportive program.

My Schedule and Life as a PhD+ Track Resident

As part of the new NIMH-funded integrated PhD and residency, my tailored schedule enables me to be enrolled in graduate level course-work in Neuroscience, manage the care of psychiatric patients, and still have time to be involved in innovative research.

I attend Neuroscience classes every morning at 9AM. After morning classes on Mondays and Fridays, I spend the rest of the day taking care of patients either on Psychiatry CL, in outpatient clinics, or taking shifts in the

Psychiatry ED. On Monday late afternoons, I also have the "Responsible Conduct of Research" course, which is immediately followed by weekly meetings with the principle investigator on my project.

On Tuesdays and Thursdays I have Biostatistics class from 11AM-1PM, and for the rest of that afternoon, I am in the lab preparing for upcoming experiments. Every other week on Tuesday afternoons, I also have Journal Club moderated by senior level PhD candidates focused on how to critically read scientific articles and how to present my data.

On Wednesdays after Neuroscience class in the morning, I attend PGY-2 didactics for the rest of the day with my co-residents.

My call schedule is reasonable and includes taking 24-hour call on Fridays every other week. I also have 2 weeks of Night-float each year.

Where I Live

I live in East Harlem and very close to work and Central Park. My commute is 4 minutes flat, on foot, which is great when one has finished a long call or needs to run back to the lab to check in on cell cultures. My doorman building is owned by Mount Sinai, and I have Central Park views from my apartment. I love being able to walk everywhere or catch the 6 train to go downtown for a night-out with friends.

Final Thoughts

Mount Sinai psychiatry residency has been a tremendous opportunity, and I am looking forward to developing into a highly skilled psychiatrist and independent researcher.

Appendix H1

Physician-Scientist Track: Trainees

Trainees (2008 – present)

Mount Sinai's Physician-Scientist Track began in 2008. We've included, below, graduates and current residents' descriptions of their research experiences in this track. **We're very proud of their successes.**

Panagiotis Roussos, MD, PhD

Graduated 2012

Current Position: Assistant Professor of Psychiatry, and Genetics and Genomic Sciences, Icahn School of Medicine at Mount Sinai

Please see here for a current listing of Dr. Roussos's Pubmed-indexed papers.

Mount Sinai's Physician-Scientist program offered me protected time in order to get deeply involved in research activities. As a PGY-1 and 2, my protected time allowed me exposure to different labs and research teams. This elective time significantly increased in PGY-3 and PGY-4, which provided me sufficient time to work on a project, analyze results, and publish. As a PGY-1, I worked in the lab of Dr. Monte Buchsbaum, analyzing neuroimaging data (MRI, DTI, FDG-PET, and fMRI) in schizophrenia. As a PGY-2, I got involved with human postmortem brain studies in the Lab of Dr. Vahram Haroutunian where I worked till the end of my residency training. During that time I received excellent mentoring from my primary mentor (Dr. Haroutunian) as well as additional mentoring from multiple Mount Sinai faculty members, and I was able to develop the following projects:

- Examine the role of the NF-kappa B pathway in schizophrenia. Preliminary results from this
 project were successfully used to obtain funding (\$20K) from the federal Mental Illness Research
 Education and Clinical Center (MIRECC) to expand the analysis from human postmortem brain to
 living patients with schizophrenia and their unaffected first-degree relatives. The manuscript
 describing the postmortem findings is currently submitted to Molecular Psychiatry.
- 2. Examine abnormalities of the Node of Ranvier in schizophrenia. In this study, we used a combined analysis of transcriptomic, proteomic, genetic, cognitive, and neuroimaging data to show that abnormalities of the Node of Ranvier exist in schizophrenia. The results of this study were presented in multiple conferences, as part of invited speaker engagements, and were published in the *Archives of General Psychiatry*. In addition, these results provided the preliminary findings in two recently submitted grants (Dr. Haroutunian PI) for examining the role of two different genes using animal models. In both grants I participate as co-investigator. Finally, these results supported a successfully funded grant (Dr. Domna Karagogeos PI; European Union/Hellenic Republic Juxtaparanodal proteins in the molecular organization of myelinated axons; 600,000 euros for a total period of 4 years) in which I participated as a co-investigator.
- 3. Examine alteration in the transciptome of patients with schizophrenia using systems biology

- approaches. The results of this study were presented in multiple conferences, as part of invited speaker engagements, and are published in the *Archives of General Psychiatry*. In addition, these results were including as preliminary in a recently submitted K99/R00, where I am the PI, which aims to examine the genetic basis of gene expression in schizophrenia.
- 4. The research protected time provided me the opportunity to continue working on multiple different projects and submitting manuscripts in collaboration with my previous institute, where I obtained my MD and PhD, as well as finish 2 book chapters. Finally, I participated in multiple other projects with Dr. Larry Siever, which resulted in preliminary results that supported a successfully funded grant (Dr. Larry Siever– PI; VA Merit White Matter Abnormalities in the Schizophrenia Spectrum; \$600,000 for a total period of 4 years), where I participate as a co-investigator.

Partial list of Publications <u>during Residency</u>:

- 1. Roussos P, Giakoumaki SG, Georgakopoulos A, Chrisoulakis A, Somaraki K, Robakis NK, Bitsios P. Allelic variations in ANK3 and CACNA1C impact on spatial working memory, startle reactivity and personality traits in healthy males. *Bipolar Disorders*. 2011 13(3):250-9.
- 2. Roussos P, Giakoumaki SG, Georgakopoulos A, Chrisoulakis A, Somaraki K, Robakis NK, Bitsios P. A D-amino acid oxidase Diplotype is Associated with Deficient PPI and Attenuated Anxiety in Healthy Males. *Neuropsychopharmacology*. 2011 36(8):1677-88.
- 3. Roussos P, Katsel K, Davis KL, Bitsios P, Giakoumaki SG, Jogia J, Rozsnyai K, Collier D, Frangou S, Siever LJ, Haroutunian V. Molecular and Genetic Evidence for Abnormalities in the Nodes of Ranvier in Schizophrenia. *Archives of General Psychiatry*. 2012 69(1):7-15.
- 4. Roussos P, Katsel P, Davis KL, Siever LJ, Haroutunian V. A System Level Transcriptomic Analysis in Schizophrenia Postmortem Brain. *Archives of General Psychiatry*. 2012 Dec;69(12):1205-13.
- 5. Roussos, P. Transcription factor 4 as an important determinant of gating function in schizophrenia. *PNAS*. 2012 Apr 17;109(16):5915-6
- 6. Roussos P, Katsel P, Davis KL, Giakoumaki SG, Lencz T, Malhotra AK, Siever LJ, Bitsios P, Haroutunian V. Convergent findings for abnormalities of the NF-κB signaling pathway in schizophrenia. *Neuropsychopharmacology*. 2013 Feb;38(3):533-9. doi: 10.1038/npp.2012.215
- 7. Roussos P, Bitsios P, Giakoumaki SG, McClure MM, Hazlett EA, New AS, Siever LJ. CACNA1C as a risk factor for schizotypal personality disorder and schizotypy in healthy individuals. *Psychiatry Research.* 2013 Mar 30;206(1):122-3.

Awards and Honors during Residency:

- 2010 National Institute of Mental Health (NIMH) Outstanding Resident Award
- 2010 International Society of Psychiatric Genetics travel award.
- 2010 First place, New York State Psychiatric Association Scientific Paper Contest
- 2011 Research Colloquium for Junior Investigators from American Psychiatric Association.
- 2011 NIMH sponsored Brain Camp III, 2011 at Cold Spring Harbour, NY.
- 2012 Society of Biological Psychiatry's 2012 Domestic Travel Fellowship Award.
- 2012 Research Colloquium for Junior Investigators from American Psychiatric Association.
- 2012 First place, New York State Psychiatric Association Scientific Paper Contest.
- 2012 VA Advanced Fellowship Program in Mental Illness Research and Treatment.
- 2012 Awarded the American College of Neuropsychopharmacology Travel Award
- 2012 First place, New York State Psychiatric Association Scientific Paper Contest.
- 2012 APA/Merck Early Academic Career Award
- 2012 International Congress on Schizophrenia Research 2013 Travel Award
- 2013 Elected an Associate Member of the American College of Neuropsychopharmacology.

Mercedes Perez-Rodriguez, MD, PhD

Graduated 2012

Current Position: Assistant Professor of Psychiatry, Icahn School of Medicine at Mount Sinai

Please see here for a current listing of Dr. Perez-Rodriguez's Pubmed-indexed papers.

During residency, I've been able to use protected research time to become involved in and develop numerous projects, primarily focusing on suicidality and borderline personality disorder. I completed the project "Tryptophan Hydroxylase 2 haplotype association with borderline personality disorder (BPD) and aggression," which resulted in a first-authored paper, an award-nominated poster at the annual meeting of the Society for Biological Psychiatry, and the APA New York County District Branch Resident Research Award. I also presented this project at the APA 2011 Research Colloquium for Young Investigators. I am also first author of the paper "Striatal Activity in Borderline Personality Disorder: Sex Differences," which has received the APA New York State Scientific Paper Award. I am also Co-Investigator in the project "High Risk Suicidal Behavior in veterans: Assessment of Social Cognition" (Department of Veteran Affairs Mental Illness Research, Education, & Clinical Center pilot grant funding), for which numerous patients have already been recruited. The aim of this project is to examine performance on social cognition tasks as a predictor of treatment response to Dialectical Behavior Therapy (DBT) among veterans at high risk for suicide. I am also an investigator in the projects "Clinical Testing of a D1 Agonist for the Cognitive Enhancement of Schizotypal Personality Disorder," and "Pharmacology of Cognition in Schizotypal Personality Disorder (SPD)." My research has grown into an investigation of whether the neuroimaging abnormalities found in patients with bipolar disorder (including overactivity in anterior limbic structures in response to affective Go-No Go or facial emotional expressions) might constitute a heritable endophenotype or biomarker in their being detectable in unaffected relatives carrying genetic liability for illness.

Partial list of Publications during Residency:

- 1. Baca-Garcia E, Perez-Rodriguez MM, Keyes KM, Oquendo MA, Hasin DS, Grant BF, Blanco C. Suicidal ideation and suicide attempts in the United States: 1991-1992 and 2001-2002. Mol Psychiatry. 2010 Mar;15(3):250-9.
- 2. Perez-Rodriguez MM, Weinstein S, New AS, Bevilacqua L, Yuan Q, Zhou Z, Hodgkinson C, Goodman M, Koenigsberg HW, Goldman D, Siever LJ. Tryptophan-hydroxylase 2 haplotype association with borderline personality disorder and aggression in a sample of patients with personality disorders and healthy controls. *J Psychiatr Res.* 2010 Nov;44(15):1075-81.
- 3. Perez-Rodriguez MM, Lopez-Castroman J, Martinez-Vigo M, Diaz-Sastre C, Ceverino A, Núñez-Beltrán A, Saiz-Ruiz J, de Leon J, Baca-Garcia E. Lack of association between testosterone and suicide attempts. *Neuropsychobiology*. 2011;63(2):125-30.
- Perez-Rodriguez MM, Hazlett EA, Rich EL, Ripoll LH, Weiner DM, Spence N, Goodman M, Koenigsberg HW, Siever LJ, New AS. Striatal activity in borderline personality disorder with comorbid intermittent explosive disorder: Sex differences. *J Psychiatr Res.* 2012 Jun;46(6):797-804.
- 5. Ripoll LH, Zaki J, Perez-Rodriguez MM, Snyder R, Strike KS, Boussi A, Bartz JA, Ochsner KN, Siever LJ, New AS. Empathic accuracy and cognition in schizotypal personality disorder. Psychiatry Res. 2013 Nov 30;210(1):232-41.
- 6. Mahon K, Perez-Rodriguez MM, Gunawardane N, Burdick KE. Dimensional endophenotypes in bipolar disorder: affective dysregulation and psychosis proneness. J Affect Disord. 2013 Nov;151(2):695-701.

Awards and Honors <u>during Residency</u>:

- 2010 AADPRT Fellowship Award
- 2010 APA New York County District Branch Resident Research Award
- 2010 Poster selected for the 30 Top Posters, Society of Biological Psychiatry
- 2011 Laughlin Fellowship
- 2011 APA Annual Research Colloquium for Junior Investigators Award
- 2011 AADPRT Pre-meeting Speaker "How to do research during residency"
- 2011 American College of Psychiatrists Laughlin Fellowship Award
- 2011 APA New York County District Branch Resident Research Award
- 2011 American College of Neuropsychopharmacology (ACNP) Travel Award
- 2011 Travel award and Presenter, Critical Research Issues in Latino Mental Health conference
- 2011 New York State Psychiatric Association Annual Scientific Paper Award
- 2012 Selected for "Career Development Institute for Psychiatry," a 2-year competitive career development program (NIMH)
- 2012 APA New York County District Branch Resident Research Award
- 2013 APA New York County District Branch Annual Scientific Paper Contest Award
- 2013 Fellowship to participate in the University of Michigan's 2013 Training course in fMRI
- 2013 Mount Sinai Graduate Medical Education Research Day Best Clinical Research Poster
- 2013 Travel Award, Workshop on Clinical Trials in Psychopharmacology, American Society of Clinical Psychopharmacology
- 2013 Travel Award, Military Suicide Research Consortium and American Association of Suicidology
- 2013 Travel Award, Society of Biological Psychiatry

Kyle Lapidus, MD, PhD

Graduated 2013

Current Position: Assistant Professor of Psychiatry and Neuroscience, Director of Neuromodulation, Stony Brook University

Please see here for a current listing of Dr. Lapidus's Pubmed-indexed papers.

I used my protected research time in Mount Sinai's Physician-Scientist Track to launch a career of patient-oriented clinical and translational research. I developed projects, received grants, and published on new approaches to mechanistic understanding and treatment of major depression (MDD) and OCD. With support from NARSAD, I am completing an investigation of the role of oxidative stress in the therapeutic, rapid antidepressant response to ketamine in MDD. To this end, I have performed MRS scans before and after treatment in a clinical trial of a novel delivery method for ketamine for depression, intranasal administration. I also completed a research fellowship in deep TMS *during* residency, and have established collaborations with multiple sites and countries. Following receipt of my K23, I have started working at Stony Brook, where I will establish a translational research program including clinical and basic-science laboratories.

Partial list of Publications during Residency:

- 1. Lapidus KA, CH Kellner. When to switch from unilateral to bilateral electroconvulsive therapy. *J ECT*. 2011:244-6.
- Lapidus K, AR Gilbert. Treatment of pediatric OCD. Child Adol Psychopharm News 2010;15:6-12.
- 3. Lapidus KA, Shin JS, Pasculli RM, Briggs MC, Popeo DM, Kellner CH. Low-Dose Right Unilateral Electroconvulsive Therapy (ECT): Effectiveness of the First Treatment. *J ECT*. 2013 Jun;29(2):83-5

- 4. Lapidus KA, Kopell BH, Ben-Haim S, Rezai AR, Goodman WK. History of psychosurgery: a psychiatrist's perspective. World Neurosurg. 2013 Sep-Oct;80(3-4):S27.e1-16
- 5. Lapidus KA, Gabbay V, Mao X, Johnson A, Murrough JW, Mathew SJ, Shungu DC. In vivo (1)H MRS study of potential associations between glutathione, oxidative stress and anhedonia in major depressive disorder. Neurosci Lett. 2014 May 21;569:74-9.
- Lapidus KA, Levitch CF, Perez AM, Brallier JW, Parides MK, Soleimani L, Feder A, Iosifescu DV, Charney DS, Murrough JW. A Randomized Controlled Trial of Intranasal Ketamine in Major Depressive Disorder. Biol Psychiatry. 2014 Apr 3. pii: S0006-3223(14)00227-3.
- 7. Lapidus KA, Nwokafor C, Scott D, Baroni TE, Tenenbaum SA, Hiroi N, Singer RH, Czaplinski K. Transgenic expression of ZBP1 in neurons suppresses cocaine-associated conditioning. Learn Mem. 2012 Jan 12;19(2):35-42.

Awards and Honors during Residency:

2010 APIRE/Janssen Resident Psychiatric Research Scholars Program

2010 NARSAD Young Investigator Award

2010 APA Research Colloquium for Junior Investigators

2010 Fellowship for Workshop on Clinical Trials in Psychopharmacology, ASCP

2011 NIMH Outstanding Resident Award

2011 Graduate Medical Education Travel Award

2011 Career Development Institute for Bipolar Disorder

2012 APA Research Colloquium for Junior Investigators

2012 NIMH Brain Camp

Laili Soleimani, MD, MSc

Graduated 2013

Current Position: Assistant Clinical Professor of Psychiatry, Icahn School of Medicine at Mount Sinai

Please see here for a current listing of Dr. Soleimani's Pubmed-indexed papers.

During residency I was able to establish my research interest in the area of mood disorders and suicide, working closely with Dr. James Murrough and Dr. Dan Iosifescu in the Mood and Anxiety Program (MAP) to design, submit and establish the first inpatient psychiatry study at The Mount Sinai Hospital. We designed a Double-Blind Randomized Clinical Trial to measure the efficacy of ketamine infusion in ameliorating suicidal ideation (SI) and depression in inpatients. This study was funded by the American Foundation for Suicide Prevention (AFSP) and was launched in March 2012. I have also been trained and certified in administering repetitive transcranial magnetic stimulation (rTMS) and studied the cognitive changes after treatment with rTMS. I am also involved in studying changes in a prefrontal cortex- dependent task after stimulation with rTMS. In another study, with Dr. Pamela Sklar as the PI, we are looking for the possible cognitive enhancing effect of a calcium channel blocker. I am also submitting another study, along with Dr. Charles Kellner, measuring implicit measures of suicidal ideation via a computer task before and after receiving ECT. After completing residency training I did a fellowship in Geriatric Psychiatry at Mount Sinai and now have a full-time position on the faculty where I am a supervising psychiatrist on our Geriatric Psychiatry Inpatient Service and am continuing my research.

Partial list of Publications during Residency:

- Soleimani L, Oquendo MA, Sullivan GM, Mathé AA, Mann AA. Cerebrospinal Fluid Neuropeptide Y in Major Depression and Reported Childhood Trauma. Int J Neuropsychopharmacol. 2014 Oct 31;18(1)
- 2. Lapidus KA, Levitch CF, Perez AM, Brallier JW, Parides MK, Soleimani L, Feder A, Iosifescu DV, Charney DS, Murrough JW. A Randomized Controlled Trial of Intranasal Ketamine in Major Depressive Disorder. *Biol Psychiatry*. 2014 Apr 3.
- 3. Price RB, Iosifescu DV, Murrough JW, Chang LC, Al Jurdi RK, Iqbal SZ, Soleimani L, Charney DS, Foulkes AL, Mathew SJ. Effects of ketamine on explicit and implicit suicidal cognition: a randomized controlled trial in treatment-resistant depression. *Depress Anxiety*. 2014 Apr;31(4):335-43.
- 4. Friedman JI, Soleimani L, McGonigle DP, Egol C, Silverstein JH. Pharmacological treatments of non-substance-withdrawal delirium: a systematic review of prospective trials. *Am J Psychiatry*. 2014 Feb 1;171(2):151-9.

Poster Presentations:

- "Self and proxy ratings of Patient Reported Outcomes: Impact of the cognitive status." Soleimani L, Lopez S, De la Fuente A, Benson G, Creighton J, Geramian H, McGovern C, Luo X, Sano M, Neugroschl J. Poster Presentation at the Alzheimer's Association International Conference (AAIC). July 2013. Boston, USA.
- "Cerebrospinal Fluid Neuropeptide Y in Major Depression and Reported Childhood Abuse."
 Soleimani L, Oquendo MA, Sullivan GM, Mathé AA, Mann JJ. Society for Biological Psychiatry (SOBP), May 2013. San Francisco, USA.
- "Impulsivity in Bipolar Disorder and its Relationship with Neurocognitive Dysfunction." Soleimani L, Powers R, Garno J, Malhotra A, Burdick K. Society for Biological Psychiatry (SOBP), May 2012 Philadelphia, USA.
- "Investigating rapid anti-suicidal ideation effects of intravenous (IV) ketamine in hospitalized patients." Soleimani L, Murrough J, Feder A, Rodriguez G, Perez A, Lapidus K, Iosifescu D. APA Colloquium for Junior Investigators, Research Colloquium for Junior Investigators, 2011, Honolulu, USA.

Awards and Honors <u>during Residency</u>:

2011 APA Research Colloquium for Junior Investigators 2012 Workshop on Clinical Trials in Psychopharmacology 2012 Geriatric Mental Health Foundation (GMHF) Scholarship Program

Benjamin Angarita, MD

Graduated 2014

Current Position: Fellow in Child and Adolescent Psychiatry, Icahn School of Medicine at Mount Sinai

During my PGY-1 year I worked with Dr. Jeffrey Newcorn analyzing data from his multi-site, double-blind, crossover comparison trial of Atomoxetine vs OROS Methylphenidate in Youth with ADHD, and I presented my findings as a poster at the APA's Institute on Psychiatric Services in San Francisco. During my PGY-2 year, I worked with Dr. Alexander Kolevzon to design a research plan for a pilot trial of IGF-1 in Autism Spectrum Disorder. I submitted this research plan to the National Institute of Health

(NIH) and received The National Institute of Health Clinical Research Loan Repayment Award for Individuals from Disadvantaged Backgrounds to support this pilot trial as a PGY-3 and PGY-4. In addition as a PGY-2, I designed several outreach programs and a research study related to Latino Mental Health, and I was awarded the APA/SAMSHA National Minority Fellowship (\$27,000) to complete this work. As a PGY-3 and PGY-4 I continued my work in clinical trials for Autism Spectrum Disorder. I am currently a PGY-5 fellow in Child and Adolescent Psychiatry at Mount Sinai where I am continuing on as a research track resident.

Partial list of Publications during Residency:

- Kolevzon A, Angarita B, Bush L, Wang AT, Frank Y, Yang A, Rapaport R, Saland J, Srivastava S, Farrell C, Edelmann LJ Buxbaum JD. Phelan-McDermid Syndrome: Practice Parameters for Medical Assessment and Monitoring. *The Journal of Neurodevelopmental Disorders*. Journal of Neurodevelopmental Disorders 2014, 6:39
- 2. Samuel D, Angarita B, Igboeli B, Woldu H. Four International Residents' Perspectives on Working Overseas as Part of Residency Training: Liberia, Myanmar, and Saint Vincent/Grenadines. *Annals of Global Health*. 2014 March April;80(2):143-145.
- 3. Soorya L, Kolevzon A, Zweifach J, Lim T, Dobry Y, Schwartz L, Frank Y, Wang AT, Cai G, Parkhomenko E, Halpern D, Grodberg D, Angarita B, Willner JP, Yang A, Canitano R, Chaplin W, Betancur C, Buxbaum JD. Prospective Investigation of Autism and Genotype Phenotype Correlations in 22q13 Deletion Syndrome and SHANK3 Deficiency. *Molecular Autism*, 2013 Jun 11:4(1):18.
- 4. Angarita B. A PGY2's Reflections on the ACGME Mandated Changes in Intern Work Hours. *Am J Psychiatry Res J.* 2014 Jan 7(1):11-12.

Awards and Honors:

2011 American Academy of Child and Adolescent Psychiatry's Program for General Psychiatry Residents 2012 NIH Clinical Research Loan Repayment Award for Individuals from Disadvantaged Backgrounds

2012 APA/SAMHSA National Minority Fellowship

2013 APA/Janssen Resident Psychiatric Research Scholar

2013 APA Research Colloquium for Junior Investigators

2014 Laughlin Fellowship

Marc Lener, MD Graduated 2015

Current Position: Research Fellowship, NIMH

During my PGY-1 year, I completed work on projects I had begun prior to residency training, including a manuscript of a study that was recently published in *Schizophrenia Research* and a review article that compares the common neurobiological characteristics of temporal lobe epilepsy and schizophrenia. During my PGY-2 year, in addition to completing chapters in clinical manuals in Psychiatry and Interventional Pain, I began working in Dr. Erin Hazlett's lab studying white matter abnormalities via diffusion tensor imaging (DTI) analysis in brains of schizophrenic patients compared to brains of schizotypal personality disorder patients. The manuscript of this study was recently submitted for publication. During my PGY-3 year, I have spent the majority of my outpatient clinical and research time in the Mood and Anxiety Disorders Program with Drs. Daniel losifescu and James Murrough, studying patients who have treatment resistant depression (TRD). I am currently performing a DTI analysis comparing a TRD population with a non-treatment resistant population (nTRD) to determine whether

patients with TRD have a greater degree of illness as defined by white matter tract coherence within the spectrum of depressive illness. Furthermore, within the TRD patient group, we are examining whether specific white matter tract abnormalities predict treatment response to ketamine, a novel experimental treatment for depression. For both analyses, we plan to combine structural MRI with functional MRI data to further identify associations with depression illness severity and ketamine treatment response. I have submitted this research plan to the NIH and am currently under review by The NIH Clinical Research Loan Repayment Award for Individuals from Disadvantaged Backgrounds. My goal is to continue developing my research skills, particularly in neuroimaging techniques to help identify biomarkers for diagnosis and treatment response prediction.

Partial list of Publications during Residency:

- 1. Lener MS, Iosifescu DV. In pursuit of neuroimaging biomarkers to guide treatment selection in major depressive disorder: a review of the literature. Ann N Y Acad Sci. 2015 May;1344:50-65.
- 2. Lener MS, Wong E, Tang CY, Byne W, Goldstein KE, Blair NJ, Haznedar MM, New AS, Chemerinski E, Chu KW, Rimsky LS, Siever LJ, Koenigsberg HW, Hazlett EA. White matter abnormalities in schizophrenia and schizotypal personality disorder. Schizophr Bull. 2015 Jan;41(1):300-10.
- 3. Lener MS, Wong E, Tang CY, Byne W, Goldstein KE, Blair NJ, Haznedar MM, New AS, Chemerinski E, Chu KW, Rimsky LS, Siever LJ, Koenigsberg HW, Hazlett EA. White Matter Abnormalities in Schizophrenia and Schizotypal Personality Disorder. *Schizophr Bull.* 2014 Jun 23.
- 4. Lener MS, Goodnow SJ, Wood JA, Chowdari KV, Keshavan MS, Nimgaonkar V, Prasad KM. RGS4 and COMT risk variants are associated with brain structural alterations. Schizophr Res. 2013 Oct;150(1):321-2.
- 5. Lener MS, Hyde TM. Seizures and Schizophrenia: Seeking Common Ground. Submitted to *British Journal of Psychiatry*
- 6. Lener MS, Anderson SA, Ivanov I. Illicit Stimulant Abuse in Adolescents. In *Substance Abuse in Adolescence and Young Adults: A Manual for Pediatric and Primary Care Physicians*. Eds. Donald E. Greydanus MD, Gabriel Kaplan MD, Dilip Patel MD, Joav Merrick MD. Edits accepted, in process of publication.

Awards and Honors during Residency:

2014 APA Research Colloquium for Junior Investigators 2014 Third place, New York State Psychiatric Association Scientific Paper Contest 2014 NIH Travel Grant for Training in fMRI Course at the University of Michigan 2015 2nd Prize, NY County Resident-Fellow Research Awards 2015 Society of Biological Psychiatry Travel Award

Tobias Halene, MD, PhD

Graduated 2015

Current Position: MIRECC Research Fellowship, James J Peters VAMC and Icahn School of Medicine at Mount Sinai

I received my medical training in Germany and Italy and worked in clinical psychiatry at Aachen University before I took the opportunity to expand my research training at the University of Pennsylvania. My work with animal models of psychiatric disease helped me to understand better how NMDA receptor expression impacts both behavior and early sensory processing. This set me up for a seamless transition towards

becoming an intern in psychiatry. In my 1st year, I took my time to scout for what Mount Sinai has to offer and focused on finding a mentor and a lab that would provide a good fit for my interests. In my 2nd year, I started to train with Schahram Akbarian, MD, PhD and his lab. By perusing the literature to collaborate on review articles, I learned the basics of epigenetic regulation of the human brain, possible roles in the neurobiology and pathophysiology of schizophrenia and other disorders, potential epigenetic targets for drug therapy, and challenges associated with chromatin-modifying drugs. I also started to use microbiological research techniques. I inherited data from monkeys treated with either control or antipsychotics and worked with monkey brain tissue to understand the role of subcortical white matter neurons that have been reported to be increased in number and density for a subset of patients with schizophrenia (and related disorders). While it is often assumed that this type of alteration reflects a fixed lesion of early brain development, other potential interpretations of this finding include ongoing dynamic regulation of white matter neuron numbers beyond the postnatal period, a shared molecular pathophysiology, or a medication effect. I am currently isolating RNA from sorted nuclei and plan to amplify and quantify messenger RNA for specific genes to unravel the molecular fingerprint of the white matter neurons and ultimately get to a better understanding of their origin and function.

Partial list of Publications during Residency:

- Maze I, Wenderski W, Noh KM, Bagot RC, Tzavaras N, Purushothaman I, Elsässer SJ, Guo Y, Ionete C, Hurd YL, Tamminga CA, Halene T, Farrelly L, Soshnev AA, Wen D, Rafii S, Birtwistle MR, Akbarian S, Buchholz BA, Blitzer RD, Nestler EJ, Yuan ZF, Garcia BA, Shen L, Molina H, Allis CD. Critical Role of Histone Turnover in Neuronal Transcription and Plasticity. *Neuron.* 2015 Jul 1;87(1):77-94.
- 2. Halene TB, Peter CJ, Akbarian S. Epigenetic Dysregulation in the Schizophrenic Brain. *Curr Behav Neurosci Rep.* Epub: 2014 Mar 23.
- 3. Akbarian S, Halene T. The neuroepigenetics of suicide. Am J Psychiatry. 2013 May 1;170(5):462-5.
- 4. Hasan A, Mitchell A, Schneider A, Halene T, Akbarian S. Epigenetic dysregulation in schizophrenia: molecular and clinical aspects of histone deacetylase inhibitors. *Eur Arch Psychiatry Clin Neurosci.* 2013 Jun;263(4):273-84.
- 5. Featherstone RE, Phillips JM, Thieu T, Ehrlichman RS, Halene TB, Leiser SC, Christian E, Johnson E, Lerman C, Siegel SJ. Nicotine receptor subtype-specific effects on auditory evoked oscillations and potentials. *PLoS One*. 2012;7(7):e39775.
- 6. Carlson GC, Talbot K, Halene TB, Gandal MJ, Kazi HA, Schlosser L, Phung QH, Gur RE, Arnold SE, Siegel SJ. Dysbindin-1 mutant mice implicate reduced fast-phasic inhibition as a final common disease mechanism in schizophrenia. *Proc Natl Acad Sci USA*. 2011 Oct 25;108(43).

Ivan Chavarria-Siles, MD (PhD candidate)

Current PGY-4 Resident

Since I started residency training, I joined the Division of Psychiatric Genomics under the supervision of Pamela Sklar, MD, PhD. During my PGY-1 and PGY-2 years, I worked on completing projects that I had started prior to entering residency training as part of my ongoing PhD project. I completed a study investigating whether genetic variations in specific glia functions that have been associated with schizophrenia explained white matter integrity changes in schizophrenia; this study was presented as a poster in the XXI World Congress of Psychiatric Genetics in Boston (fall 2013) and is currently being reviewed for publication. During this time I also participated in writing 2 book chapters, one on Brain Imaging and Cognition for a book series on advances in Behavior Genetics, and another chapter on Translational Neuroscience in Clinical Psychiatry for the Mount Sinai Expert Guide series. During my PGY-3 year I've been looking at the effect of schizophrenia polygenic risk scores on white matter integrity in the brain using data from the Psychiatric Genomics Consortium. The goal of this project is to

determine the effects of an overall polygenic risk profile score on the white matter integrity that might help identify measures of genetic susceptibility for schizophrenia. My work on imaging genetics is part of my PhD project at the VU University in Amsterdam, Netherlands; I expect to be defending my thesis in the summer of 2015. Recently I received the NIMH Outstanding Resident Award and was invited to visit the NIH intramural program and meet with multiple leading investigators in psychiatry. I will be attending the NIMH Brain Camp in the spring of 2015.

Partial list of Publications <u>during Residency</u>:

- 1. Chavarria-Siles I, White T, de Leeuw C, Goudriaan A, Lips E, Ehrlich S, Turner JA, Calhoun VD, Gollub RL, Magnotta VA, Ho BC, Smit AB, Verheijen MH, Posthuma D. Myelination-related genes are associated with decreased white matter integrity in schizophrenia. Eur J Hum Genet. 2015 May 27.
- 2. Chavarría-Siles I, Rijpkema M, Lips E, Arias-Vasquez A, Verhage M, Franke B, Fernández G, Posthuma D. Genes encoding heterotrimeric G-proteins are associated with gray matter volume variations in the medial frontal cortex. *Cereb Cortex*. 2013 May;23(5):1025-30.
- 3. Chavarria-Siles I, Fernández G, Posthuma D. Brain Imaging and Cognition. In: *Behavioral Genetics of Cognition Across the Lifespan*. Advances in Behavior Genetics Series (Finkel D. and Reynolds C.A., Eds) Springer Publishing Group, New York, 2013.

Awards and Honors <u>during Residency</u>:

2014 NIMH Outstanding Resident Award 2014 NIMH Brain Camp 2014-2016 Leon Levy Fellowship

Drew Kiraly, MD, PhD

Current PGY-3 Resident

Prior to medical school and throughout my MD/PhD training, my work has been focused on examining neuronal mechanisms of drug addiction, such as NMDA receptor signaling, changes in dendritic spine morphology, and changes in post-synaptic signaling complexes. I have also worked on the neuronal changes associated with chronic corticosterone exposure in various behavioral paradigms.

During my PGY-1&2 years, in addition to learning to be a new physician and new father, I spent time finishing projects with my thesis lab examining the effects of the post-synaptic protein Kalirin-7 on cocaine self- administration, and another using mass spectrometry to look at quantitative changes in phosphorylation of post-synaptic proteins following acute or chronic cocaine exposure. During my time at the VA, I was able to work with attendings from the inpatient psychiatry unit and was first author on publication of two case reports and three book chapters. During those years I also worked on a project looking at cognitive effects of buprenorphine in patients recovering from opiate abuse; this study is currently being written up for publication.

Now that I have entered my PGY-3 year, I have much protected research time and have been able to throw myself into multiple research projects. I have chosen Eric Nestler, MD, PhD as my primary research mentor, and in his lab have developed several translational projects examining the effects of inflammatory signaling cascades and the effects of the gut microbiota on the development of psychostimulant addiction. In addition to this, I have begun clinical research in the Mood and Anxiety Disorders Research Program (MAP) under the tutelage of Drs. James Murrough and Dan Iosifescu. Here, I have been able to start developing projects that feed into my own interests in the role of

inflammation in mental illness, while also working as a study physician on multiple ongoing studies to learn the details of how clinical trials are carried out. Finally, I have also been working on setting up a collaboration with Dr. Alex Kolevzon of the Seaver Autism Center to develop a mouse model of autism to examine the pathogenic role of the gut microbiome in autism spectrum disorders. While starting all of these projects (in addition to taking on child and adult caseloads in the outpatient clinics) has made for a busy start to the year, it is also very exciting to be involved in so many collaborative projects and start being able to see ideas come to fruition. During these years I hope to accumulate enough data to begin writing grants and transition to a faculty position shortly after residency.

Partial list of Publications <u>during Residency</u>:

Peer-Reviewed Papers:

- 1. Kiraly DD, Sher L. Low testosterone in a young combat veteran with dual diagnosis and suicidal behavior: a case study. *Int J Adolesc Med Health*. 2015;27(2):235-7.
- 2. Kiraly DD, Sher L. Suicidal behavior in a medical professional with comorbid depression and substance use disorder: an educational case report. *Int J Adolesc Med Health*. 2015;27(2):231-3.
- Kiraly DD, Nemirovsky NE, LaRese TP, Tomek SE, Yahn SL, Olive MF, Eipper BA, Mains RE. Constitutive knockout of kalirin-7 leads to increased rates of cocaine self-administration. *Mol Pharmacol*. 2013 Oct;84(4):582-90.

Book Chapters:

- 4. Kiraly DD, Sher L. Suicidal behavior in men with comorbid depression and substance use disorders: Roles of active substance use, exposure to combat in the military, and alterations in testosterone levels. Chapter in *Men's Mental Health*. Leo Sher & Tim Rice Eds. In Press.
- 5. Kiraly DD, Sher L. Dual diagnosis and suicidal behavior in combat veterans. Chapter in Forensic Psychiatry: A Public Health Perspective. Leo Sher & Joav Merrick Eds. In Press
- 6. Kiraly DD, Sher L. Health professionals and suicidal behavior. Chapter in *Forensic Psychiatry:* A *Public Health Perspective*. Leo Sher & Joav Merrick Eds. In Press

Dr. Kiraly's Pubmed indexed papers can be found here.

Awards and Honors during Residency:

2015 NIMH Outstanding Resident Award

Nigel Kennedy, MBBS, PhD, MSc Current PGY-2 Resident

Nigel has had a longstanding fascination with neuroscience and psychiatry. Currently working as a neurosurgery specialty trainee in the UK, he previously obtained his graduate degrees conducting research in schizophrenia. His association study of potential pathogenic alleles in schizophrenia highlighted that genetic changes in neurodevelopmental pathways are important both in pathogenesis and for building a genetic haplotype most strongly associated with schizophrenia. In another project, using a novel gene capture technique based on RecA and the DIRECT method, he cloned and characterized a large trinucleotide repeat found to be overrepresented in DNA from patients with schizophrenia. Working with novel techniques in an immunohistochemistry study of human brain tissue, he stained for markers of neurodegeneration and showed an over-representation of inflammatory markers in patients with schizophrenia. He also developed a model system for imaging and identifying

ligands as potential targets for clinical intervention in treating autonomic disorders, using immunofluorescent antibodies to the acetylcholine receptor in cultured rat dorsal root ganglia. As an undergraduate, he researched a lipid extrusion method to create multi-lamellar vesicles with surface-grafted polyethylene glycol, with the goal to create potential drug-delivery vehicles. Studying the scientific basis of psychiatric illness inspired him to become a clinician. During his clinical training and after, he became particularly interested in the use of surgical treatments, such as deep brain stimulation, for the treatment of previously intractable conditions. Hence his current position in neurosurgery and his forward-thinking commitment to a career in the research and practice of interventional psychiatry. He plans on working with Dr. Wayne Goodman and others involved in the current state-of-the-art DBS research at Mount Sinai.

Appendix H2

PhD+ Track: Current Trainees

PGY-3

Kenechi Ejebe, MD (PhD candidate)

(Originally in Physician Scientist Track, now in PhD+ Residency Track)

Born in Nigeria to a professor and a judge, Kenechi Gabriel Ejebe immigrated to Plymouth, Minnesota when he was 8 years old. He learned English in grade school ESL classes and eventually went on to compete in speech and debate tournaments in high school, and he has continued to excel in academic pursuits and leadership. Kenechi's academic interests center on psychiatric genetics, innovative medicines, and diagnostics. In college, he worked alongside Dr. Susan Singer, on research funded by the National Science Foundation, investigating the genetic regulation of inflorescence in plant-based systems. He was elected to the Sigma Xi chapter for his research contributions and was honored as the Student Commencement Speaker for the graduating Class of 2002. For 2 years after college, Kenechi conducted research under an Intramural Research Training Award at NIH with Dr. Henry Levin, studying yeast genetics and using yeast as a model system to characterize HIV reverse transcription; this work was published in the Journal of Virology. During medical school, Kenechi broadened his research interests to include social activism. He interned at the World Health Organization in Geneva and was co-Leader of Physicians for Human Rights at GW. He directed the GW Chapter of the Student National Medical Association (SNMA) and served on SNMA's National Board of Directors. These and other accomplishments lead to Kenechi's 2006 selection as 1 of 10 American Medical Association Minority Scholars in the country. In 2008 during his third year of medical school, Kenechi received a Sarnoff Foundation Research Fellowship and joined the lab of Dr. Sekar Kathiresan at MGH/Harvard and the Broad Institute of Harvard/MIT. Kenechi's focus was on statistical analysis of SNPs in common disease. and he led a GWAS study of approximately 8,000 African-American patients. Upon graduation from medical school, Kenechi joined the Kathiresan lab as a Research Scientist and in 2011 was recruited as a Senior Scientist to join Moderna Therapeutics, an RNA-based personalized medicine start-up company based out of Harvard and founded by Flagship Ventures. Moderna is pioneering an entirely new drug modality using mRNA therapeutics to produce, in vivo, human proteins or antibodies inside patient cells that are in turn active intracellularly or secreted into the serum. As a member of the founding scientific team, he was involved in due-diligence activities, IP strategy/execution, and conducted medical needs assessments of potential IND candidates. In 2013, Moderna entered into an exclusive research agreement with AztraZeneca and Alexion Pharmaceuticals. Kenechi has co-authored over 9 peerreviewed journal articles including in Nature (x2), Nature Genetics, PLoS Genetics (x2), and Human Genetics. He is also named as an Inventor on 12 patent pending applications.

Kenechi describes choosing Mount Sinai's Psychiatry Residency Program because of its commitment to Human Genomics and Translational Neuroscience, and he first entered residency in the Physician-Scientist Track. During his PGY-1 year, he became involved in the Division of Psychiatric Genomics led by Pamela Sklar, MD, PhD. Under her mentorship, as well as that of Kristen Brennand, PhD, he began to familiarize himself with stem cell techniques and lay important groundwork for future projects during residency. Towards the end of PGY-1, the PhD+ Residency Track was funded by the NIMH, and he enthusiastically joined it, already having established relationships with excellent mentors, work, and research projects that would lead to a PhD thesis. In his PGY-2 year, in addition to his beginning outpatient clinical work, he worked on developing a project that applies genome-editing technology to human induced pluripotent (iPS) cells and neuronal progenitors cells (NPCs) to modulate targets of interest and explore their roles in the epigenetics of schizophrenia. As a PGY-3, he will continue his PhD

didactics as well as his outpatient clinical experience.

Partial list of Publications during Residency:

- 1. Schrum J, Ejebe K, Elbashir S. Method of Producing Antibodies. September 19, 2013. US Patent Application 20130244282.
- 2. Bancel S, Chakraborty T, de Fougerolles A, Elbashir S, Matthias J, Roy A, Whoriskey S, Wood K, Hatala P, Schrum J, Ejebe K, Ellsworth J, Guild J. Modified Polynucleotides for the Production of Secreted Proteins. October 3, 2013. US Patent Application 20130259923.
- 3. Bancel S, Chakraborty T, de Fougerolles A, Elbashir S, Matthias J, Roy A, Whoriskey S, Wood K, Hatala P, Schrum J, Ejebe K, Ellsworth J, Guild J. October 3, 2013. Modified Polynucleotides for the Production of Biologics and Proteins Associated with Human Disease. US Patent Application 20130259924.
- 4. Bancel S, Chakraborty T, de Fougerolles A, Elbashir S, Matthias J, Roy A, Whoriskey S, Wood K, Hatala P, Schrum J, Ejebe K, Ellsworth J, Guild J. Modified Polynucleotides for the Production of Proteins Associated with Human Disease. January 9, 2014. US Patent Application 20140010861

PGY-2

Alexander Charney, MD (PhD candidate)

Alex completed all medical school requirements in 3.25 years, then spent the final 8 months as an apprentice to the senior bioinformatician in the lab of his co-mentor—Pamela Sklar, MD. PhD—one of the world's experts on psychiatric genetics. He remained in Dr. Sklar's lab as a postdoctoral researcher for an additional 2 years, before entering Mount Sinai's psychiatry residency program in July 2014, allowing him to continue his research without interruption. Alex's expertise lies in the genetic architecture of neuropsychiatric illness. Under Dr.Sklar, he has been responsible for the programming and implementation of the statistical analyses performed for the International Cohort Collection for Bipolar Disorder (ICCBD), a large genome-wide association study (GWAS). His work for the ICCBD has included analyses involved in deriving phenotypic variables, harmonizing datasets derived from multinational cohorts, and performing all genetic analyses for both single-nucleotide and structural variation. Through these analyses evidence for genetic differences between the clinical subtypes of bipolar disorder was identified (manuscript under review). Alex has also played a lead role in developing a novel method that uses genetics to characterize the overlap between schizophrenia pathogenesis and antipsychotic mechanism of action. Using this method, the team found that the overlap between disease genetics and treatment mechanisms extends beyond canonical dopaminergic hypotheses, and that treatmentrefractory patients have higher rates of rare loss-of-function mutations in the genes that code for antipsychotic targets (manuscript under review). Alex is the primary investigator of the "Living Brain Project," which he began developing in November 2012. This project aims to utilize brain tissue, neuroimaging, electrophysiology, and clinical observations of living patients in order to elucidate biological processes underlying both normal and pathological functions of the human brain. The living cohort will ultimately consist of over 200 individuals with severe, treatment-refractory neuropsychiatric illnesses from whom hundreds of clinical phenotype measurements are obtained and multiple layers of molecular data from multiple tissue types—most notably the brain—are generated. Enrollment for this project began in September 2013, and tissue has been collected from over 70 individuals at the time of this writing.

Publications/Posters:

1. Ivanov I, Charney A. Treating pediatric patients with antipsychotic drugs: Balancing benefits and safety. Mt Sinai J Med. 2008 May-Jun;75(3):276-86.

- Roussos P, Mitchell AC, Voloudakis G, Fullard JF, Pothula VM, Tsang J, Stahl EA, Georgakopoulos A, Ruderfer DM, Charney A, Okada Y, Siminovitch KA, Worthington J, Padyukov L, Klareskog L, Gregersen PK, Plenge RM, Raychaudhuri S, Fromer M, Purcell SM, Brennand KJ, Robakis NK, Schadt EE, Akbarian S, Sklar P. A role for noncoding variation in schizophrenia. Cell Rep. 2014 Nov 20;9(4):1417-29.
- 3. Castro VM, Minnier J, Murphy SN, Kohane I, Churchill SE, Gainer V, Cai T, Hoffnagle AG, Dai Y, Block S, Weill SR, Nadal-Vicens M, Pollastri AR, Rosenquist JN, Goryachev S, Ongur D, Sklar P, Perlis RH, Smoller JW; International Cohort Collection for Bipolar Disorder Consortium. Validation of electronic health record phenotyping of bipolar disorder cases and controls. Am J Psychiatry. 2015 Apr;172(4):363-72.
- 4. Charney AW, Moughal S, Charney DS. An assessment of the catecholamine hypothesis of bipolar disorder. *Bipolar Disorders: Basic Mechanisms and Therapeutic Implications*, 3rd Ed. (in press). Soares and Young (editors). Cambridge Academic Press.
- 5. Charney AW, Scarpa J, Ruderfer DM, Charney DS. Drug Repositioning in Psychiatry. *Drug Repositioning: Approaches and Applications for Neurotherapeutics.* (in press). Dudley and Berliocchi (editors). CRC Press-Taylor & Francis Group (Boca Raton, US).

Awards and Honors:

T32 Neuroscience Training Grant (2012) National Institutes of Health Clinical Loan Repayment Program Recipient (2012)

Whitney McFadden, MD (PhD candidate)

Having demonstrated a keen interest in the integration of basic science research, clinical research, clinical medical practice, and patient/public advocacy. Whitney was ideally poised to become the psychiatrist-scientist for whom our "PhD+" program was developed. Whitney was awarded a fellowship in the HHMI/Medical Research Scholars Program at NIMH between her MS2 and 3 years, where she conducted research under the mentorship of Dr. Joel Kleinman and Dr. Barbara Lipska in The Lieber Institute for Brain Development. Her first study used differential RNA expression as an intermediate phenotype and showed that a genetic variant affects coding for the alpha7-nicotinic acetylcholine receptor. The clinical manifestations of variants of this gene include cognitive deficits in episodic memory and learning, making it a possible target in high risk patients with psychiatric disease and cognitive symptoms. In another project also studying schizophrenia, she identified genetic risk variants for altered white matter neurons in the DLPFC using microarrays. The risk genes were found to have an affect on actin cell remodeling, phospholipid second messenger signaling, and zinc ion transport carriers, suggesting cellular mechanisms by which these aberrant white matter neurons may persist and contribute to altered circuitry responsible for symptoms. She has presented her findings at the cumulative MRSP symposium and at the Society for Biological Psychiatry; and the work has been published in the American Journal of Psychiatry. Her current research interest lies in continuing to investigate genetic risk variants involving altered neuronal migration during neurodevelopment. Earlier in her career, she studied motivation and resilience in geriatric populations working with Dr. Dilip Jeste and Dr. Colin Depp at the UCSD Stein Center for Research on Aging. She has also worked with Dr. Ehud Isacoff in the Neuroscience department at UC Berkeley studying ion channel stoichiometry, and with Dr. Jenifer Whistler at UCSF studying the biology of opiate addiction. In addition to her facility with research, Whitney has progressed through the ranks of the American Medical Student Association's leadership, first as UCSD Co-President, then Regional Director, then National Health Policy Coordinator, then Health Policy Chair. She helped develop a motivation scale for successful aging, served as Psychiatry Manager of the UCSD Student-Run Free Clinic, travelled as a summer health intern in Peru, and she is a club triathlete. Whitney is also an exemplary colleague and compassionate physician, traits recognized by her induction into the Gold Humanism Honor Society.

In the beginning of PGY-1 Whitney was able to explore different research mentors. Along with clinical rotations in the emergency room, the inpatient medical ward, and the inpatient psychiatric units Mount Sinai, she's been able to attend lab meetings and explore the wealth of neuroscience and technology talks and symposia at MSH. She will begin work this year in the labs of Dr. Panos Roussos and Dr. Pamela Sklar studying single cell RNA expression and epigenetic profiles of human brain tissue in psychiatric disease focusing on schizophrenia, cognition, and psychosis. She will also begin graduate courses in neuroscience, biostatistics, and genetic/genomics electives in her first and second year of the graduate program.

Publications/Posters:

- 1. Kunii Y, Zhang W, Xu Q, Hyde TM, McFadden W, Shin JH, Deep-Soboslay A, Ye T, Li C, Kleinman JE, Wang KH, Lipska BK. CHRNA7 and CHRFAM7A mRNAs: Co-Localized and Their Expression Levels Altered in the Postmortem Dorsolateral Prefrontal Cortex in Major Psychiatric Disorders. Am J Psychiatry. 2015 Jul 24:
- 2. McFadden W, Paltán-Ortiz JD, Jaffe A, Ye T, Hyde TM, Kleinman JE. Uniform Distribution of Interstitial White Matter Neurons in the Dorsolateral Prefrontal Cortex. Society for Biological Psychiatry. May 2014.
- 3. McFadden W. Copy Number Variants in CHRFAM7A and their associations with expression of CHRNA7 and CHRFAM7A. Society for Biological Psychiatry. May 2013
- 4. McFadden W, Depp C, Golshahn S, Jeste D. Motivation and resilience in successful aging. MSTREAM NIH Symposium Presentation. 2011.
- 5. He L, Kim J, Ou C, McFadden W, Van Rijn R, Whistler J. 2009. Methadone antinociception is dependent on peripheral opioid receptors. *Journal of Pain* 10: 369-379.
- 6. McFadden W, He L, Whistler J. Ethanol and Opiates: Altered states of analgesia tolerance and mu-opioid receptor trafficking in a dual drug model. Ernest Gallo Clinic and Research Center, UCSF. UC Berkeley Senior Honors Thesis Symposium. 2008.

Awards and Honors:

- 2014 Center for Excellence in Youth Education Teaching Award of the Mount Sinai Hospital and Laboratory Placement Program
- 2014 Outpatient Resident of the Month Award for professional behavior and clinical skills in outpatient medicine.
- 2014 Gold Humanism Honor Society (GHHS)

Appendix H3

PhD+ Track: Selected Program Faculty

Background

Our Department of Psychiatry is #6 in the US as ranked by federal funding, and our Department of Neuroscience is #3, with individual investigators listed among the top 10 funded Pl's.

In this powerful context, our PhD+ program includes faculty mentorship by luminaries in the fields of neuroscience, psychiatry, and genetics and takes advantage of ongoing developments in and strong connections among established and new research Institutes and facilities across the medical center. For an overview of the most recent developments, including new recruits and grants, please see the websites of the various Departments and Institutes involved in our PhD+ Track as well as our compendium of active federal grants in Psychiatry and Neuroscience.

- Psychiatry/Neuroscience Active NIH Grants (See <u>Appendix A</u>)
- Psychiatry/Neuroscience Active VA Grants (See <u>Appendix B</u>)
- Icahn School of Medicine at Mount Sinai Research Laboratories
- Department of Psychiatry
- Graduate School of Biomedical Sciences
- · Friedman Brain Institute
- Department of Neuroscience Research Laboratories
- Fishberg Department of Neuroscience
- Icahn Institute for Genomics and Multiscale Biology
- Mount Sinai Physician-Scholars PhD Program

Thesis Preceptors

We are pleased to introduce Schahram Akbarian, MD, PhD, as appointed Advisor to both of our Residency Research Tracks. Dr. Akbarian will oversee the productivity and professional growth of all Physician-Scientist and PhD+ track residents, including ensuring that appropriate and substantial mentorship relationships are developed and maintained.

In conjunction with the Advisory Committee, we have selected the following as our primary list of potential PhD preceptors; it includes both established full professors, as well as some younger faculty members with exciting current research. This presents to our trainees a group whom we believe have a strong capability, and interest, in training psychiatrists to do translational research. They are listed alphabetically below, along (with their primary appointments) and links to labs.

Schahram Akbarian, MD, PhD (Psychiatry) Neuroepigenetics Laboratory

Dr. Akbarian employs an array of methods, including cell type-specific chromatin sortings in human, non-human primate and rodent brain, as well as conditional deletions of chromatin modifying proteins in genetically engineered mice. These methodological approaches are aimed at uncovering epigenetic regulations that are unique to the human brain, as well as testing the role of specific chromatin remodeling mechanisms in normal and diseased brain development. One particular focus is the regulation of histone methylation markings associated with transcription start sites and other regulatory sequences at the 5'-end of genes. This includes behavioral studies and transcriptome and epigenome mapping in mutant mice with demethylases that were recently implicated in the neurobiology and genetics of some cases on the autism, mood, and psychosis spectra. In parallel, the lab charts on a genome-wide scale the epigenetic architecture of cortical neurons, including occupancies of histone methylation markings, in postmortem brain of subjects diagnosed with schizophrenia, depression, or autism. Finally, the lab measures the "epigenetic distance" between different cell types residing in the same tissue/same subject. Such comparative epigenome mapping is expected to provide novel, unprecedented insights into the role of regulatory, non-coding sequences important for cellular differentiation, as well as hominid brain evolution.

Mark Baxter, PhD (Neuroscience) Baxter Laboratory

The Baxter lab focuses on the neural mechanisms of learning, memory, executive function, and decision-making, and the ways in which these mechanisms fail in aging and neuropsychiatric disorders. Baxter's research interests include the functional neuroanatomy of frontal and temporal cortex, regulation of higher cognitive functions by neuromodulators, the biological basis of cognitive impairments in neurodegenerative disease and neuropsychiatric conditions, as well as the neurobiological and cognitive effects of general anesthesia.

<u>Deanna Benson, PhD (Neuroscience)</u> Benson Laboratory

The Benson lab investigates mechanisms underlying the generation and function of circuits and synapses during normal development and in the presence of disease-associated changes in gene dosage or gene mutation that are suspected to contribute to neurological and neuropsychiatric disorders. Changes in synapse number, shape or function are common to a variety of diseases and an underlying theme in the lab is that key stages of synapse assembly and stabilization during the generation of neural circuits may be selectively vulnerable. Of particular interest are the activity dependent development and regulation of cortical-striatal and hippocampal circuits.

Kristen Brennand, PhD (Psychiatry) Brennand Laboratory

Dr. Brennand's research uses stem cells to model psychiatric disorders *in vitro*. Her laboratory directly reprograms fibroblasts from schizophrenia (SZ) patients into human induced pluripotent stem cells (hiPSCs) and subsequently differentiates these disorder-specific hiPSCs into neural progenitor cells (NPCs) and neurons. The lab has observed aberrant migration and increased oxidative stress in SZ hiPSC NPCs (published in *Molecular Psychiatry*, 2014), while SZ hiPSC neurons showed diminished neuronal connectivity in conjunction with decreased neurite number, PSD95-protein levels and glutamate receptor expression (published in *Nature*, 2011). Key cellular and molecular elements of the SZ phenotype were ameliorated following treatment of SZ hiPSC neurons with the antipsychotic loxapine. Her group is now expanding their studies to include better clinically characterized patients, including a cohort of childhood onset SZ patients and patients with defined genetic mutations. Because gene expression comparisons of their hiPSC-derived NPCs and neurons indicate that these cells most resemble fetal rather than adult brain tissue, the Brennand laboratory is focusing on identifying causal genetic factors

contributing to predisposition to SZ. Major foci of interest include the relationship between cell adhesion and microRNA regulation, translation and epigenetics. Her lab seeks to define the disrupted molecular pathways and cellular processes that contribute to SZ.

Joseph Buxbaum, PhD (Psychiatry) Laboratory of Molecular Neuropsychiatry & Seaver Autism Center

Members of the research team in the laboratory and the Seaver Autism Center participate in interrelated autism research programs in genetics, phenotyping, imaging, behavioral and pharmacological interventions, genotype-phenotype analyses, cell and animal models, and functional neuroscience. The Center uses methods of genetic epidemiology, molecular and cell biology, genetics, and animal models to identify, and then characterize, genes that contribute to autism susceptibility, carrying out whole exome sequencing to identify mutations in autism. The laboratory has several rodent models where autism genes have been mutated. In the case of the Shank3 gene, Dr. Buxbaum's studies in a mouse model have led to an ongoing clinical trial.

Patrizia Casaccia, MD, PhD (Neuroscience) Laboratory of Epigenetics of Neural Repair

Dr. Casaccia's laboratory is interested in understanding the role of glial-neuronal communication in the pathogenesis of neurological and psychiatric disorders and adopts molecular and cellular techniques to find new therapies for these conditions. Her work includes translational research in regenerative and personalized medicine. The lab focuses on signaling mechanisms underlying axonal damage and mechanisms of myelin repair, with a special emphasis on the effect of aging, gender and environment on gene expression. Recently, the Casaccia lab has investigated the effect of emotional stress on myelin, hence, addressing high comorbidity between MS and depression.

Elizabeth Cropper, PhD (Neuroscience)

The cellular and molecular mechanisms that endow neural circuits with the ability to respond to changes in the external environment, simultaneously maintaining coordinated patterns of activity, are being investigated in an experimentally advantageous preparation, the marine mollusk Aplysia Californica. Mechanisms responsible for the expression of plasticity in complex rhythmic behavior, driven by a central pattern generator and composed of multiple phases are being characterized.

Joel Dudley, PhD (Genetics/Genomics) Dudley Lab

Dr. Dudley is the Director of Biomedical Informatics at the Icahn School of Medicine at Mount Sinai. His work focuses on the development and use of translational and biomedical informatics approaches to address critical challenges in systems medicine and biomedical informatics. He is are interested in identifying and developing novel therapeutic and diagnostic approaches for human disease through integration and analysis of molecular and clinical data, and also perform research to develop and evaluate methods to incorporate genomic sequencing data into clinical practice.

<u>Graham Ellis-Davies, PhD (Neuroscience)</u> <u>Ellis-Davies Lab</u>

The Ellis-Davies lab takes a multidisciplinary approach to scientific inquiry, combining expertise in chemistry, laser optics and transgenic mice to answer questions in contemporary neurobiology. We are is best known for using synthetic organic chemistry to make caged compounds that have been widely used by physiologists, cell biologists and neuroscientists around the world. For more than twenty years we have pioneered the development of such probes. Over the past decade computer controlled, ultra-fast lasers

have become widely available. These Ti:sapphire lasers enable highly localized excitation of chromophores in living tissue such that small subcellular regions can be pinpointed for imaging or photoactivation. Current research in the Ellis-Davies lab is concerned with using these lasers in two areas of neurobiology. First, we are developing new caged compounds that are designed for two-photon photolysis. In particular we are interested in multimodal optical control and capture of physiological processes using dual color, two-photon uncaging. A second line of research uses fluorescence imaging of cellular function and structure in living mice. Such imaging allows us to understand how, for example, calcium signals in astrocytes, neuronal integrity during Familial Alzheimer's disease or dendritic spine density change during learning and/or disease progression.

Sophia Frangou, MD, PhD (Psychiatry) Psychosis Research Program

The aim of the program is to promote discovery and accelerate translation of biomedical advances into novel prevention, detection, and treatment strategies for Schizophrenia and Bipolar Disorder. We combine neuroimaging, cognitive, and genomic data to map the biological pathways in psychosis and understand their relevance for resilience or transition to overt disease expression, progression, and treatment response. Dr. Frangou's multiple simultaneous projects include Project 1000, the key aim of which is to build a large-scale repository of demographic, clinical, cognitive, neuroimaging, and molecular data from 1000 patients with affective and non-affective psychosis. Interrogation of this comprehensive database represents a translational opportunity to identify characteristics and biological pathways that determine treatment response or resistance and patient outcome.

Menachem Fromer, PhD (Psychiatry)

Dr. Fromer, a recent recruit, focuses on sequencing data and genetic interpretation of this data within a disease context, specifically schizophrenia. His work has yielded efficient algorithms for processing large datasets of protein sequences and clustering them into functional groups, accurate algorithms for modeling protein structures and protein-protein interactions at the atomic level, and general-purpose algorithms for finding multiple optimal solutions for widely used mathematical models. His current focus is developing computational tools to analyze exome sequencing data for a sample of thousands of schizophrenia patients in order to uncover copy number variation.

Samuel Gandy, MD, PhD (Psychiatry and Neurology) Alzheimer's Disease Research Center

The Gandy laboratory focuses on molecular pathogenesis and drug discovery in Alzheimer's disease. Particular areas of interest include genes that co-regulate risk for both Alzheimer's disease and type 2 diabetes, iPS cell models of Alzheimer's disease, and roles of neurogenesis and autophagy in the pathogenesis of Alzheimer's disease. The Lab has recently developed basic and clinical research into chronic traumatic encephalopathy (CTE), the delayed Neurodegeneration that affects athletes and veterans who have undergone significant exposure to repetitive blast trauma.

Rita Goldstein, PhD and Nelly Alia-Klein, PhD (Psychiatry) NARC

The NARC (Neuropsychoimaging of Addiction and Related Conditions) research group uses multimodality functional neuroimaging methods (including fMRI, EEG/ERP, PET) to explore the neurobiological basis of impaired cognitive and emotional functioning in human drug addiction and other disorders of self-control (such as violent behavior). An important application of this research is to facilitate the development of intervention modalities that would improve treatment outcome in drug addiction and other chronically relapsing disorders of self-regulation.

<u>Javier Gonzalez-Maeso, PhD (Psychiatry)</u> Molecular Pharmacology Laboratory

Dr. Gonzalez-Maeso is interested in investigating the structure and function of G-protein-coupled receptors with the ultimate goal of discovering new drugs for the treatment of neuropsychiatric disorders. The lab uses several interdisciplinary approaches involving tissue cultures, mouse models, and post-mortem human brain analysis. The major focus of his group is to formulate epigenetic approaches to improve antipsychotic medications.

Ming-Hu Han, PhD (Pharmacology and Neuroscience) Han Laboratory

Dr. Han's group is using advanced optogenetic tools to characterize the cellular and circuit level mechanisms that govern susceptibility versus resilience to chronic stress in mouse models. His research has uncovered several novel ionic mechanisms of stress vulnerability within specific neural pathways and provides tangible pathways forward in the development of new antidepressant medications.

<u>Vahram Haroutunian, PhD (Psychiatry & Neuroscience)</u> <u>Psychopharmacology Laboratory</u>

Dr. Haroutunian's research centers on clinical and neurobiological correlates of schizophrenia and dementia, using combinations of cognitive and neuropsychological assessments, molecular biological techniques, neuropathological studies and rodent models to understand the biological substrates of mental illness and dementia with special emphasis on clinical application and translation.

<u>Patrick Hof, MD (Neuroscience)</u> <u>Laboratory of Neuromorphology</u>

Our research is directed towards the study of selective neuronal vulnerability in dementing illnesses using classical neuropathological as well as modern quantitative immunohistochemical methods. We intend to develop a quantitative, detailed and cohesive definition of neuronal susceptibility to degeneration in the cerebral cortex, by extending data on Alzheimer disease to other dementing disorders, such as FTD and CTE, as well as animal models of age-related illnesses, and by defining the key neurochemical and morphological characteristics linked to relative vulnerability (or resistance to degeneration) of identified neuronal populations. Neuronal morphology is analyzed in a quantitative manner using intracellular injection of hippocampal and neocortical neurons coupled with computerized reconstruction to assess the degree to which the accumulation of pathologic markers causes dendritic atrophy and spine loss in different subtypes of neocortical pyramidal cells subserving cortical circuits critical for memory and cognition. The laboratory is also involved in a large-scale characterization of the structural and molecular neuropathology of autism spectrum disorders, in association with the Seaver Center at Mount Sinai and Autism BrainNet.

George Huntley, PhD (Neuroscience) Huntley Laboratory

Dr. Huntley's principal research focus is on mechanisms of synaptic plasticity through which synaptic structure and function are modified developmentally, by learning and memory, and following injury. Current research projects include: 1) determining the role of adhesion and related molecules in synaptic function; 2) characterizing roles of several autism-linked genes in establishment and plasticity of cortical sensory maps; 3) molecular mechanisms of hippocampal synaptic remodeling.

<u>Yasmin Hurd, PhD (Psychiatry)</u> Molecular Neuropsychopharmacology

The Hurd lab investigates the relationship between psychiatric and drug abuse disorders with a growing emphasis on identifying factors that increase the risk for these disorders. Work is focused on systematic study of the human brains of drug abusers and subjects with psychiatric disorders in relation to opioid neuropeptide, cannabinoid and dopamine neural systems, mapping specific genes in the mesocorticolimbic system that regulate emotional function.

<u>Hirofumi Morishita, MD, PhD (Psychiatry)</u> Developmental Brain Plasticity & Cognition

Following PhD and psychiatry residency in Japan, his research focuses on understanding the mechanisms of experience-dependent brain plasticity during developmental critical periods. By combining molecular, circuit, and systems level methodologies in mouse visual cortex, he identified novel molecular "brakes" on adult plasticity, the removal of which led to successfully restored juvenile brain plasticity in adulthood. His current research aims to translate the critical period principle beyond vision and toward an understanding of neurodevelopmental disorders such as schizophrenia.

John Morrison, PhD (Neuroscience) Morrison Lab

Dr. Morrison's lab studies the molecular and structural nature of age-related alterations in synaptic plasticity that lead to decreased cognitive function and/or degeneration, and links between age-related decreases in estrogen levels (i.e., menopause), NMDA receptors, and cortical circuits. Cellular neuropathologic analyses of human brain, experimental and neuropathologic analyses of non-human primate cortex, and detailed neuropathologic analyses of genetically manipulated mice, are involved.

Eric Nestler, MD, PhD (Neuroscience) Nestler Lab

Dr. Nestler's research focuses on the role of the brain's reward pathways in the regulation of mood and motivation under normal conditions and its contribution to depression and antidepressant action in animal models. Regulation of reward pathway function by transcriptional mechanisms, in particular stress-induced transcription factors such as CREB and DeltaFosB and their physiological target genes, and epigenetic mechanisms that provide insight into stress and antidepressant action, are studied.

<u>Dalila Pinto, PhD (Psychiatry)</u> <u>Pinto Lab</u>

Dr. Pinto's research focuses on identifying risk factors and pathways involved in neurodevelopmental disorders such as autism, epilepsy, intellectual disability, and Rett syndrome. By using a combination of innovative high-throughput experimental and bioinformatics approaches, her lab maps and characterizes various forms of genetic variation (deletions, duplications, complex rearrangements, and point-mutations) that are further integrated with gene expression, epigenetics and clinical data to shed light on the mechanisms underlying these disorders.

Shaun Purcell, PhD (Psychiatry) Center for Statistical Genetics

Dr. Purcell is a genetic epidemiologist whose work focuses on developing statistical and computational tools for the design of genetic studies, the detection of gene variants influencing complex human traits and the dissection of these effects in the larger context of other genetic and environmental factors. In particular, Dr. Purcell currently works on whole exome resequencing and whole genome association studies of

bipolar disorder and schizophrenia, and the development of tools for whole genome and exome genetic studies. He directs the Center for Statistical Genetics at Mount Sinai School of Medicine, and is a Member of the Division of Psychiatric Genomics and the Institute for Genomics and Multiscale Biology.

Panagiotis (Panos) Roussos, MD, PhD (Psychiatry/Genetics & Genomics)

Dr. Roussos applies a multidisciplinary approach combining computational biology with genomic, transcriptomic and epigenomic analysis in human brain tissue to study the mechanisms through which loci increase the risk for neuropsychiatric illnesses. Current projects include (1) generating a cell-type specific, genome-wide map of open chromatin in human cortical neurons and glial cells; (2) characterizing the functional role of schizophrenia risk non-coding variants; (3) identify perturbations in gene networks of cases with schizophrenia, using postmortem brain and iPS neurons.

Scott Russo, PhD (Neuroscience) Russo Lab

The Russo lab investigates how the brain adapts to stress and drugs, leading to altered synaptic connectivity and behavioral changes relevant to depression and addiction. Behavioral models are analyzed by molecular, biochemical, and neuroanatomical techniques. Recent work, for example, has demonstrated a role for synaptic plasticity within the brain's reward circuitry in mediating the deleterious effects of stress as well as the importance of peripheral immune cytokines in mediating some of this stress-induced cellular and behavioral pathology.

Stephen Salton, MD, PhD (Neuroscience) Salton Lab

Dr. Salton studies the function of neurotrophic growth factors such as BDNF and NGF by identifying the target genes that they regulate, signaling pathways involved in gene induction, and the role that these downstream gene products play in CNS and PNS development and function, and in the regulation of complex behavior, including depression and memory.

<u>Eric Schadt, PhD (Genetics/Genomics)</u> Institute of Genomics and Multiscale Biology

One of the world's foremost experts in computational biology, he has focused on the generation and integration of large-scale sequence variation, molecular profiling and clinical data in disease populations to construct predictive network models of disease, providing for direct links between molecular biology and the pathophysiology of disease. He has contributed to a number of discoveries relating to the genetic basis of common human diseases such as diabetes and obesity.

<u>Daniela Schiller, PhD (Psychiatry)</u> Laboratory of Affective Neuroscience

Dr. Schiller's research focuses on the neural mechanisms underlying emotional learning and memory in the human brain. In that the environment we live in is constantly changing, our learned emotional responses need to be continuously updated to appropriately reflect current circumstances. Understanding the neural mechanisms that make such emotional flexibility and allow for memory modification may shed light on the impairments leading to anxiety disorders.

Andrew Sharp, PhD Sharp Lab His laboratory performs global analyses of structural variation, epigenetics, and gene expression combining innovative experimental and bioinformatic approaches. It uses both wet lab technologies such as DNA microarrays and high-massively parallel sequencing in addition to performing computational analyses of the human genome, and large datasets produced by high-throughput technologies.

Pamela Sklar, MD, PhD (Psychiatry) Division of Psychiatric Genomics

Dr. Sklar was recruited to Mount Sinai to develop a Division where gene finding in psychiatric genomics, functional characterization, molecular analysis and clinical translational genomics are tightly coupled in order to reach the point where human genetic insights affect the clinical practice of psychiatry. She is currently PI on 3 NIH grants on the genetics of schizophrenia and bipolar disorder. The highly interdisciplinary nature of this Division is demonstrated by the co-recruitment of all faculty in concert with the appropriate institute heads (Nestler for FBI, Schadt for Multiscale Genomics). The Division includes a Center for Statistical Genetics led by Shaun Purcell, PhD with two new junior faculty, Eli Stahl, PhD (Theoretical and Computational Genetics), Menachem Fromer, PhD (Computational Genetics, Functional Analyses). Additional genetic analyses of autism are being led by Dalila Pinto, PhD (Clinical Correlations of Structural Variants). Molecular analyses are being carried out by new recruits Kristen Brennand, PhD (Pluripotent Stem Cell Models) and Hirofumi Morishita, MD, PhD (Genetics of Brain Plasticity). Clinical analyses and clinical trials are being led by Katherine Burdick, PhD (Neurocognition). These recruits have built a vibrant new culture in the Division. Together, they represent what might be an unequaled educational environment for a psychiatrist wishing to train in psychiatric genetics.

Eli Stahl, PhD (Psychiatry)

Dr. Stahl, a recent recruit focuses on computational methods for the development and analyses of complex genetic disorders including autoimmune and neuropsychiatric diseases. His focus is on genetic association studies, genomics, and medical genetics of rheumatoid arthritis. Current projects include (1) characterizing the risk allele spectrum in schizophrenia, ALS, gout, rheumatoid arthritis, and other diseases, (2) establishing the genetic contribution to drug efficacy and toxicity in bipolar disorder, cancer, statin therapy, and others, (3) estimating genetic correlations among psychiatric and inflammatory diseases, (4) building genetic predictors of height, body mass index/obesity, and heart disease.

Klaudiusz Weiss, PhD (Neuroscience) Weiss Lab

The Weiss lab has developed and applied a multidisciplinary approach combining behavioral, morphological, electrophysiological, cell biological and molecular-biological techniques to explain the neural basis of those forms of behavioral plasticity that are due to changes in the motivational state of animals, addressing these questions in the marine mollusc Aplysia.

Hongyan Zou, MD, PhD (Neuroscience) Zou Lab

Dr. Jenny Zou is interested in molecular mechanisms controlling how neurons are born, extend axons, and regenerate or fail to regenerate after mammalian CNS injury. Dr. Zou uses mouse axon injury models, dissociated and explant neural cultures, molecular, cellular, biochemical and various imaging techniques to study signaling pathways that promote neurogenesis and axonogenesis. Such knowledge is crucial for targeting molecules for effective CNS regeneration.

Appendix I

Residents' Positions after Graduation (pre-2014)

2014 and 2015 graduates are included in the body of the document above.

2013

Jacob Appel, MD, JD

Psychosomatic Medicine Psychiatry Fellowship Mount Sinai Hospital Icahn School of Medicine

Hansel Arroyo, MD

Psychosomatic Medicine Psychiatry Fellowship Mount Sinai Hospital Icahn School of Medicine

Drew Bianchi, MD

Child & Adolescent Psychiatry Fellowship NYU Child Study Center / Bellevue Hospital Center New York University School of Medicine

Megan Crochet, MD

Child & Adolescent Psychiatry Fellowship Tulane University School Of Medicine

Claudine Egol, MD

Assistant Clinical Professor of Psychiatry Icahn School of Medicine at Mount Sinai

Kyle Lapidus, MD, PhD

Assistant Professor of Psychiatry Mount Sinai Health System

Andrei Moroz, MD

Private Practice, New York, NY.
Staff Psychiatrist
The Fifth Avenue Counseling Center
Candidate, New York Psychoanalytic Society and Institute

Sanjay Patel, MD

Child & Adolescent Psychiatry Fellowship NYU Child Study Center / Bellevue Hospital Center New York University School of Medicine

Diana Samuel, MD

Public Psychiatry Fellowship Columbia University College of Physicians & Surgeons Emergency Psychiatry Fellowship Columbia University College of Physicians & Surgeons

Marianna Shimonova, MD

Attending Psychiatrist James J. Peters VA Medical Center

Laili Soleimani, MD, MSc

Geriatric Psychiatry Fellowship Mount Sinai Hospital Icahn School of Medicine

Caitlin Stork, MD

Hospitalist Fellowship Mount Sinai Hospital Icahn School of Medicine Assistant Clerkship Director, Psychiatry Icahn School of Medicine at Mount Sinai

Hiwot Woldu, MD

Assistant Professor of Psychiatry
World Trade Center Program
Icahn School of Medicine at Mount Sinai
Public Psychiatry Fellowship
Columbia University College of Physicians & Surgeons

2012

Emily Aron, MD

Child & Adolescent Psychiatry Fellowship NYU Child Study Center / Bellevue Hospital Center New York University School of Medicine

Joseph Cerimele, MD

National Research Service Award (NRSA) Health Servies Research/Primary Care Psychiatry Fellow

University of Washington School of Medicine

Paul Glass, MD

Private Practice, Washington D.C.

Ellen Goldstein, MD

Attending Psychiatrist One Medical Group New York, NY

Kenneth Hung, MD

Assistant Clinical Professor of Psychiatry Mount Sinai Health System Staff Psychiatrist The Fifth Avenue Counseling Center New York, NY

Mary LaLonde, MD, PhD

Child & Adolescent Psychiatry Fellowship Mount Sinai Hospital Icahn School of Medicine

Teresa Lim, MD, MSc

Child & Adolescent Psychiatry Fellowship Mount Sinai Hospital Icahn School of Medicine

Mariana Markella, MD

Child & Adolescent Psychiatry Fellowship Mount Sinai Hospital Icahn School of Medicine

Maria de las Mercedes Perez Rodriquez, MD, PhD

Mood Disorders Fellowship Mount Sinai Hospital Icahn School of Medicine James J. Peters VA Medical Center

Panagiotis Roussos, MD, PhD

Mental Illness Research, Education, and Clinical Center (MIRECC) Fellowship Mount Sinai Hospital Icahn School of Medicine James J. Peters VA Medical Center

Eli Shalenberg, MD

Attending Psychiatrist Visiting Nurse Service of New York New York, NY

Devendra Thakur, MD

Consult Liaison Psychiatry Fellowship Mount Sinai Hospital Icahn School of Medicine

Jessica Wiegand, MD

Public Psychiatry Fellowship Columbia University College of Physicians & Surgeons

Amanda Wilson, MD, JD

Private Practice, New York, NY

2011

Olivia Carrick, MD

Child & Adolescent Psychiatry Fellowship NYU Child Study Center / Bellevue Hospital Center New York University School of Medicine

Christine Chang, MD

Pain Management Fellowship USC Keck School of Medicine University of Southern California

Yelena Kalitenko, MD

Consult Liaison Psychiatry Fellowship Mount Sinai Hospital Icahn School of Medicine

Katherine Mallory, MD

Child & Adolescent Psychiatry Fellowship Georgetown University Hospital Georgetown University

Kelly Morton, MD

Child & Adolescent Psychiatry Fellowship New York-Presbyterian Hospital Columbia University College of Physicians & Surgeons Weill Cornell Medical College

Lindsay Moskowitz, MD

Child & Adolescent Psychiatry Fellowship New York-Presbyterian Hospital Columbia University College of Physicians & Surgeons Weill Cornell Medical College

Louise Mullan, MD

Forensic Psychiatry Fellow New York-Presbyterian Hospital Columbia University College of Physicians & Surgeons

Andrew Rosendahl, MD, PhD

Private Practice, New York, NY

Naomi Schmelzer, MD, MPH

Consultation Liaison Psychiatry Fellowship Brigham & Women's Hospital Harvard Medical School

Jan Schuetz-Mueller, MD

Hospitalist Fellowship Mount Sinai Hospital Icahn School of Medicine

Emily Steinberg, MD

Assistant Professor World Trade Center Program Icahn School of Medicine

Michelle Tricamo, MD

Child & Adolescent Psychiatry Fellowship New York-Presbyterian Hospital Columbia University College of Physicians & Surgeons Weill Cornell Medical College

Sophia Wang, MD

Research Fellowship Alzheimer's Disease Research Center Icahn School of Medicine

2010

Roy Bachar, MD

Clinical Instructor of Psychiatry Icahn School of Medicine Attending Psychiatrist, Adult Inpatient Unit Mount Sinai Hospital Candidate, New York Psychoanalytic Society and Institute

Sharon Batista, MD

Consultation Liaison Psychiatry Fellowship Bellevue Hospital Center New York University School of Medicine

Daniel Culliford, MD

Attending Psychiatrist, FEGS New York, NY

Joanna Gedzior-Castillo, MD

Consultation Liaison Psychiatry Fellowship Long Island Jewish Medical Center Albert Einstein College of Medicine

Kathleen Jung, MD

Child & Adolescent Psychiatry Fellowship New York-Presbyterian Hospital Columbia University College of Physicians & Surgeons Weill Cornell Medical College

Kevin Lam, MD

Child & Adolescent Psychiatry Fellowship NYU Child Study Center / Bellevue Hospital Center New York University School of Medicine

Luis Ripoll, MD

Research Fellowship James J. Peters VA Medical Center Icahn School of Medicine

Anna Rosen, MD

Hospitalist Fellowship Icahn School of Medicine

Michele Wang, MD

Public Psychiatry Fellowship Columbia University College of Physicians & Surgeons

Lora Wolk, MD

Child & Adolescent Psychiatry Fellowship Montefiore Medical Center Albert Einstein College of Medicine

Meredith Wong, MD

Private Practice, New York, NY
Candidate, New York Psychoanalytic Society and Institute

2009

Howard Bliwise, MD

Clinical Instructor of Psychiatry
Icahn School of Medicine
Attending Psychiatrist, Adult Inpatient Unit
Mount Sinai Hospital
Candidate, New York Psychoanalytic Society and Institute

Catherine Daniels-Brady, MD

Consultation Liaison Psychiatry Fellowship Bellevue Hospital Center New York University School of Medicine

Noah Degaetano, MD

Clinical Instructor of Psychiatry Stanford University Attending Psychiatrist, PTSD Unit VA Palo Alto Health Care System

Ruth Geller, MD

Child & Adolescent Psychiatry Fellowship Long Island Jewish Medical Center Albert Einstein College of Medicine

Matthew Hopperstad, MD

Child & Adolescent Psychiatry Fellowship NYU Child Study Center / Bellevue Hospital Center New York University School of Medicine

Alicia Hurtado, MD

Public Psychiatry Fellowship Columbia University College of Physicians & Surgeons Attending Psychiatrist, World Trade Mental Health & Monitoring Program Icahn School of Medicine

Ilana Kulman, MD

Child & Adolescent Psychiatry Fellowship New York-Presbyterian Hospital Columbia University College of Physicians & Surgeons Weill Cornell Medical College

Maria Linden, MD

Clinical Instructor of Psychiatry Icahn School of Medicine Attending Psychiatrist, Psychiatric Emergency Service Mount Sinai Hospital

James Murrough, MD

Mood and Anxiety Disorders Research Fellowship Icahn School of Medicine

Jocelyn Soffer, MD

Child & Adolescent Psychiatry Fellowship NYU Child Study Center / Bellevue Hospital Center New York University School of Medicine

Lawrence Young, MD

Child & Adolescent Psychiatry Fellowship NYU Child Study Center / Bellevue Hospital Center New York University School of Medicine

2008

Jennie Byrne, MD, PhD

Attending Psychiatrist, Archdale Medical Associates Chapel Hill, NC

Uri Cohen, MD

Child & Adolescent Psychiatry Fellowship University of California San Francisco

Glen P. Davis, MD

Child & Adolescent Psychiatry Fellowship NYU Child Study Center / Bellevue Hospital Center New York University School of Medicine

Garrett M. Deckel, MD, PhD

Clinical Instructor of Psychiatry Icahn School of Medicine Attending Psychiatrist, Outpatient Clinic Bronx VA Medical Center

Alejandra Durango, MD

Public Psychiatry Fellowship Columbia University College of Physicians & Surgeons

Martin M. Evers, MD

Attending Psychiatrist, Northern Westchester Hospital Mount Kisco, NY

Allison J. Grolnick, MD

Public Psychiatry Fellowship Columbia University College of Physicians & Surgeons

Matthew Rottnek, MD

Addiction Psychiatry Fellowship Bellevue Hospital Center New York University School of Medicine

Phillip Seibell, MD

Clinical Instructor of Psychiatry Icahn School of Medicine Attending Psychiatrist, Center of Excellence for Compulsive & Impulsive Disorders Attending Psychiatrist, World Trade Mental Health & Monitoring Program

Larry Young, MD

Child & Adolescent Psychiatry Fellowship NYU Child Study Center / Bellevue Hospital Center New York University School of Medicine

2007

David Cole, MD

Attending Psychiatrist, Comprehensive Psychiatric Emergency Program (CPEP) New York-Presbyterian Hospital (Columbia) Candidate, NYU Psychoanalytic Institute

Amanda Focht, MD

Geriatric Psychiatry Fellowship Icahn School of Medicine

Lauren Helm, MD

Mood and Personality Disorders Research Fellowship Icahn School of Medicine

Stephanie Ho, MD

Consultation/Liaison Psychiatry Fellowship Memorial Sloan-Kettering Cancer Center Weill Cornell Medical College

Amanda Itzkoff, MD

Geriatric Psychiatry Fellowship Icahn School of Medicine

Eleni Maloutas, MD

Child and Adolescent Psychiatry Fellowship Icahn School of Medicine

Lysiane Ribeiro, MD, MPH

Attending Psychiatrist, Dual Diagnosis Unit Mount Sinai Hospital

Patrick Runnels, MD

Public Psychiatry Fellowship Columbia University College of Physicians and Surgeons

Alan Schlechter, MD

Child & Adolescent Psychiatry Fellowship
NYU Child Study Center / Bellevue Hospital Center
New York University School of Medicine

May Tsui, MD

Private Practice, New York, NY