Mount Sinai Hospital
Psychiatry Residency Training Program

Main Residency Match® Numbers

General Clinical Track:	Psychiatry – 1490400**C0**
Physician-Scientist Track:	Psychiatry/Physician-Scientist – 1490400**C2**
Residency + PhD Track:	Psychiatry-Residency+PhD – 1490400**C3** ***PhD Track not offered this year*

Current Residents in the Research Track

September 2022

"Mount Sinai had one of the largest amounts of protected research time of any program that I visited, and the amount has only increased. Importantly, the administration worked to ensure that this time truly was protected."

Drew Kiraly, MD, PhD, Assistant Professor (Class of 2017)

Lauren Lepow, MD

PGY-6
Residency/PhD Track
Columbia University, BA University of Texas HSC, MD

Lauren grew up in Houston, TX, where her passion for neuroscience began in high school, studying the cognitive effects of ALS with Dr. Paul Schulz, MD, which resulted in her first-author paper in the *Journal of Clinical and Experimental Neuropsychology*. She continued to be involved in research at Columbia University, studying Neuroscience and Behavior, where she designed her own study looking at the oxytocin receptor density in the brains of pregnant rats with chronic stress. In medical school, Lauren was the President of the Student Interest Group in Neurology and Psychiatry and was inducted into the Gold Humanism Honor Society. She continued research with Dr. Schulz, developing a novel plasma exchange treatment for Alzheimer's disease. She then pursued research with Drs. Carlos Zarate, MD, and Larry Park, MD, at the Experimental Therapeutics & Pathophysiology Branch of the NIMH, conducting a retrospective data-mining project on the antidepressant effects of ketamine and NMDA-antagonists, and her first- author paper was published in the *Journal of Psychiatric Research*. Lauren plans to link neuroscience research to clinical narratives through natural language processing and machine learning using transcripts from psychedelic- assisted psychotherapy sessions. For fun, Lauren loves biking around the ever-vibrant city, studying psychoanalysis, connecting with nature, and losing track of time engrossed in conversation.

Since starting residency at Mount Sinai, *July 2017 - Present*

Research Focus: Modeling Resilience after Trauma in Naturalistic

Research Mentors: Benjamin Glicksberg, PhD; Alexander Charney, MD, PhD; Rachel Yehuda, PhD; Muhammad Parvaz, PhD

Awards

Guest Editor, *American Journal of Psychiatry Residents' Journal,* 2019 Travel Award, MDMA-Assisten Psychotherapy training, 2019

Peer-reviewed journal articles

1. Gruber CN, Patel RS, Trachtman R, **Lepow L**, *et al.* Mapping Systemic Inflammation and Antibody Responses in Multisystem Inflammatory Syndrome in Children (MIS-C). Cell. Sep 2020.
2. Charney A, Simons N, Mouskas K, **Lepow L**, …COVID-19 Biobank Team. Sampling the host response to SARS-CoV-2 in hospitals under siege. Nat Med. Aug 2020.
3. DePierro J, **Lepow L**, *et al.* Translating Molecular and Neuroendocrine Findings in Posttraumatic Stress Disorder and Resilience to Novel Therapies. Biol Psychiatry. Sep 2019.
4. Younes K, **Lepow LA**, *et al.* Auto-antibodies against P/Q- and N-type voltage-dependent calcium channels mimicking frontotemporal dementia. SAGE Open Med Case Rep. Apr 2018.

Book Chapter

Benavides C, Fred-Torres S, Rutter SB, Larsen E, Fastman J, Bulbena-Cabre A, **Lepow L**,…Perez-Rodriguez M. **"**Role of oxytocin in social cognition in psychosis spectrum disorders." Social Cognition in Psychosis. Elsevier. 2019.

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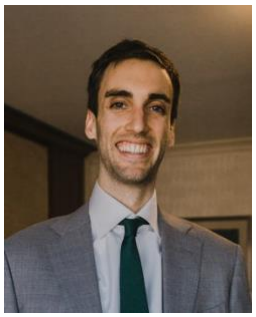
Andy McKenzie, MD, PhD



PGY-4
Physician-Scientist Track

Chief Resident

Vassar College, BA

Icahn School of Medicine at Mount Sinai, MD, PhD

Andrew was raised in Marin County, CA and attended San Francisco University High School, where he was co-captain of the basketball team. He subsequently attended Vassar College, where he majored in Neuroscience & Behavior, minored in Mathematics, and performed research on choice behavior in pigeons under variable reinforcement schedules. After his undergraduate work, he was awarded a position as a post-baccalaureate intramural research trainee at the NIH, where he studied gene expression in bacteria. In the Medical Scientist Training Program at the Icahn School of Medicine at Mount Sinai, he extended his work on gene expression to the study of oligodendrocytes and myelination in Alzheimer disease. Co- mentored by Drs. Patrizia Cassacia and Bin Zhang, he was supported in his PhD studies by an NRSA pre- doctoral fellowship from the National Institute of Aging. Andrew's PhD work uncovered dysregulation in a network of genes associated with oligodendrocytes in Alzheimer disease, several of which are genetic risk factors for the disease. A true innovator Andrew created open-source software packages to analyze gene expression data in a novel way, which have been downloaded thousands of times. Andrew is incredibly productive and has published 13 publications, including five first-author publications in prestigious journals such as *Molecular Neurodegeneration* and *Scientific Reports*, as well as co-authored publications in *Nature Neuroscience*, *Human Molecular Genetics*, and *Genome Medicine*. Andrew's goal going forward at Mount Sinai is to leverage his background in genetics and gene expression to study the pathophysiology of mental illness. In addition to pursuing his passion for patient care, he is interested in performing translational research to pave the way for new therapies that will improve the lives of people suffering from mental illness.

Since starting residency at Mount Sinai, *July 2019 - Present*

Research Plans: Structural Neuropathology of Mental Illness Through Postmortem Human Brain Tissues

Research Mentor: John Crary, MD, PhD

Peer-reviewed journal articles

1. Hur JY, Frost GR, Wu X, Crump C, Pan SJ, Wong E, Barros M, Li T, Nie P, Zhai Y,…**, McKenzie A,** *et al*. The innate immunity protein IFITM3 modulates γ-secretase in Alzheimer's disease. Nature. Sep 2020.
2. Wang Q, Zhang Y, Wang M, Song WM, Shen Q, **McKenzie A,** *et al.* The landscape of multiscale transcriptomic networks and key regulators in Parkinson's disease. Nat Commun. Nov 2019.
3. Lorsch ZS, Hamilton PJ, Ramakrishnan A, Parise EM, Salery M, Wright WJ,… **McKenzie A,** *et al.* Stress resilience is promoted by a Zfp189-driven transcriptional network in prefrontal cortex. Nat Neurosci. Sep 2019.
4. McFadden WC, Walsh H, Richter F, Soudant C, Bryce CH, Hof PR, Fowkes M, Crary JF, **McKenzie AT.** Perfusion fixation in brain banking: a systematic review. Acta Neuropathol Commun. Sep 2019.

Simone Tomasi, MD, PhD

PGY-4
Physician-Scientist Track

Chief Resident

Università degli Studi di Torino, MD, PhD

Yale University, Postdoc

Simone was born and raised in Torino, Italy and was the first in his family to go to college and earn a degree in Medicine *summa cum laude*. As first year medical student, he became involved in neuroscience research with the goal to understand clinical phenotypes in the context of unerlying neurobiology. His undergraduate work focused on the study of cellular responses evoked by distinct noxious stimuli was awarded "Best Medical Thesis in Neuroscience" by his University. During his PhD training, Simone further explored the molecular mechanisms of neuronal death and possible strategies to achieve neuroprotection in collaboration with several research groups from both Europe and US. He then joined the Yale Child Study Center where he studied brain development using mouse models and human induced pluripotent stem cells (hiPSC). As a post-doc, he was the recipient of a prestigious NARSAD/Brain and Behavior research Foundation Young Investigator Award to investigate the genetic and epigenetic underpinnings of brain development, with a particular focus on the regulation of surface area, gyrification and the role of fibroblast growth factor 2. As a member of the Brain Somatic Mosaicism Network, he explored the role of single nucleotide variants (SNVs) in the onset of Tourette's syndrome and became more interested in the genetic bases of mental illness. Simone is a highly productive researcher, having already authored 16 publications (5 of them as first author) including in *Science*, *Genome Biology*, *Biological Psychiatry* and *Cerebral Cortex*. Simone's ultimate translational research goal is to personalize medical treatments based on the genetic background of an individual. In his spare time, he enjoys outdoor activities (particularly skiing and hiking), jazz music, sport and traveling around the country with his family.

Since starting residency at Mount Sinai, *July 2019 - Present*

Research Plans: Computational approaches to predict clinical outcomes from EHR using machine learning approaches

Research Mentors: Panos Roussos, MD, PhD; Georgios Voloudakis, MD, PhD

Peer-reviewed journal articles

1. Fasching L, Jang Y, **Tomasi S,** Schreiner J, Tomasini L, ..., Fernandez TV, Leckman JF, Abyzov A, Vaccarino FM. Early developmental asymmetries in cell lineage trees in living individuals. Science. Mar 2021
2. Wang Y, Bae Y, Thorpe J, Sherman MA, Jones AG, Cho S, Daily K, Dou Y, Ganz J, Galor A, Lobon I, Pattni R, Rosenbluh C, **Tomasi S**, *et al*. Comprehensive identification of somatic nucleotide variants in human brain tissue. Genome Biol. Oct 2020
3. Xenos D, Kamceva M, **Tomasi S,** Cardin JA, Schwartz ML, Vaccarino FM. Loss of TrkB signaling in parvalbumin-expressing basket cells results in network activity dysruption and abnormal behavior. Cereb Cortex Oct 2018
4. Salmaso N, Stevens HE, McNeill J, ElSayed M, Ren Q, Maragnoli ME, Schwartz M, **Tomasi S,** Sapolsky R, Duman R, Vaccarino FM. Fibroblast growth factor 2 modulates hypothalamic pituitary axis activity and anxiety behavior through glucorticoid receptors. Biol Psychiatry Sept 2016

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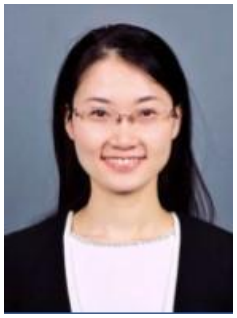
Lu Jin, MD, PhD



PGY-3
Physician-Scientist Track

Zhejiang University, BS
Yale University, PhD
Weill Cornell, MD

Lu was born and raised in Xi'an, China, graduating college with a degree in Biotechnology at Zhejiang University in Hangzhou, China. She moved to the US to pursue a PhD in Neurobiology at Yale, where she was mentored by Amy Arnsten. Her doctoral research focused on the molecular mechanisms of cognitive circuits in the prefrontal cortex, aiming to develop better treatments for cognitive deficits in aging and mental illness. She trained monkeys in a working memory task, recorded single neurons in their prefrontal cortex, and applied drugs to the recording site to test influences on neural activity. Her dissertation focused on the roles of mGluR2/3 receptors in regulating prefrontal circuitry and cognitive functions. The results ultimately challenged the prevailing understanding of these receptors and contributed to the development of compounds to treat schizophrenia. In medical school she conducted research at Weill Cornell with Faith Gunning and at Mount Sinai with Helen Mayberg and Allison Waters, focusing on optimizing subthalamic deep brain stimulation for motivational symptoms in Parkinson's Disease. This experience motivated her to pursue a career combining clinical and research work, with the goal of incorporating scientific discoveries into clinical practice. Lu has already authored 11 publications, including two as first author in Molecular Psychiatry and Cerebral Cortex, and several others as coauthor in Nature, PNAS, and Neuron. In her spare time, Lu loves rock climbing, reading history and sociology books, and attending Broadway and Off-Broadway plays.

Since starting residency at Mount Sinai, *July 2020 - Present*

Research Plans: Characterization of the neurobiological basis of human decision-making related to effort and reward by intracranial electrophysiological and electrochemical recordings in human subjects, with the goal of developing novel circuit therapeutics for psychiatric conditions such as apathy and anhedonia.

Research Mentors: Igancio Saez, PhD; Helen Mayberg, MD

Peer-reviewed journal articles

1. Galvin VC, Yang ST, Paspalas CD, Yang Y, **Jin LE**, Datta D, Morozov YM, Lightbourne TC, Lowet AS, Rakic P, Arnsten AFT, Wang M. Muscarinic Mq receptors modulate working memory performance and activity via KCNQ potassium channels in the primate prefrontal cortex. Neuron May 2020
2. **Jin LE**, Wang M, Galvin VC, Lightbourne TC, Conn PJ, Arnsten AFT, Paspalas C. mGluR2 versus mGluR3 metabotropic glutamate receptors in primate dorsolateral prefrontal cortex: post-synaptic mGluR3 strengthen working memory networks. Cereb Cortex May 2018
3. **Jin LE,** Wang M, Yang ST, Yang Y, Galvin VC, Lightbourne TC, Ottenheimer D, Zhong Q, Stein J, Raja A, Paspalas C, Arnsten AFT. mGluR2/3 mechanisms in primate dorsolateral prefrontal cortex: evidence for both presynaptic and postynaptic actions. Mol Psychiatry Aug 2016

Brian Sweis, MD, PhD

PGY-3
Physician-Scientist Track

Loyola University, BA
U Minnesota, MD, PhD

Brian is a first generation Arab-American who grew up in Chicago, IL, and went to Loyola University where he double majored in Psychology and Biology, with a dual minor in Neuroscience and Philosophy. His PhD work at the U. of Minnesota was co-mentored by Drs. Mark J. Thomas and David Redish, and focused on understanding the mechanisms underlying complex choices using a cross-species approach to study decision making. He applied neuroeconomic theories with neuromodulation to identify neural computations underlying the distinct aspects of information processing as choices are being made. He discovered that there is a conserved evolutionary history to cognitive biases previously thought to be unique to humans, and that these biases arose from similar neural systems in mice, rats, and humans. Applying this framework to the study of addiction, he found that mice exposed to different drugs of abuse suffered lasting impairments in fundamentally distinct types of choices. Brian's research was recognized with the best PhD awards from the University of Minnesota, National Council for Graduate Studies and from the Society for Neuroscience, and was listed in the Forbes 30 Under 30 list. Brian has published 17 peer-reviewed articles, including five as first-author in *Science*, *Nature Communications*, *PNAS*, *PLoS Biology*, and *Learning & Memory*, as well as his first senior-author paper in *Science Advances* since arriving at Mount Sinai where he is continuing this line of work. In medical school Brian was inducted into the Gold Humanism Honor Society and was awarded the Fisch Art in Science & Medicinegrant to communicate neuroscience to the public through painting. Outside of medicine and science, Brian stays active with running, playing pick-up nasketball games in Central Park, cooking and exploring the best eats and stand-up comedy in NYC.

Since starting residency at Mount Sinai, *July 2020 - Present*

Research Focus: Translational Neuroeconomics; Cross-Species Decision Science in Mood Disorders; Computational Psychiatry

Research Mentors: Eric Nestler, MD, PhD; Denise Cai, PhD; Scott Russo, PhD; Helen Mayberg, MD

Peer-reviewed journal articles

1. Durand-de Cuttoli R, Martinez-Rivera F, Li L, Minier-Toribio A, Cathomas F, ,…, Russo SJ, Nestler EJ, **Sweis BM.** Distinct forms of regret linked to resilience versus susceptibility to stress are regulated by region-specific CREB function in mice, Science Advances. 2022 (*in press)*
2. **Sweis BM,** Mau W, Rabinowitz S, Cai DJ. Dynamic and heterogeneous neural ensembles contribute to memory engram. Curr Opin Neurobiol Apr 2021
3. Durand-de Cuttoli R, Martinez-Rivera F, Li L, Minier-Toribio A, Russo SJ, Nestler EJ, **Sweis BM.** Chronic social stress induces isolated deficits in reward anticipation on a neureconomic foraging task. Pre-print on bioRxiv Jan 2022

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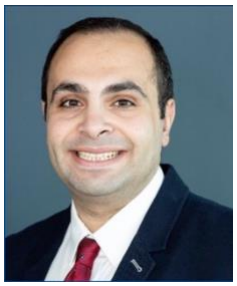
Mina Rizk, MBBCH, MSc



PGY-2
Physician-Scientist Track

University of Minya, MD

Mina was born and raised in Egypt, where he earned his Medical Degree, and completed a prior Residency training and Masters in Neurology and Psychiatry. He then joined the Department of Psychiatry at Columbia University in 2016 as a visiting research scholar then postdoctoral research scientist where his work focused on the neurobiology of suicidal ideation and behavior. Using different brain imaging modalities (i.e., diffusion tensor imaging, voxel-based morphometry and resting-state functional MRI) and stress response paradigms, he helped delineate the neurobiological underpinnings of distinct subtypes of suicidal individuals. In 2019, Mina received the Paul Janssen Fellowship in Translational Neuroscience Research and the NARSAD Young Investigator Award to study the anti-suicidal effects of buprenorphine, and the potential role of its kappa opioid receptor antagonism properties in this context. Using a task-based functional MRI paradigm, he plans to investigate if the anti-suicidal ideation effects of buprenorphine correlate with changes in brain responses to negative emotions, a proxy measure of the kappa opioid system function. He has obtained FDA approval to test the putative effects of low-dose buprenorphine on suicidal ideation among depressed opioid naïve persons and plans to conduct his project at The Mount Sinai Hospital and New York State Psychiatric Institute during residency. Mina has published 14 papers, including 8 first-author publications, in prestigious journals such as the *American Journal of Psychiatry*. He also co-authored the Suicide Prevention chapter in the new edition of the APA Textbook of Mood Disorders. In his spare time, Mina loves to watch soccer (Liverpool!!) and spend time with his family.

Since starting residency at Mount Sinai, *July 2021 – Present*

Research Focus: Brain Imaging; Suicidal Ideation and Behavior among individuals with Mood Disorders and Opioid Use Disorder; New Anti-suicidal Treatments.

Research Mentor: James Murrough, MD, PhD

Peer reviewed journal articles

1. Heyman-Kantor R, **Rizk M**, Sublette ME, Rubin-Falcone H, Fard YY, Burke AK, Oquendo MA, Sullivan GM, Milak MS, Zanderigo F, Mann JJ, Miller JM. Examining the relationship between gray matter volume and a continuous measure of bipolarity in unmedicated unipolar and bipolar depression. Journal of Affective Disorders Feb 2021
2. Mann JJ, **Rizk MM**. A brain-centric model of suicidal behavior. American Journal of Psychiatry Oct 2020
3. Yuan M, Rubin-Falcone H, Lin X, **Rizk MM**, Miller JM, Sublette ME, Oquendo MA, Burke A, Ogden RT, Mann JJ. Smaller left hippocampal subfield CA1 volume is associated with reported childhood physical and/or sexual abuse in major depression: a pilot study. Journal of Affective Disorders Jul 2020

Ehsan Moazen Zadeh, MD, MSc

PGY-2
Physician-Scientist Track

Iran University, MD

Ehsan was born and raised in Kerman, Southern Iran. He moved to Tehran for medical school in 2008, where he started working on research projects very early in the course, first on the genetics of bipolar disorder and later on the treatment of pain and depression in fibromyalgia, inspired by both his broad interest in biological medicine and a great mentor. His passion for psychiatry developed as he started psychodynamic psychotherapy in 2011 and subsequently founded a free discussion group for medical students. He then later tele-collaborated on a number of large-scale epidemiologic studies of mental health disparities among racial groups in the USA and did a postdoctoral fellowship in psychopharmacology at Tehran University upon graduation from medical school, where he mainly focused on RCTs of novel therapeutics for major psychiatric disorders. Ehsan moved to Canada in 2018 for graduate studies on substance use disorders at UBC, Vancouver. In 2019, he joined a major Neuroimaging lab at Columbia University, and by 2020 he moved to Mount Sinai for a postdoctoral fellowship at Yasmin Hurd laboratory. Ehsan has had 30 publications so far, including 2 in The Lancet Psychiatry. In his personal life, he is passionate about photography and adventures in nature.

Since starting residency at Mount Sinai, *July 2021 - Present*

Since joining Mount Sinai, Ehsan's focus has been on new drug development and neuroimaging in opioid use disorder. He has been a co-investigator on an FDA-regulated UG3/UH3 Phase1-Phase2 clinical trial of CBD and on an R01 NIDA-funded proof of concept trial of CBD in patients with heroin use disorder using sequential fMRI-MRSI.

Research Focus His specific areas of interest for future research are shared neural phenotypes and transdiagnostic treatments across addictive disorders.

Peer reviewed journal articles

1. Nikoo M, Kianpoor K, Nikoo N, Javidanbardan S, Kazemi A, ..., **Moazen-Zaden E**, Givaki R, Jazani M, Mohammadian F, Moghaddam NM, Schutz C, Jang K, Akhondzadeh, Krausz M. Opium tincture versus methadone for opioid agonist treatment: a randomized controlled trial. Addiction Aug 2022
2. Saraf G, **Moazen-Zadeh E**, Pinto JV, Ziafat K, Torres IJ, Kesavan M, Yatham LN. Early intervention for people at high risk of developing bipolar disorder: a systematic review of clinical trials. The Lancet Psychiatry Jan 2021
3. **Moazen-Zadeh E,** Bayanati S, Ziafat K, Rezaei F, Masgarpour B, Akhondzadeh S, Vortioxetine as adjunctive therapy to risperidone for treatment of patients with chronic schizophrenia: a randomised, double-blind, placebo-controlled clinical trial. Journal of Psychopharmacology May 2020
4. **Moazen-Zadeh E,** Karamouzian M, Kia H, Salway T, Ferlatte O, Knight R. A call for action on overdose amont LGBTQ people in North America. The Lancet Psychiatry Sept 2019

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Eric Sanford, MD, PhD

PGY-1
Physician-Scientist Track

Brown University, BS

University of Pennsylvania, MD, PhD

Andrew was raised in Marin County, CA and attended San Francisco University High School, where he was co-captain of the basketball team. He subsequently attended Vassar College, where he majored in Neuroscience & Behavior, minored in Mathematics, and performed research on choice behavior in pigeons under variable reinforcement schedules. After his undergraduate work, he was awarded a position as a post-baccalaureate intramural research trainee at the NIH, where he studied gene expression in bacteria. In the Medical Scientist Training Program at the Icahn School of Medicine at Mount Sinai, he extended his work on gene expression to the study of oligodendrocytes and myelination in Alzheimer disease. Co- mentored by Drs. Patrizia Cassacia and Bin Zhang, he was supported in his PhD studies by an NRSA pre- doctoral fellowship from the National Institute of Aging. Andrew's PhD work uncovered dysregulation in a network of genes associated with oligodendrocytes in Alzheimer disease, several of which are genetic risk factors for the disease. A true innovator Andrew created open-source software packages to analyze gene expression data in a novel way, which have been downloaded thousands of times. Andrew is incredibly productive and has published 13 publications, including five first-author publications in prestigious journals such as *Molecular Neurodegeneration* and *Scientific Reports*, as well as co-authored publications in *Nature Neuroscience*, *Human Molecular Genetics*, and *Genome Medicine*. Andrew's goal going forward at Mount Sinai is to leverage his background in genetics and gene expression to study the pathophysiology of mental illness. In addition to pursuing his passion for patient care, he is interested in performing translational research to pave the way for new therapies that will improve the lives of people suffering from mental illness.

Since starting residency at Mount Sinai, *July 2022 - Present*

Research Plans: computational correlates of psychotherapy response, psychedelic-assisted psychotherapy, PTSD, major depressive disorder, generalized anxiety disorder

Peer-reviewed journal articles

1. **Sanford EM**, Emert BL, Cote A, Raj A. Gene regulation gravitates toward either addition or multiplication when combining the effects of two signals. eLife Dec 2020
2. Kiani K, **Sanford EM**, Goyal Y, Raj A Changes in chromatin accessibility are not concordant with transcriptional changes for single-factor perturbations. Preprint on bioRxiv Feb 2022
3. Chung JH*, **Sanford EM***(co-first author), Johnson A, Klempner SJ, Schrock AB, Palma NA, … Ali SM. Comprehensive Genomic Profiling of Anal Squamous Cell Carcinoma Reveals Distinct Genomically Defined Classes. Annals of Oncology, Jul 2016
4. Ali SM, **Sanford EM**, Rubinson D, Wang K, Palma N, Chmielecki J, … Miller VA. Prospective Comprehensive Genomic Profiling of Advanced Gastric Carcinoma Cases Reveals Frequent Clinically Relevant Genomic Alterations and New Routes for Targeted Therapies. The Oncologist May 2015

Deepak Kaji, MD, PhD

PGY-1
Physician-Scientist Track

Cornell University, BA

Icahn School Of Medicine at Mount Sinai, MD, PhD

Deepak was born in New York and went to Cornell University where he double majored in Economics and Biology and began studying developmental and stem cell biology. He completed an honors thesis in cardiac development before coming to Mount Sinai for his MD/PhD. He completed the PhD training area in the "Developmental and Stem Cell Biology" track. His dissertation was mentored by Dr. Alice Huang and focused on mechanisms of tendon regeneration and molecular control over the tendon cell fate. During this time, Deepak developed novel engineering strategies for driving stem cells towards the tendon and fibrocartilage fates. This work resulted in inventors status on a patent, an R01 supplement, and an NIH NIAMS F31 fellowship. Outside of his dissertation laboratory, Deepak leveraged the statistical education he got during his economics degree to deploy artificial intelligence on a variety of clinical problems. Towards the end of his PhD, he began working with Dr. Alexander Charney and used artificial intelligence to understand the relative prognostic values of genetic and clinical data in schizophrenia. His work in artificial intelligence resulted in being Co-Investigator on an NIH K12 Clinical Scientist Award and a Mount Sinai 4D Technology Award. He finished his PhD with over 15 publications and an h-index of 12. In his spare time, Deepak loves eating his way through NYC in search of its best pizza and ice cream.

Since starting residency at Mount Sinai, *July 2019 - Present*

Deepak is currently working as a research resident in the Charney lab using stem cell biology and computational biology to study development of the human brain and model psychotic patients with rare genetic variants.

Research Plans: Using human stem cell models to model psychotic diseases and neurodevelopment

Research Mentors: Alexander Charney, MD, PhD

Peer-reviewed journal articles

1. **Kaji DA**, Montero AM, Patel R, Huang AH. "Transcriptomic profiling of mESC-derived tendon and fibrocartilage cell fate switch". Nat Communications. 2021 July 9
2. **Kaji DA**, Howell KL, Huang AH. "TGFβ signaling is required for tenocyte recruitment and functional neonatal tendon regeneration." eLife. 2020 June 5.
3. Landi I, **Kaji DA**, Cotter, Van Vleck T, Belbin G, Preuss M, Loos R, Kenny E, Glicksberg BS, Beckmann N, O'Reilly P, Fanous A, Pato M, Pato C, Bigdeli T, Nadkarni GN, Charney AW. "Schizophrenia polygenic risk scores do not predict outcomes in adults with psychotic disorders." Nature Medicine. 2021 Sept 6
4. **Kaji DA**, Kim JS, Cho SK, Dangayach NS, Costa AB, Oermann EK. "An interpretable deep learning model of clinical events in the intensive care unit." PLosOne. 2019 Feb 13.

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Research Track Psychiatry Residency at the Icahn School of Medicine at Mount Sinai

Training Director and Vice Chair of Education: Dr. Antonia S. New, MD. antonia.new@mssm.edu
Associate Training Director (Research Track): Dr. M. Mercedes Perez-Rodriguez, MD, PhD. mercedes.perez@mssm.edu
Associate Training Director (Clinical Track): Dr. Asher B. Simon, MD. asher.simon@mssm.edu