Robin Chemers Neustein

Postdoctoral Fellowship Award Winners

Icahn School of Medicine at Mount Sinai

Graduate School of Biomedical Sciences

Robin Chemers Neustein Postdoctoral Fellowship Award

The Robin Chemers Neustein Postdoctoral Fellowship award was established in 2010 to encourage and support research scientists at the Icahn School of Medicine at Mount Sinai (ISMMS).

The award facilitates the progress of talented postdoctoral fellows in the health sciences and encourages them to pursue careers in scientific research. The award includes a $25,000 supplement for one year

The fellowship is made possible by the generous support of Ms. Neustein, a dedicated advocate for the advancement of women's careers in science. Past recipients of the award have gone on to tremendous success.

Kristen Whitney

2024 Winner

At the time of this award, Dr. Kristen Whitney worked in the Department of Pathology, Molecular and Cell-Based Medicine at the Icahn School of Medicine at Mount Sinai (ISMMS). She studied mechanisms of cell death related to the tau protein in neurodegenerative disorders such as Alzheimer's disease, frontotemporal dementia, and progressive supranuclear palsy ("tauopathies"). She is leading the development of the next generation of cell models, including 3D "mini-brain" organoids generated directly from human patients, and utilizes post-mortem human brain tissue to validate her models. With her research, Dr. Whitney is asking what are the earliest changes occurring in the aging brain that cause cells to die? She focuses on genetic background as a key contributor to understanding disease progression and why some brain cells are vulnerable, but others resilient to disease. Understanding these mechanisms is a promising path to identifying novel therapeutic strategies and drug targets to delay or cure these devastating diseases. She is an NIH NRSA F32 fellow as well as a recipient of an Alzheimer's Association Research Fellowship and Tau Leadership Award from the Rainwater Charitable Foundation.

Dr. Whitney is a postdoctoral fellow in the laboratory of **Dr. John F. Crary**, Professor of Pathology, Neuroscience, and Artificial Intelligence & Human Health, and Director of the Mount Sinai Neuropathology Brain Bank and Research CoRE.

Andrea Joseph

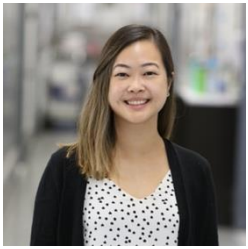
2023 Winner

When she received the award, Dr. Andrea Joseph worked in the Department of Obstetrics, Gynecology, and Reproductive Sciences and is a member of the Women's Biomedical Research Institute. Her research bridges engineering and reproductive biology with a dedicated focus on the use of nanotechnology for understanding and improving maternal, fetal, and neonatal health. As an NIH F31 graduate research fellow, Dr. Joseph developed biodegradable, polymeric nanoparticles for the delivery of small molecule and large enzyme therapeutics to the injured neonatal brain. Looking earlier in life, Dr. Joseph's postdoctoral projects probe the ways inflammation is initiated in pregnancy, focusing on microbial-immune interaction as a key mediator of preterm birth. Specifically, her proposed work investigates how extracellular vesicles (EVs) derived from vaginal bacteria propagate inflammation in the reproductive tract and how EVs may be engineered for bio-inspired, anti-inflammatory drug delivery. Outside of the laboratory, she holds leadership positions with the National Postdoctoral Association, Controlled Release Society, and the Sinai Postdoctoral Organizing Committee to advocate for early career researchers and women in science.

Dr. Joseph is a postdoctoral fellow in the laboratory of **Dr. Michal Elovitz**, Dean for Women's Health Research, Founding Director of the Women's Biomedical Research Institute, and Professor in the Department of Obstetrics, Gynecology, and Reproductive Sciences.

Jennifer Chan

2022 Award Winner



When she received the award, Dr. Jennifer Chan worked in the Nash Family Department of Neuroscience at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research focused on understanding how biological systems outside the nervous system interact with stress to impact the brain during windows of neuroplasticity. Specifically, her work investigates the involvement of epigenetic mechanisms that are poised to respond to environmental challenges to produce persistent changes in brain disorder risk or resilience. In her postdoctoral research, Dr. Chan has combined molecular, biochemical, genome editing, and behavioral approaches to investigate the role of serotonin in chromatin mechanisms underlying both mouse brain development and changes in neuroplasticity following pregnancy and postpartum experiences.

Dr. Chan is a Postdoctoral Fellow in the laboratory of **Dr. Ian Maze,** Professor in the Department of Neuroscience at the ISMMS and a Howard Hughes Medical Institute (HHMI) Investigator.

Whitney Cowell

2021 Award Winner

At the time of this award, Dr. Whitney Cowell worked in the Department of Environmental Medicine and Public Health at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research leverages a combination of molecular and epidemiologic tools to investigate sub-clinical changes at the biological level with the goal of translating these findings to improve population-level health. As a post-doctoral fellow, she worked with the Programming of Intergenerational Stress Mechanisms (PRISM) pregnancy cohort to elucidate the pathways through which psychosocial and environmental stressors manifest at the biological level to disrupt pregnancy progression, ultimately contributing to adverse maternal and child health outcomes. She was awarded an NIEHS P30 Center pilot to investigate maternal traumatic and non-traumatic stress in relation to expression of placental genes involved in nutrient transport, immune responsivity, and the glucocorticoid (i.e., cortisol in humans) barrier, as well as an NIEHS K99/R00 Pathway to Independence Award focused on how exposure to particulate air pollution during pregnancy disrupts communication along the maternal-placental-fetal axis.

Dr. Cowell was a postdoctoral fellow in the laboratory of **Dr. Rosalind Wright,** Dean for Translational Biomedical Research, Co-Director of the Institute for Exposomic Research, and Professor in the Department of Pediatrics at the ISMMS.

Dr. Cowell is currently an Assistant Professor in Pediatrics and Population Health at NYU Langone.

Angelica Torres-Berrio

2021 Award Winner

When she received the award, Dr. Angélica Torres-Berrío worked in the Nash Family Department of Neuroscience at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research focuses on understanding how stress across the lifespan leads to enduring epigenetic alterations linked to depression. She is also interested in identifying molecular biomarkers that can be used to prevent and treat this psychopathology. To this end, she combines cutting-edge molecular techniques and novel behavioral paradigms to unravel the role of specific stress-induced histone modifications and microRNAs using mouse models.

Dr. Torres-Berrío is a Postdoctoral Fellow in the laboratory of **Dr. Eric J. Nestler,** Dean for Academic and Scientific Affairs and Director of the Friedman Brain Institute at the ISMMS. In the summer of 2023, Dr. Torres-Berrío opened her own lab at the Lurie Center for Autism at the Massachusetts General Hospital and will join the Department of Pediatrics at Harvard Medical School as an Assistant Professor.

Ana S. Gonzalez-Reiche

2020 Award Winner

When she received the award, Dr. Ana S. Gonzalez-Reiche worked in the Department of Genetics and Genomic Sciences at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research focused on applying genomics tools and next-generation sequencing to understand the evolution of zoonotic viruses, as well as virus:host interactions. Dr. Gonzalez-Reiche used molecular epidemiology for the ancestral reconstruction of virus transmission events, which she applied to investigate the genetic diversity of Severe Respiratory Syndrome Corona Virus 2 (SARS-CoV-2) in New York City through the Mount Sinai's Pathogen Surveillance Program, which resulted in the first description of the origins and introductions of the virus in NYC in early March 2020. Currently, in collaboration with other investigators at ISMMS, Dr. Gonzalez-Reiche is applying transcriptomics and single-cell genomics to study virus:host interactions in the context of non-canonical antiviral cellular response, unusual tissue reservoirs, and in response to vaccination.

Dr. Gonzalez-Reiche was a Postdoctoral Fellow in the laboratory of **Dr. Harm van Bakel,** Assistant Professor in the of Department of Genetics and Genomic Sciences ISMMS.

Dr. Gonzalez-Reiche is currently an Assistant Professor in the Department of Genetics and Genomic Sciences ISMMS.

Jessica Sook Yuin Ho

2020 Award Winner

At the time of this award, Dr. Jessica Ho worked in the Department of Microbiology at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research focused on exploiting viral adaptations to the host in order to uncover novel epigenetic mechanisms and pathways that underlie infectious and oncogenic diseases. She has recently uncovered a novel gene origination mechanism that is used by the segmented negative sense viruses. She showed that expression of these new genes affect viral pathogenicity in host cells. Her studies have implications for our understanding of these viruses, as well as in the development of therapeutics/vaccines against them.

Dr. Ho is a Postdoctoral Fellow in the laboratory of **Dr. Ivan Marazzi**, Associate Professor in the Department of Microbiology at the ISMMS.

In the summer of 2023, Dr. Ho will be moving on to an Assistant Professor role in Duke-NUS in Singapore.

Kirstie A. Cummings

2020 Award Winner

At the time she received the award, Dr. Kirstie Cummings worked in the Department of Neuroscience at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research focused on unraveling the circuit mechanisms underlying fear memory acquisition and expression in the prefrontal cortex of mice. Specifically, Dr. Cummings worked to understand how a GABAergic cell type, which has historically been considered to play a negative modulatory role in memory, paradoxically encodes fear memory. To do this, she combines intersectional activity-dependent neural tagging, cell type-specific in vivo optogenetics, in vivocalcium imaging using head-mounted miniature microscopes (Miniscopes) in freely behaving mice, and ex vivo electrophysiology in acute brain slices.

Dr. Cummings was a postdoctoral fellow in the laboratory of **Dr. Roger Clem,** Associate Professor in the Department of Neuroscience at the ISMMS.

Dr. Cummings is currently an Assistant Professor (tenure-track) in the Department of Neurobiology at the University of Alabama at Birmingham Heersink School of Medicine.

Pinar Ayata

2019 Award Winner

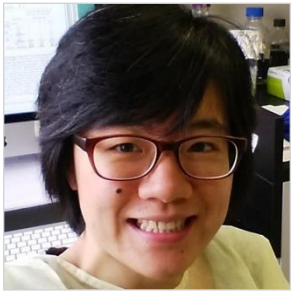
When she received the award, Dr. Pinar Ayata worked in the Department of Neuroscience at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research focused on uncovering molecular mechanisms by which microglia support health and function of the brain, and how their dysfunction contributes to neurodegenerative disease. During that time, she identified an epigenetic mechanism that regulates microglial clearance activity in different brain regions and showed that its dysregulation is detrimental to normal brain function. Inspired by recent genetic studies, which point to myeloid engulfment and degradation pathways as major risk factors in neurodegenerative diseases, she plans to continue to investigate regulatory mechanisms of microglial phagocytosis and its role in tissue protection and regeneration.

Dr. Ayata was a Postdoctoral Fellow in the laboratory of **Dr. Anne Schaefer,** Associate Professor in the Department of Neuroscience at the ISMMS.

Dr. Ayata is currently an Assistant Professor of Biology at the CUNY advanced Science Research Center and an Adjunct Assistant Professor in the Department of Neuroscience at ISMMS.

Shuang Wang

2019 Award Winner



At the time of award, Dr. Shuang (Sammi) Wang worked in the Department of Medicine, Division of Liver Diseases at the Icahn School of Medicine at Mount Sinai (ISMMS). Her long-term goal and passion is to understand how epigenomics shape cell identity and response to external stimuli in differentiated cells of the adult liver, and how this contributes to liver diseases. Her current research is focused on investigating how epigenomic reprogramming affects hepatic stellate cell biology, the key driver of liver fibrosis, using various mouse models.

Dr. Wang was a Postdoctoral Fellow in the laboratory of **Dr. Scott L. Friedman**, Dean for Therapeutic Discovery, Professor in the Department of Medicine, Division of Liver Diseases at the ISMMS.

Dr. Wang is currently an Instructor in the Department of Medicine, Division of Liver Diseases ISMMS and interviewing for academic positions.

Lorna Farrelly

2018 Award Winner

At the time of award, Dr. Lorna Farrelly worked in the Department of Neuroscience at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research investigated the complex interplay between novel chromatin regulatory mechanisms in the brain and neuronal plasticity. Her studies more specifically identified and delineated a previously undefined histone modification mediated by the monoamine serotonin. In her work, Dr. Farrelly combined a wide variety of biochemical, biophysical and molecular approaches to address the regulation of this epigenetic phenomenon within normal neurodevelopment, and in terms of its contribution to psychiatric disease.

Dr. Farrelly was a Postdoctoral Fellow in the lab of **Dr. Ian Maze,** Assistant Professor in the Department of Neuroscience at the ISMMS.

Dr. Farrelly is currently Precision Medicine Strategy Lead at Regeneron.

Sabrina Tamburini

2018 Award Winner

When she received the award, Dr. Sabrina Tamburini worked in the Department of Genetics and Genomic Sciences at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research focused on understanding what constitutes a viable “healthy” microbiome and how the shape of viable microbiomes relates to overall health and disease. She developed a bacterial viability assay to study what bacteria can be viably transferred from a donor to a recipient to build a new healthy viable microbiome. This assay can be applied to fecal microbial transplantation in recurrent clostridium difficile and immune bowel disease patients, and to characterize the viable microbiome transferred from mothers to newborn infants during delivery.

Dr. Tamburini was a Postdoctoral Fellow in the lab of **Dr. Jose Clemente Litran,** Assistant Professor in the Department of Genetics and Genomic Sciences at the ISMMS.

Dr. Tamburini is currently an Assistant Professor (tenure track) in Microbiology in the Department of Molecular Sciences and Nanosystems at Ca’Foscari University Venice.

Catherine Jensen Peña

2017 Award Winner

At the time of the award, Dr. Peña worked in the Department of Neuroscience at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research investigated the effects of early life stress on genome-wide transcriptional and epigenetic changes within regions of the brain implicated in depression-like behavior. Dr. Peña established a translationally relevant, “two-hit” stress paradigm in mice. She has provided new evidence of sensitive windows for development of emotion regulation and identified a novel molecular mechanism underlying the heightened risk for depression resulting from early life stress.

Dr. Peña was a Postdoctoral Fellow in the lab of **Dr. Eric J. Nestler,** Dean for Academic and Scientific Affairs, Director of The Friedman Brain Institute and Nash Family Professor of Neuroscience at the ISMMS.

Dr. Peña is currently an Assistant Professor in the Neuroscience Institute at Princeton University.

Zoi Karoulia

2017 Award Winner

When she received the award, Dr. Karoulia worked in the Department of Oncological Sciences at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research focused on the mechanisms that regulate oncogenic signaling in BRAF mutant tumors. The focus of her research was to characterize mechanisms of drug resistance to develop more effective therapeutic approaches. Her studies involve investigating translational therapeutic strategies and enabling the optimization of combinations of BRAF and MEK inhibitors in various clinical contexts including resistant BRAFV600E melanomas, colorectal and thyroid tumors as well as non-V600 BRAF malignancies.

Dr. Karoulia was a Postdoctoral Fellow in the lab of **Dr. Poulikos Poulikakos,** Associate Professor in the Department of Oncological Sciences at the ISMMS.

Dr. Karoulia is currently a Senior Scientist at Stelexis Therapeutics.

Helene Salmon

2016 Award Winner

When she received this award, Dr. Salmon worked in the Department of Oncological Sciences at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research is specifically investigating the contribution of cancer-associated fibroblasts to tumor immunity, and their role in regulating immune cell distribution and function in lung and bladder tumor lesions. In addition, she is organizing a multi-country, videoconference-based course on Immunotherapy for MD/PhD and PhD students and Postdoctoral Fellows.

Dr. Salmon was a Postdoctoral Fellow in the lab of **Dr. Miriam Merad,** Professor in the Department of Oncological Sciences at the ISMMS.

Since 2019, Dr. Salmon has been leading her own lab-Stroma and Immunity at the Institut Curie in Paris, France.

Lara Manganaro

2016 Award Winner

At the time of this award, Dr. Manganaro worked in the Department of Microbiology at the Icahn School of Medicine at Mount Sinai (ISMMS). She was later promoted to Instructor at the ISMMS in the Department of Microbiology. Her research focused on characterizing the molecular pathways regulating HIV susceptibility and reactivation. In 2015 and again in 2016, she received a Young Investigator Scholarship award at the Conference on Retroviruses and Opportunistic Infections (CROI) in Boston.

Dr. Manganaro was a Postdoctoral Fellow in the lab of **Dr. Viviana Simon**, Professor in the Department of Microbiology at the ISMMS.

Dr. Manganaro is currently an Assistant Professor at the University of Milan in the Department of Pharmacological and Biomolecular Sciences.

Leticia Tordesillas

2015 Award Winner

In 2015, Dr. Tordesillas worked in the Department of Pediatrics at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research was focused on how to establish immune tolerance to foods for the treatment of food allergy. In particular, she studied how regulatory T cells induced by epicutaneous immunotherapy are generated and suppress anaphylaxis. Dr. Tordesillas's research focused on identification of the immunologic mechanisms responsible for the development of sensitization or tolerance to food allergens through the epicutaneous route, to understand how to manipulate the skin immune environment to optimize tolerance to foods.

Dr. Tordesillas was a Postdoctoral Fellow in the lab of **Dr. M. Cecilia Berin,** Professor in the Department of Pediatrics at the ISMMS.

Dr. Tordesillas is currently a Research Scientist at Moffitt Cancer Center, Tampa, Florida, where she is investigating identification and validation of novel targets for prevention and treatment of skin cancer.

Elizabeth Heller

2015 Award Winner

At the time of this award, Dr. Heller worked in the Department of Neuroscience at the Icahn School of Medicine at Mount Sinai (ISMMS). Dr. Heller's research focused on epigenetic remodeling (the molecular changes that occur at specific genes) in the context of drug abuse and stress. She found that a specific epigenetic remodeling factor delivered to the reward region of the brain is sufficient to reverse the effects of drug and stress exposure, demonstrating the potential therapeutic efficacy of epigenetic regulation in combating neuropsychiatric disease.

Dr. Heller was a Postdoctoral Fellow in the lab of **Dr. Eric J. Nestler,** Dean for Academic and Scientific Affairs, Director of The Friedman Brain Institute and Nash Family Professor of Neuroscience at the ISMMS.

Dr. Heller is currently an Assistant Professor of Pharmacology, leading her own lab in the Penn Epigenetics Institute at Perelman School of Medicine at the University of Pennsylvania in Philadelphia.

Allyson Friedman

2014 Award Winner

When she received this award, Dr. Friedman, who is a PhD alumna of the Graduate School of Biomedical Sciences at the Icahn School of Medicine at Mount Sinai (ISMMS), worked in the Department of Pharmacological Sciences. Dr. Friedman's research focused on cellular neurophysiology and behavior. Her research demonstrated that resilience to chronic social stress is achieved through homeostatic mechanisms that stabilize mid-brain dopamine activity, an important system in the brain that controls reward and motivation. Promoting these naturally occurring homeostatic mechanisms has antidepressant effects, a conceptually new avenue for exploring depression treatment.

Dr. Friedman was a Postdoctoral Fellow in the lab of Dr. **Ming-Hu Han,** Associate Professor in the Department of Pharmacological Sciences at the ISMMS.

Dr. Friedman is currently an Assistant Professor at Hunter College, CUNY, New York.

Sonia Schmid

2014 Award Winner

At the time of this award, Dr. Schmid worked in the Department of Microbiology at the Icahn School of Medicine at Mount Sinai (ISMMS). Dr. Schmid's research focused on the interplay between viruses and their hosts on a molecular level. This included the characterization of distinct arms of the host antiviral response, as well as the development of novel viral vectors, with a goal to improve current vaccine strategies and generate innovative therapeutics.

Dr. Schmid was a Postdoctoral Fellow in the lab of **Dr. Benjamin R. tenOever,** Professor in the Department of Microbiology at the ISMMS.

Dr. Schmid is currently a Senior Editor at Nature Communications in New York.

Judith Agudo

2013 Award Winner

At the time of this award, Dr. Agudo worked in the Department of Genetics and Genomic Sciences at the Icahn School of Medicine at Mount Sinai (ISMMS). Dr. Agudo studied strategies for the induction of tolerance and prevention of type-1 diabetes. She received a Fulbright fellowship in 2010 to join Dr. Brown's lab at the ISMMS in order to work on the development of "vaccines" to prevent autoimmune attack in type-1 diabetes. She also received a postdoctoral award from the Juvenile Diabetes Research Foundation to study strategies that can prevent type-1 diabetes. In 2015, Dr. Agudo created a powerful new technology, called Jedi, to advance her studies (Agudo et al. Nature Biotechnology 2015, Agudo et al., Immunity, 2018).

Dr. Agudo was a Postdoctoral Fellow in the lab of **Dr. Brian Brown,** Professor, in the Department of Genetics and Genomic Sciences at the ISMMS.

Dr. Agudo is currently an Assistant Professor in the Department of Immunology at Harvard Medical School and maintains her independent lab at the Dana-Farber Cancer Institute.

Anne-Claude Bedard

2012 Award Winner

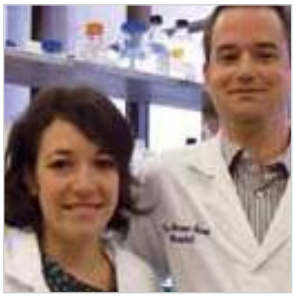
At the time of this award, Dr. Bedard worked in the Department of Psychiatry at the Icahn School of Medicine at Mount Sinai (ISMMS) and was later promoted to Assistant Professor. Dr. Bedard studied the neural correlates of visual-spatial working memory in children and adolescents with ADHD using fMRI, which was published in the Journal of the American Academy of Child and Adolescent Psychiatry.

Dr. Bedard was a Postdoctoral Fellow in the lab of **Dr. Jeffrey Newcorn,** Professor in the Department of Psychiatry at the ISMMS.

Dr. Bedard is currently an Assistant Professor in the Department of Applied Psychology and Human Development at the Ontario Institute for Studies in Education at the University of Toronto, Canada.

Marion Sourisseau

2011 Award Winner



At the time of the award, Dr. Sourisseau worked in the Department of Microbiology at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research focused on the role of tight junction protein occluding in cell entry pathways of the Hepatitis C Virus. Thanks to this fellowship, she was able to publish in several papers and presented at international conferences. She also worked on understanding flaviviruses-host interactions to help in the development of potent viral inhibitors, with a focus on Zika virus.

Dr. Sourisseau was a Postdoctoral Fellow in the lab of **Dr. Matthew J. Evans,** Associate Professor in the Department of Microbiology at the ISMMS.

Dr. Sourisseau is currently a Staff Scientist at the National Institute for Research in Agronomy (INRA) in the Virology department of Maison Alfort Veterinary School in Paris, France.

Ruth Johnson

2010 Award Winner

Dr. Johnson was one of the very first awardees of the Robin Chemers Neustein Postdoctoral Fellowship Award in 2010.She worked in the Department of Cell, Developmental & Regenerative Biology at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research aimed to understand how cells that are integrated within a complex tissue layer can reorganize to generate a functional organ.

Dr. Johnson was a Postdoctoral Fellow in the lab of **Dr. Ross L. Cagan,** Professor in the Department of Cell, Developmental & Regenerative Biology at the ISMMS.

Dr. Johnson is currently an Associate Professor at Wesleyan University in Middletown, Connecticut.

Dr. Ingersoll was the other inaugural awardee of Robin Chemers Neustein Postdoctoral Fellowship Award in 2010. She worked in the Department of Gene and Cell Medicine at the Icahn School of Medicine at Mount Sinai (ISMMS). Her research focus was urinary tract infection and bladder immunobiology. Dr. Ingersoll was a Postdoctoral Fellow in the lab of **Dr. Gwendalyn Randolph** who was a Professor in the Department of Gene and Cell Medicine at the ISMMS.

Dr. Ingersoll currently holds a joint appointment between Institut Pasteur and Institut Cochin as tenured scientist and group leader.