

# The NKInformer



A newsletter of the Nathan S. Kline Institute for Psychiatric Research

Donald C. Goff, MD, Director  
Thomas Cunningham, MBA, Deputy Director, Institute Administration

September – October 2024

Stuart Moss, MLS, Editor

## NKI WELCOMES MIND-EXPANDING RESEARCHERS



**Joshua S. Siegel, MD, PhD**, is a psychiatrist with a doctoral degree in systems neuroscience. Dr. Siegel has published more than 30 peer-reviewed publications in the fields of neuroimaging and neuropsychopharmacology. His primary research focus has been on

using systems neuroscience to understand ketamine, psilocybin, and novel molecules that rapidly reverse mood disorders. This work aims to elucidate the complex interplay between neurotransmitters, neurotrophic stimulation, brain networks, mood, and human behavior.

Dr. Siegel received his MD and PhD from Washington University in St. Louis, where he also completed his residency. In 2018, he began work on what would become Missouri's first human psychedelics clinical study, utilizing precision imaging to study acute and persisting effects of psilocybin on brain networks. He continued this work as junior faculty and also established Washington University's Program in Psychedelics Research, created a graduate *(continued on p.2)*

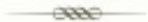
**Jordan Hamm, PhD**, is the newest investigator to join NKI's Emotional Brain Institute. Dr. Hamm's research aims to advance basic understanding of brain systems that support perception and cognition, toward the long-term goal of identifying new



avenues for treating neuropsychiatric disorders. His lab specifically studies how spatial, temporal, and/or behavioral context influence sensory processing in the mammalian neocortex. This function enables the rapid detection of behaviorally relevant changes in the sensory milieu and, importantly, is altered in major psychiatric diseases like schizophrenia, as quantified by electroencephalographic (EEG) biomarkers like "mismatch negativity" (MMN).

Ongoing projects in the Hamm lab involve 1) a deep dive into the role of neocortical neuron subtypes and feed-back circuits in supporting context processing and MMN, 2) a study of how these cells/circuits develop across *(continued on p.2)*

(Joshua Siegel continued) course titled “Mechanisms of Rapid Antidepressants,” and founded the WU Rapid Antidepressants Journal Club. In 2023-2024, Dr. Siegel completed a brief directorship of Translational Medicine at Sunovion/Sumitomo Pharma, where he led biomarker programs for early-phase compounds with potential in depression, Parkinson’s Disease, epilepsy, and other CNS indications. Now he has joined the faculty at NYU Langone Center for Psychedelic Medicine and the Center for Biomedical Imaging & Neuromodulation at NKI with aspirations to bring his expertise in translational neuroscience and target engagement to these world-leading research organizations.



(Jordan Hamm continued) adolescence, 3) an interrogation into a role for microglia-neuron interactions in shaping this circuit development, and 4) an exploration of how psychedelic compounds may alter feedback circuitry to reshape perception and, ultimately, pathological beliefs.

Dr. Hamm earned his PhD in neuroscience at the University of Georgia in 2014 under the mentorship of Dr. Brett Clementz and completed a postdoctoral position in Rafael Yuste’s laboratory at Columbia University. In 2018, Dr. Hamm started as an Assistant Professor of Neuroscience at Georgia State University, and in 2024 he was promoted to Associate Professor.

Dr. Hamm has mentored five PhD students and two postdoctoral scientists. He has published 36 peer-reviewed papers, including 19 as first or senior author, in journals including *Neuron*, *Biological Psychiatry*, *Cell Reports*, and *Current Biology*. He is PI on two active NIH R01s from the National Institute of Mental Health and the National Eye Institute.



## GRANTS RECEIVED



**Drs. Efrat Levy and Paul Mathews** (Center for Dementia Research) received funding for a three-year RF1 grant from NIH for a project titled “[Apolipoprotein E genotype modulates brain mitovesicle production, a component of mitochondrial quality control.](#)”

**Dr. Helen Scharfman** (Center for Dementia Research) was awarded an RF1 for the renewal of the project titled “[Hyperexcitability in Alzheimer's disease.](#)”

**Dr. Christos Lisgaras** (Center for Dementia Research) was awarded an R21 for the project titled “[High frequency oscillations in Alzheimer's disease.](#)”



## NIH Office of the Director

**Dr. Mark Klinger** (Laboratory Animal Resources) received an R24 for the project titled “[Use of DVC® systems to acquire and remotely view data for improved monitoring of animal models and their environment.](#)”



**Dr. Antigona Martinez** (Schizophrenia Research) received funding for a diversity supplement to Dr. Dan Javitt’s project at Columbia titled “[Neural mechanisms of reading dysfunction in schizophrenia.](#)”

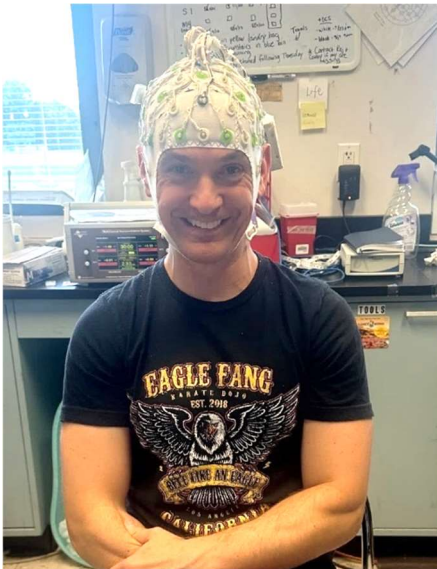
**Dr. Matthew Hoptman** (Clinical Research) was awarded an R01 at NYU School of Medicine, with a subcontract to NKI, for the project titled “[A transdiagnostic study of emotional impulsivity in suicidal ideation and behavior.](#)”

## FROM AROUND THE INSTITUTE



The 2024 Rockland County Walk to End Alzheimer's is on Sunday, October 20<sup>th</sup> at Boulders Stadium in Pomona. Members and friends of NKI's GERI Program will be at the Research Champion Table with Alzheimer's Association, and they welcome you to join them and/or to donate to the cause. For more information and to donate, [go to the team page](#).

### Random Noise



Clinical Evaluation Center Director **Russell Tobe** and **Antigona Martinez** (Schizophrenia Research) are starting a project that hopes to “remediate” visual processing and social cognition impairments in autism spectrum disorder. They are administering high and low frequency transcranial random noise stimulation (tRNS) simultaneous with fMRI acquisition. Dr. Tobe (pictured below) bravely lent his brain to test out the stimulation. Afterwards, he reported that the tRNS was “tolerable”.

## DEPARTMENT OF WONDER



After more than a decade of work, scientists have produced the first complete map of an adult animal's brain – that of the fruit fly (*Drosophila melanogaster*). A fly's brain may be tiny, but it contains more than 140,000 neurons connected by nearly 500 feet of wiring and over 50 million synapses. You can [read all about it](#) in *The New York Times*. The details of the fly brain connectome have been published in a [collection of papers](#) in *Nature*.



### The NEW ENGLAND JOURNAL of MEDICINE

Brain-computer interfaces can help people with paralysis to communicate by decoding neural signals into words, but previous interfaces have had limited accuracy. Now researchers have developed a highly accurate brain-computer interface, requiring relatively little calibration, that allowed a man whose ability to speak was impaired by ALS to communicate. You can read about this advance in NIH Research Matters (“[Brain-computer interface helps paralyzed man speak](#)”). The [study was published](#) in *The New England Journal of Medicine*.



# BBQ 2024

The weather was glorious for NKI's Sweet September Barbecue. The **Community Building Committee** organized another successful end-of-summer barbecue on September 10<sup>th</sup>. Attendees were rewarded with lots of tasty food, blue skies, and yard games. Thanks to the CBC members – Melissa Alldred, Pam Butler, Alex Franco, Renee Hartig, Ying Jiang, Amanda Labuza, Annette Moreno, Brian Russ, Rob Sears, Emily Stern, Catia Teixeira, and Sharifa Williams – for hosting another great event!









## PUBLICATIONS OF NOTE

Here are two recent publications by **Melissa Alldred** (first author), senior author **Stephen Ginsberg**, Ginsberg lab members **Harshitha Pidikiti** and **Kyrillos Ibrahim** (Center for Dementia Research), and colleagues. Dr. Alldred provided summary descriptions of both studies.



This study examined spatial profiling differences in hippocampal CA1 pyramidal neurons in an aged female DS/AD mouse model. We utilized laser capture microdissection combined with low input RNA sequencing analysis to determine gene expression differences in select excitatory CA1 pyramidal neuron populations. We found both unique and overlapping mechanisms of degeneration dependent on the spatial localization and innervation patterns within discrete CA1 sectors. Deep neurons in the CA1a region, which are postulated to encode spatial and non-spatial memory, showed significant impairments in a Down syndrome mouse model, with significantly more dysregulation as compared to superficial CA1 pyramidal neurons in the same CA1 sector.

Allred MJ, Pidikiti H, Ibrahim KW, Lee SH, Heguy A, Hoffman GE, Mufson EJ, Stutzmann GE, Ginsberg SD. [Hippocampal CA1 Pyramidal Neurons Display Sublayer and Circuitry Dependent Degenerative Expression Profiles in Aged Female Down Syndrome Mice](#). J Alzheimers Dis. 2024; 100(s1):S341-S362. PMID: 39031371.



This study examined human postmortem Down syndrome (DS) frontal cortex excitatory pyramidal neurons, which are critical for executive function. Single population RNA-seq of spatially identified neurons in postmortem human tissue have not

been previously undertaken in DS brains. We postulated that convergent gene expression will elucidate gene expression differences relevant to the DS phenotype and Alzheimer's disease (AD) pathology, while divergent gene expression may elucidate gene expression differences that are related to circuitry. We isolated differentially expressed genes that were convergently dysregulated in both layer III and layer V pyramidal neurons to elucidate pertinent biological pathways relevant to neurodegenerative programs. Bioinformatic inquiry identified key pathway-associated targets likely driving corticocortical neurodegeneration and related cognitive decline in individuals with DS.

Allred MJ, Pidikiti H, Ibrahim KW, Lee SH, Heguy A, Hoffman GE, Roussos P, Wisniewski T, Wegiel J, Stutzmann GE, Mufson EJ, Ginsberg SD. [Analysis of microisolated frontal cortex excitatory layer III and V pyramidal neurons reveals a neurodegenerative phenotype in individuals with Down syndrome](#). Acta Neuropathol. 2024 Aug 6;148(1):16. PMID: 39105932.



**Balopal Basavarajappa** (Dementia Research) contributed a chapter to this new book published by Elsevier: [Anandamide in Health and Disease](#). The chapter is the perfect reference for bioscience researchers seeking to understand anandamide pharmacology, biochemistry, and cellular and molecular biology in alcohol use disorders, including fetal alcohol spectrum disorder (FASD).

Basavarajappa BS. Anandamide signaling dysfunction in the development of alcohol use disorders. In: Le Foll B, editor. Anandamide in Health and Disease. Elsevier; 2024.

**Michael Milham, Charles Schroeder**, and other members of the Center for Biomedical Imaging & Neuromodulation including **Karl-Heinz Nenning, Alexandre Franco, Brian Russ, Arnaud Falchier, Renee Hartig, Gary Linn, Kurt Masiello, and Brent Butler** are among the coauthors of this preprint describing normative growth charts for brain structure across the macaque lifespan.

Alldritt S, ... Schroeder C, Milham M, Xu T. [Brain Charts for the Rhesus Macaque Lifespan](#). bioRxiv [Preprint]. 2024 Aug 30. PMID: 39257737.



## Cerebral CORTEX

This paper recently published in *Cerebral Cortex* is by **Yoshinao Kajikawa** (corresponding author), **Chase Mackey**, and **Noelle O'Connell** (Biomedical Imaging & Neuromodulation).

Kajikawa Y, Mackey CA, O'Connell MN. [Laminar pattern of sensory-evoked dynamic high-frequency oscillatory activity in the macaque auditory cortex](#). *Cereb Cortex*. 2024 Aug 1;34(8):bhae338. PMID: 39128941.



## Biological Psychiatry

This review article in *Biological Psychiatry* is by **Pejman Sehatpour** and **Joshua Kantrowitz** (Schizophrenia Research).

Sehatpour P, Kantrowitz JT. [Finding the right dose: NMDAR modulating treatments for cognitive and plasticity deficits in schizophrenia and the role of pharmacodynamic target engagement](#). *Biol Psychiatry*. 2024 Aug 30. PMID: 39218136.

C-BIN Director **Michael Milham** (corresponding author) and **Alexandre Franco** (Director of the Computational Neuroimaging Laboratories) are coauthors of this article published in *Nature Human Behaviour*.

Li X, Bianchini Esper N, Ai L, Giavasis S, Jin H, Feczko E, Xu T, Clucas J, Franco A, Sólón Heinsfeld A, Adebimpe A, Vogelstein JT, Yan CG, Esteban O, Poldrack RA, Craddock C, Fair D, Satterthwaite T, Kiar G, Milham MP. [Moving beyond processing- and analysis-related variation in resting-state functional brain imaging](#). *Nat Hum Behav*. 2024 Aug 5. PMID: 39103610.



## Translational Psychiatry

**Vilma Gabbay** (Clinical Research) is the corresponding author of this open access paper published in *Translational Psychiatry*.

Gabbay V, Ely BA, Vileisis JN, Petrovic Z, Cicvaric A, Asnis GM, Kim-Schulze S, Radulovic J. [Immune and neural response to acute social stress in adolescent humans and rodents](#). *Transl Psychiatry*. 2024 Jul 25;14(1):306. PMID: 39054336.



## Neuropsychopharmacology

At the intersection of brain, behavior, and therapeutics

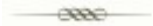
Clinical Research Director **Dan Iosifescu** contributed this Hot Topics piece with Naomi Gaggi in *Neuropsychopharmacology*.

Gaggi NL, Iosifescu DV. [Transcranial photobiomodulation: an emerging therapeutic method to enhance brain bioenergetics](#). *Neuropsychopharmacology*. 2024 Jul 18. PMID: 39025949.



**Katlyn Nemani** (Clinical Research) is the first author and NKI Director **Donald Goff** is the senior author of this open access paper in *Brain, Behavior, and Immunity – Health*.

Nemani K, De Picker L, Dickerson F, Leboyer M, Santacatterina M, Ando F, Capichioni G, Smith TE, Kammer J, El Abdellati K, Morrens M, Coppens V, Katsafanas E, Origoni A, Khan S, Rowe K, Ziemann RS, Tamouza R, Yolken RH, Goff DC. [Anti-spike antibody responses to SARS-CoV-2 mRNA vaccines in people with schizophrenia and schizoaffective disorder](#). *Brain Behav Immun Health*. 2024 Jun 3; 38:100802. PMID: 39021438.



These two reviews by **Ralph Nixon**, Director of the Center for Dementia Research, were published since the last update.



Nixon RA, Rubinsztein DC. [Mechanisms of autophagy-lysosome dysfunction in neurodegenerative diseases](#). *Nat Rev Mol Cell Biol*. 2024 Aug 6. PMID: 39107446.



Nixon RA. [Autophagy-lysosomal-associated neuronal death in neurodegenerative disease](#). *Acta Neuropathol*. 2024 Sep 11;148(1):42. PMID: 39259382.

## The Journal of Infectious Diseases

This article coauthored by **Stephen Ginsberg** (Dementia Research) appears in a *Journal of Infectious Diseases* supplement on “Advances in Identifying Microbial Pathogenesis in Alzheimer’s Disease.” The [paper was covered](#) by Natural Science News.

Ginsberg SD, Blaser MJ. [Alzheimer's Disease Has Its Origins in Early Life via a Perturbed Microbiome](#). *J Infect Dis*. 2024 Sep 10;230(Supplement\_2):S141-S149. PMID: 39255394.



**Lila Davachi** (Clinical Research) coauthored this recent publication in the *Journal of Cognitive Neuroscience*.

DuBrow S, Sherman BE, Meager MR, Davachi L. [Medial Temporal Lobe Damage Impairs Temporal Integration in Episodic Memory](#). *J Cogn Neurosci*. 2024 Jul 17:1-15. PMID: 39023365.



**Ricardo Osorio** (Clinical Research) is a corresponding author of this open access paper published in the *Journal of the American Heart Association*.

Kovbasyuk Z, Ramos-Cejudo J, Parekh A, Bubu OM, Ayappa IA, Varga AW, Chen MH, Johnson AD, Gutierrez-Jimenez E, Rapoport DM, Osorio RS. [Obstructive Sleep Apnea, Platelet Aggregation, and Cardiovascular Risk](#). *J Am Heart Assoc*. 2024 Aug 6;13(15):e034079. PMID: 39056328.





**Babak Tofighi** (Social Solutions & Services) coauthored this paper appearing in the *Journal of Substance Use & Addiction Treatment*.

O'Kelly B, Holmes P, Cheng A, Lee JD, Tofighi B. [Dissemination of health content through social networks: YouTube and opioid use disorders](#). *J Subst Use Addict Treat*. 2024 Oct; 165:209475. PMID: 39098570.



**Edênia da Cunha Menezes** (Emotional Brain Institute) is the first author of this new paper published in *Developmental Biology*.

da Cunha Menezes E, de Abreu FF, Davis JB, Maurer SV, Roshko VC, Richardson A, Dowell J, Cassella SN, Stevens HE. [Effects of gestational hypothyroidism on mouse brain development: Gabaergic systems and oxidative stress](#). *Dev Biol*. 2024 Nov; 515:112-120. PMID: 39048051.

## INFO UPDATE

### Order Your 4 Free At-home COVID-19 Tests

As it did during the pandemic, the federal government is making available free COVID-19 tests. Every U.S. household is eligible to order 4 free at-home tests. You can go to [covidtests.gov](https://covidtests.gov) to order yours now.

Also on this page is a link where you can check the [extended expiration dates](#) for older COVID tests that you may still have at home.



**PubMed Central® (PMC)** – the free full-text archive of biomedical and life sciences journal literature at the U.S. National Institutes of Health's National Library of Medicine (NIH/NLM) – has been relaunched with a fresh look and feel.

This update features:

- A redesigned and reorganized homepage
- Easy-to-navigate help documentation
- A similar look and feel between features in PMC and PubMed
- A streamlined article display

To learn about the new PMC design and article display, see this [NCBI Insights post](#).

The PMC archive contains more than 10 million full-text article records spanning several centuries of biomedical and life science research (late 1700s to present).



MedlinePlus <[medlineplus.gov](http://medlineplus.gov)> is a free online health information resource for patients and their families and friends. It provides information in English and in Spanish, on health topics such as medical conditions, human genetics, medical tests, medications, and supplements, along with links to other credible sources of information. MedlinePlus is a service of the National Library of Medicine (NLM), the world's largest medical library, which is part of the National Institutes of Health (NIH). NLM remains committed to connecting people to valuable information, evolving with changing consumer needs, and tailoring content to be most beneficial to everyone. MedlinePlus debuted in October 1998 and recently celebrated its 25<sup>th</sup> anniversary. You can learn more about the history of MedlinePlus [here](#).



The Substance Abuse and Mental Health Services Administration (SAMHSA) has launched [FindTreatment.gov/es](http://FindTreatment.gov/es), the Spanish-language version of FindTreatment.gov. Designed to serve Spanish-speaking communities, [FindTreatment.gov/es](http://FindTreatment.gov/es) offers confidential and anonymous access to a comprehensive list of certified substance use and mental health treatment facilities, certified community behavioral health clinics, opioid treatment programs, buprenorphine practitioners, and healthcare centers across the United States and its territories.

The NKI librarian is always available to assist with literature searching, citation searching (Web of Science, Scopus), bibliographic reference management, and the like. When you have any information needs, or questions about available resources, don't hesitate to turn to us.

You can [link to the NKI Library's website](#) from myNKI. The Library site includes quick links to the NYU Health Sciences Library and to the New York State Library, as well as links to NKI's own library resources ([journal finder](#), [online catalog](#), etc.).



# EVENTS & SEMINARS

## Center for Biomedical Imaging and Neuromodulation Science Series

Held on Mondays at 11 am via Zoom

**Lucas Trambaiolli, MSc, PhD**

McLean Hospital

***Linking non-human primate neuroanatomy to  
human neuroimaging: a new approach to  
inform basic and clinical studies***

October 21<sup>st</sup>

**Iman Beheshti, PhD**

University of Manitoba

***From Brain Age to Clinical Impact:  
Innovations and Prospects***

October 28<sup>th</sup>

**Michael Hawrylycz, PhD**

Allen Institute

***The BRAIN Initiative Cell Atlas Network  
(BICAN): Comprehensive multimodal atlases  
of the mammalian brain***

November 4<sup>th</sup>

**Timothy Laumann, MD, PhD**

Washington University

***TITLE TBA***

December 2<sup>nd</sup>

**Talma Hendler, MD, PhD**

Tel Aviv University

***TITLE TBA***

December 9<sup>th</sup>

**Save the Date**

## NKI Town Hall Meeting

***2024 Town Hall Meeting  
and  
Employee Recognition Event***

will be held on Tuesday,  
December 3<sup>rd</sup>



## CBC Community Space Discussion

*Wednesday October 23<sup>rd</sup> at noon*

The Community Building Committee will be hosting its next community space discussion on Wednesday October 23<sup>rd</sup> at noon. This will be a Q&A on animal care and IACUC protocols. This is your chance to ask any questions you may have about proper ways to handle and care for the animals vital to our experiments. Speakers include **Kathleen Shannon**, **Mark Klinger**, and **Henry Sershen**.

The New York State Office of Mental Health (OMH) regularly hosts an interactive video broadcast covering the latest research, technology, and treatment implementation in the fields of psychiatry and psychology. These programs are recorded, and the archived Statewide Grand Rounds programs can be viewed [on the OMH website](#).



## Department of Child and Adolescent Psychiatry Grand Rounds

**Xavier Castellanos, MD**

Senior Research Scientist at NKI

Professor in the Departments of Child and Adolescent Psychiatry; Neuroscience and Physiology; and Radiology,  
NYU Grossman School of Medicine

### ***The Great Chain of Knowing: Reflections on Approaching a Half-Century in Science***

Friday, October 25<sup>th</sup>, 11 am

To join the webinar, please click [here](#) or copy and paste the following link into your browser:

[https://nyulangone.zoom.us/j/95673568051?pwd=\\_ormGu2HjCLzOS0FgY8bmanha5frDaT.1](https://nyulangone.zoom.us/j/95673568051?pwd=_ormGu2HjCLzOS0FgY8bmanha5frDaT.1)

Password: DCAP



### **2024 BBRF International Mental Health Research Symposium (Virtual & In-Person)**

The Brain & Behavior Research Foundation (BBRF)'s annual research symposium will be held on Friday, October 25<sup>th</sup>. Join to watch presentations on leading research discoveries across brain and behavior disorders by the Foundation's 2024 Outstanding Achievement Prizewinners.

For more information and to register (free), go to:

<https://bbrfoundation.org/event/international-mental-health-research-symposium>

Friday, October 25<sup>th</sup>  
9:30 am – 12:30 pm



## 2024 On the Shoulders of Giants Scientific Symposium

### ***Advancements in Anxiety Care: the Next-Gen Treatments***

The event will honor the work of this year's winner of the Sarah Gund Prize for Research and Mentorship in Child Mental Health, **Rachel Klein, PhD**. She is a leading expert in the diagnosis and treatment of anxiety disorders and ADHD. Joining her are her two distinguished proteges: **Daniel Pine, MD**, and **Chad Sylvester, MD, PhD**. Together, they will highlight recent breakthroughs in understanding anxiety disorders and their biological underpinnings — and critically assess the promise and pitfalls of innovative solutions such as brain games, virtual reality (VR), brain stimulation, and psychedelics.

For more information and to register for this free virtual event, go to:

<https://childmind.org/event/otsog-2024/>

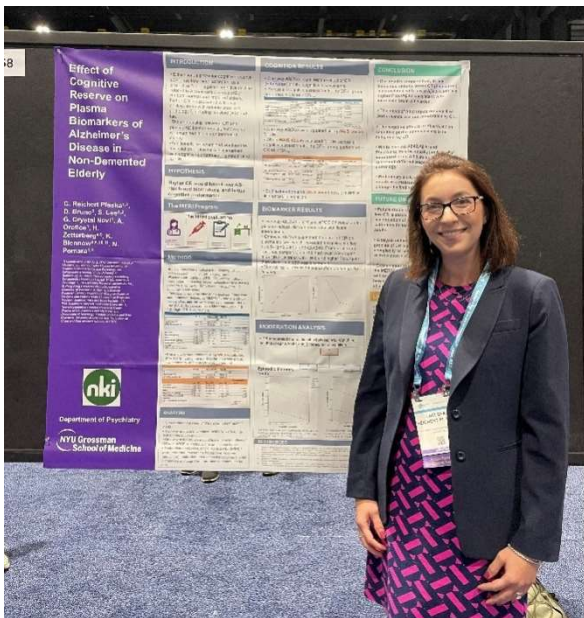
Wednesday, October 30<sup>th</sup>  
5:00 – 7:30 pm



## NKI ON THE ROAD



**Chelsea Reichert Plaska** (Geriatric Psychiatry) received a Trainee Professional Development Award and presented a poster at the [Society for Neuroscience conference](#) in Chicago. The poster, titled “Effect of Cognitive Reserve on Plasma Biomarkers of Alzheimer’s Disease in Non-Demented Elderly,” describes some preliminary results of the Memory Education and Research Initiative (MERI). Undergraduate intern **Giovanna Novi**, who contributed to this study, also attended the conference.



**Dr. Reichert Plaska** also presented at the Alzheimer’s Association International Conference held in Philadelphia in July, on a different preliminary analysis of MERI data focused on influence of social isolation and sex differences in plasma AD biomarkers.



**Christos Lisgaras** (Dementia Research) co-chaired a Gordon Research Seminar on “[Transformations Governing the Transition of a Healthy to an Epileptic Brain.](#)” This seminar was held in conjunction with the “[Mechanisms of Epilepsy and Neuronal Synchronization](#)” Gordon Research Conference (GRC), which was co-chaired by **Helen Scharfman** (Dementia Research). The conference took place in New Hampshire in August.



[Psychiatric NeuroCognition Laboratory](#) Director **Emily Stern** and lab members **Goi Khia Eng**, **Jeanmarie Harvey**, and **Rachael Moldow** attended the [International OCD Foundation \(IOCDF\) Research Symposium](#) in Orlando in July. Dr. Stern was one of the symposium organizers; Dr. Eng gave a short talk on “Sensory phenomena, interoceptive sensitivity, and neural patterns in OCD and unaffected siblings;” and Rachael, Jeanmarie, and Goi Khia each [presented a poster](#). The poster presented by Jeanmarie received the Outstanding Poster Award!

## NKI PUBLICATIONS UPDATE

Below is a list of references that have been added to the NKI publications database since the previous update. The full database contains over 7,500 items dating back to 1995 and can be searched from the [myNKI website](#).

Allred MJ, Pidikiti H, Ibrahim KW, Lee SH, Heguy A, Hoffman GE, Mufson EJ, Stutzmann GE, Ginsberg SD. Hippocampal CA1 Pyramidal Neurons Display Sublayer and Circuitry Dependent Degenerative Expression Profiles in Aged Female Down Syndrome Mice. *J Alzheimers Dis*. 2024; 100(s1):S341-S362. PMID: 39031371.

Allred MJ, Pidikiti H, Ibrahim KW, Lee SH, Heguy A, Hoffman GE, Roussos P, Wisniewski T, Wegiel J, Stutzmann GE, Mufson EJ, Ginsberg SD. Analysis of microisolated frontal cortex excitatory layer III and V pyramidal neurons reveals a neurodegenerative phenotype in individuals with Down syndrome. *Acta Neuropathol*. 2024 Aug 6;148(1):16. PMID: 39105932.

Alldritt S, ... Schroeder C, Milham M, Xu T. Brain Charts for the Rhesus Macaque Lifespan. *bioRxiv* [Preprint]. 2024 Aug 30. PMID: 39257737.

Basavarajappa BS. Anandamide signaling dysfunction in the development of alcohol use disorders. In: Le Foll B, editor. *Anandamide in Health and Disease*. Elsevier; 2024.

Bernard MA, Boutajangout A, Debure L, Ahmed W, Briggs AQ, Boza-Calvo C, Vedvyas A, Marsh K, Bubu OM, Osorio RS, Wisniewski T, Masurkar AV. The relationship between anxiety and levels of Alzheimer's disease plasma biomarkers. *medRxiv* [Preprint]. 2024 Jul 10. PMID: 39040178.

Boza-Calvo C, Faustin A, Zhang Y, Briggs AQ, Bernard MA, Bubu OM, Rao JA, Gurin L, Tall SO, Osorio RS, Marsh K, Shao Y, Masurkar AV. Two-Year Longitudinal Outcomes of Subjective Cognitive Decline in Hispanics Compared to Non-hispanic Whites. *J Geriatr Psychiatry Neurol*. 2024 Jul 23. PMID: 39043156.

Bubu OM, Mbah AK, Bernard MA, Briggs AQ, Faustin A, Gurin L, Rao JA, Ouedraogo Tall S, Osorio RS, Masurkar AV. Risk factors and cognitive domain markers of progression in subjective cognitive decline. *medRxiv* [Preprint]. 2024 Aug 22. PMID: 39228714.

Cao Q, Wang P, Zhang Z, Castellanos FX, Biswal BB. Compressed cerebro- cerebellar functional gradients in children and adolescents with attention- deficit/hyperactivity disorder. *Hum Brain Mapp*. 2024 Sep;45(13):e26796. PMID: 39254180.

Chen AM, Gajdošik M, Ahmed W, Ahn S, Babb JS, Blessing EM, Boutajangout A, de Leon MJ, Debure L, Gaggi N, Gajdošik M, George A, Ghuman M, Glodzik L, Harvey P, Juchem C, Marsh K, Peralta R, Rusinek H, Sheriff S, Vedvyas A, Wisniewski T, Zheng H, Osorio R, Kirov II. Retrospective analysis of Braak stage- and APOE4 allele-dependent associations between MR spectroscopy and markers of tau and neurodegeneration in cognitively unimpaired elderly. *Neuroimage*. 2024 Aug 15; 297:120742. PMID: 39029606.

Chen YT, Zhou Y, Williams S, Cantor J, Taylor BG, Lamuda PA, Pollack HA, Schneider J. Racial discrimination and mental health in the context of anti- Asian xenophobia: An intersecting approach of race, ethnicity, nativity, and socioeconomic status. *SSM Ment Health*. 2024 Jun; 5:100292. PMID: 39036441.

Choudhari V, Han C, Bickel S, Mehta AD, Schevon C, McKhann GM, Mesgarani N. Brain-Controlled Augmented Hearing for Spatially Moving Conversations in Multi- Talker Environments. *Adv Sci (Weinh)*. 2024 Sep 9:e2401379. PMID: 39248654.

Clewett D, Huang R, Davachi L. Locus coeruleus activation 'resets' hippocampal event representations and separates adjacent memories. *bioRxiv* [Preprint]. 2024 Aug 18. PMID: 39185215.



da Cunha Menezes E, de Abreu FF, Davis JB, Maurer SV, Roshko VC, Richardson A, Dowell J, Cassella SN, Stevens HE. Effects of gestational hypothyroidism on mouse brain development: Gabaergic systems and oxidative stress. *Dev Biol.* 2024 Nov; 515:112-120. PMID: 39048051.

Das BC, Chokkalingam P, Shareef MA, Shukla S, Das S, Saito M, Weiss LM. Methionine aminopeptidases: Potential therapeutic target for microsporidia and other microbes. *J Eukaryot Microbiol.* 2024 Jul 22:e13036. PMID: 39036929.

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## ABSTRACTS

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