

The NKInformer



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

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

July – August 2024

Stuart Moss, MLS, Editor

Changes Underway for the Emotional Brain Institute

Contributed by Catia Teixeira, PhD

The mission of NKI's Emotional Brain Institute (EBI) is aimed at understanding the neuroscience of emotions and their impact on behavior. EBI at NKI was founded in 2008 by **Dr. Joseph LeDoux**. Currently, EBI has been directed by **Dr. Don Wilson** since 2020 and includes a group of seven laboratories, headed by **Christopher Cain, Mariko Saito, Rob Sears, Regina Sullivan, Catia Teixeira, Donald Wilson, and Vinod Yaragudri.** *(continued p.2)*



This summer, a lot of changes are happening at EBI. We are welcoming a new PI, **Dr. Shuo Chen**, who is currently setting up his research lab at EBI, focusing on the study of the neural mechanisms of memory, especially hippocampal-dependent episodic memory. **Dr. John Smiley**, originally from Schizophrenia Research, is also joining EBI. Meanwhile, **Dr. Donald Wilson** and **Dr. Regina Sullivan**, two key members of EBI, are retiring from NKI, but will maintain their research labs at NYU. **Dr. Catia Teixeira** will be the new director of EBI. Finally, later in the summer, a new PI, currently at Georgia State University, will join us – **Dr. Jordan Hamm**.

While we are saddened to see all the founding members of EBI leave NKI, we celebrate their incredible careers and contributions to science. We wish them continued success in this new and exciting part of their lives. Follow these links for additional information on [Dr. LeDoux*](#), [Dr. Sullivan](#), and [Dr. Wilson](#). We hope our future EBI does them justice!

* In addition, interviews with Dr. LeDoux were recently published in [Neuron](#) and in [Current Biology](#).

Dr. Shuo Chen recently joined the Emotional Brain Institute where he is setting up his new lab. Shuo received his bachelor's degree in Chemical Engineering from Tsinghua University, China, followed by a PhD in Chemistry from the University of Tokyo. His strong interest in neuroscience

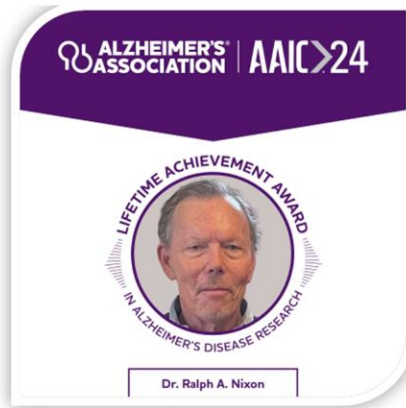
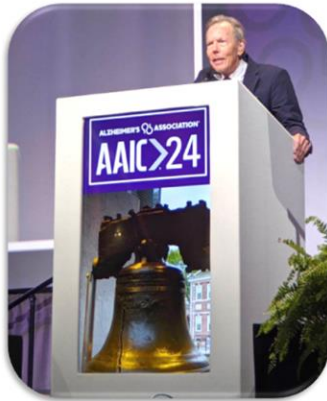


stemmed from his PhD work in the design and synthesis of voltage-responsive molecular

assemblies, which led him to consider how molecules process electric signals, generate logic flow and, more amazingly, produce cognition in the brain. He then embarked on a journey towards the neuroscience of learning and memory at RIKEN Center for Brain Science. Using his knowledge in chemistry, he developed a minimally invasive neuromodulation technology called “near-infrared (NIR) upconversion optogenetics,” where upconversion nanoparticles are used to convert tissue-penetrating NIR to visible light for optogenetically stimulating deep brain neurons. In a separate project, by leveraging optogenetic tools and multielectrode in vivo electrophysiological recordings, he identified the supramammillary nucleus as a previously unknown hypothalamic novelty hub that modulates hippocampal memory. In his following postdoc work at NYU, supported by a NIH K99 award and a BBRF grant, Dr. Chen extended his work to study memory dysfunction in Alzheimer’s disease (AD) by deciphering its circuit mechanism and developing next-generation therapies.

Dr. Chen’s research has two areas of focus: (i) to study the neural mechanism of memory, especially hippocampal-dependent episodic memory, and (ii) to develop new tools – chemical and optical – for neuroscience. These goals are complementary, because to disambiguate the connections and functions of the normal or diseased brain requires new and improved technologies that enable unprecedented recording and manipulation of neural activity. Dr. Chen is very keen to collaborate with scientists from various fields at NKI to tackle the most prominent challenges in the exciting field of neuroscience.

KUDOS



Congratulations Dr. Ralph Nixon

Khalid Iqbal Lifetime Achievement Award @AAIC 2024

Dr. Ralph Nixon, Director of NKI's Center for Dementia Research and professor of Psychiatry and Cell Biology at NYU Grossman School of Medicine, is the recipient of the Khalid Iqbal Lifetime Achievement Award, given by the AAIC (Alzheimer's Association International Conference). The AAIC Lifetime Achievement Awards honor significant contributions to Alzheimer's and dementia research, either through a single scientific discovery or a body of work. Dr. Nixon received his award on July 28th at the 2024 AAIC Conference in Philadelphia. Bravo, Dr. Nixon!

Dr. Nixon's principal research focuses on the biology of protein clearance by endosomal-lysosomal, autophagy, and calpain-calpastatin systems. His team has identified molecular defects in these clearance mechanisms central to pathogenesis of Alzheimer's disease and related disorders and as promising therapeutic targets. Another longstanding research program focuses on the axonal transport, assembly, and turnover of neuronal cytoskeletal proteins and their dysregulation in dementia. Dr. Nixon has served on many scientific advisory boards over the years, holds eight issued patents and has authored more than 325 scientific publications.

GRANTS RECEIVED



Drs. Daniel Javitt and Antigona Martinez (Schizophrenia Research) received funding for a five-year R01 for a project titled “A Schizophrenia Extension Study for the NKI Rockland Sample II project: An Open Resource of Multimodal Brain, Physiology & Behavior from a Community Lifespan Sample.”



Drs. Efrat Levy and Pasquale D’Acunzo (Dementia Research) received funding for a three-year RF1 grant from NIH for a project titled “A new perspective on the role of extracellular vesicles in Alzheimer’s disease.”

Dr. Elaine Gazes (Biomedical Imaging & Neuromodulation), in collaboration with Albert Einstein College of Medicine, has an R01 titled “Trajectories and modifiable risk factors of brain, gait, and cognitive decline in aging and pre-dementia.”

Dr. Shuo Chen (Emotional Brain Institute) received a three-year R00 for the project titled “Elucidating circuit mechanisms of brain rhythms in the aging brain.”

FROM AROUND THE INSTITUTE

The Geriatric Psychiatry team recently made a return visit to Active Rockland, a senior daycare/physical therapy center in the Palisades mall that is supported by the Rockland County Office of Aging and is a partner with the Alzheimer's Association. As part of an ongoing education series with the Alzheimer's Association, and in fulfilling the education goals of the Geriatric Psychiatry Program's Rockland County Office of Mental Health Grant, the team did an educational Q&A and conducted memory screens. Drs. Antero Sarreal and Chelsea Reichert Plaska answered questions about AD, dementia, and AD risk. Afterwards, they conducted brief memory screens.



Dr. Chelsea Reichert Plaska, Dr. Antero Sarreal, Lauren Sarreal, Rebecca Zachariah, and Andrew Orefice



Six staff members of NKI's Division of Laboratory Animal Resources (DLAR) attended the first-ever [Spanish Language Lab Animal Symposium](#) held at Rockefeller University in June. Over 200 people attended the event, in person and online, spanning over multiple countries. NKI attendees were **Manolo de la Cruz**, **Marlon de la Cruz**, **Rosanny Ramirez**, **Miguelina Ramirez de Cespedes**, **Ramon Reyes**, and **Relish Shah**. **Kathleen Shannon** also attended (online).



Also in June, the Metro NY Branch of the American Association for Laboratory Animal Science held an afternoon workshop on "Handling Techniques that Promote Low-Stress in Laboratory Mice," followed by a general meeting. **Janos Piturca** attended the workshop, and Janos and **Kathleen Shannon** both attended the general meeting.



THE TRANSMITTER

Dr. Ralph Nixon and the work of the Nixon Lab (Center for Dementia Research) were featured in the May 2024 issue of the e-journal *The Transmitter*. The article, "[Reviving 'inside-out' hypothesis of amyloid beta to explain Alzheimer's mysteries](#)," discusses how plaques begin as faulty autolysosomes, the trash collectors of the cell, according to a 2022 [study](#) led by Dr. Nixon. When autolysosomes lose their acidity, they fail to break down proteins such as amyloid beta, and the endoplasmic reticulum surrounding a cell's nucleus fills with these proteins. Amyloid beta clumps onto itself and forms fibrils within the clogged endoplasmic reticulum and autophagy vesicles. After the neuron dies, it leaves a plaque in its place, Nixon says.



A pesky visitor was recently spotted in the raised garden bed outside the atrium entrance.

Garden-variety nuisances like this bring to mind [The \\$64 Tomato](#), a book by NKI's former Director of Technology **Bill Alexander**. If you're not familiar with Bill's literary work, check it out at williamalexander.com.

PUBLICATIONS OF NOTE



The latest paper from **Helen Scharfman's lab** (Dementia Research) appears in *eLife*.

Chartampila E, Elayouby KS, Leary P, LaFrancois JJ, Alcantara-Gonzalez D, Jain S, Gerencer K, Botterill JJ, Ginsberg SD, Scharfman HE. [Choline supplementation in early life improves and low levels of choline can impair outcomes in a mouse model of Alzheimer's disease](#). *Elife*. 2024 Jun 21;12:RP89889. PMID: 38904658.



Michael Milham, Director of the Center for Biomedical Imaging & Neuromodulation, is a coauthor of this article published recently in *Nature Neuroscience*.

Park S, Haak KV, Oldham S, Cho H, Byeon K, Park BY, Thomson P, Chen H, Gao W, Xu T, Valk S, Milham MP, Bernhardt B, Di Martino A, Hong SJ. [A shifting role of thalamocortical connectivity in the emergence of cortical functional organization](#). *Nat Neurosci*. 2024 Jun 10. PMID: 38858608.



Emily Stern, Goi Khia Eng, and NKI colleagues (Clinical Research) published their latest research in the *Journal of Psychiatric Research*.

Eng GK, De Nadai AS, Collins KA, Recchia N, Tobe RH, Bragdon LB, Stern ER. [Identifying subgroups of urge suppression in Obsessive-Compulsive Disorder using machine learning](#). *J Psychiatr Res*. 2024 Jun 29; 177:129-139. PMID: 39004004.



Chelsea Reichert Plaska (first author), **Nunzio Pomara** (Geriatric Psychiatry), **Sang Han Lee**, and **Ricardo Osorio** are coauthors of this open access paper in *Brain, Behavior, and Immunity*.

Reichert Plaska C, Heslegrave A, Bruno D, Ramos-Cejudo J, Han Lee S, Osorio R, Imbimbo BP, Zetterberg H, Blennow K, Pomara N. [Evidence for reduced anti-inflammatory microglial phagocytic response in late-life major depression](#). *Brain Behav Immun*. 2024 May 23; 120:248-255. PMID: 38795783.



These bioRxiv preprints are by corresponding authors **Dun-Sheng Yang** and **Ralph Nixon**, and other members of the Center for Dementia Research.

Berg MJ, Veeranna, Rosa CM, Kumar A, Mohan PS, Stavrides P, Marchionini DM, Yang DS, Nixon RA. [Pathobiology of the autophagy-lysosomal pathway in the Huntington's disease brain](#). bioRxiv [Preprint]. 2024 May 30. PMID: 38854113.

Stavrides P, Goulbourne CN, Peddy J, Huo C, Rao M, Khetarpal V, Marchionini DM, Nixon RA, Yang DS. [mTOR inhibition in Q175 Huntington's disease model mice facilitates neuronal autophagy and mutant huntingtin clearance](#). bioRxiv [Preprint]. 2024 May 30. PMID: 38854023.



This paper by **Ricardo Osorio** (Clinical Research) and colleagues appeared recently in the *Journal of Sleep Research*.

Mullins AE, Pehel S, Parekh A, Kam K, Bubu OM, Tolbert TM, Rapoport DM, Ayappa I, Varga AW, Osorio RS. [The stability of slow-wave sleep and EEG oscillations across two consecutive nights of laboratory polysomnography in cognitively normal older adults](#). J Sleep Res. 2024 Jun 27:e14281. PMID: 38937887.



This open access article in *Traffic* is by first author **Kathy Peng**, corresponding authors **Paul Mathews** and **Efrat Levy**, and other members of the Center for Dementia Research.

Peng KY, Liemisa B, Pasato J, D'Acunzo P, Pawlik M, Heguy A, Penikalapati SC, Labuza A, Pidikiti H, Alldred MJ, Ginsberg SD, Levy E, Mathews PM. [Apolipoprotein E2 Expression Alters Endosomal Pathways in a Mouse Model with Increased Brain Exosome Levels During Aging](#). Traffic. 2024 May;25(5):e12937. PMID: 38777335.



This column appearing in the July issue of the *Harvard Review of Psychiatry* is coauthored by NKI Director **Donald Goff**.

Kitaj M, Goff DC. [Why Do Veterans Not Respond as Well as Civilians to Trauma-Focused Therapies for PTSD?](#) Harv Rev Psychiatry. 2024 Jul 1;32(4):160-163. PMID: 38990904.



Carrie Masia Warner (Social Solutions & Services) is the corresponding author of this article published in *Bulletin of the Menninger Clinic*.

Coyle-Eastwick S, Escobar M, Wimmer J, Lindsey M, Thompson J, Warner CM. [Social anxiety disorder in Black American adolescents: Cultural considerations in conceptualization, assessment, and treatment](#). Bull Menninger Clin. 2024 Spring; 88(2):171-195. PMID: 38836849.

communications biology

A recent report by **Karl-Heinz Nenning**, **Michael Milham**, **Arielle Tambini**, **Alexandre Franco**, **Stan Colcombe**, and colleagues (Center for Biomedical Imaging & Neuromodulation) was published in the open access journal *Communications Biology*.

Nenning KH, Xu T, Tambini A, Franco AR, Margulies DS, Colcombe SJ, Milham MP. [Fast connectivity gradient approximation: maintaining spatially fine-grained connectivity gradients while reducing computational costs](#). Commun Biol. 2024 Jun 6;7(1):697. PMID: 38844612.



Corresponding author **Robert Smith**, **Henry Sershen** (Schizophrenia Research) and colleagues recently published this open access paper in *Schizophrenia Research: Cognition*.

Smith RC, Sershen H, Chen A, Jin H, Guidotti A, Davis JM. [Relationship of cognitive measures to mRNA levels in lymphocytes from patients with schizophrenia and controls](#). Schizophrenia Research: Cognition 2024; 38:100321.



Yohan Kim, Pasquale D'Acunzo, and Efrat Levy (Dementia Research) published this open access review in *Current Opinion in Physiology*.

Kim Y, D'Acunzo P, Levy E. [Biogenesis and secretion of mitovesicles, small extracellular vesicles of mitochondrial origin at the crossroads between brain health and disease.](#) *Current Opinion in Physiology* 2024; 40:100765.



Xavier Castellanos (Clinical Research) published this discussion piece in *Science Bulletin*.

Castellanos FX. [Back to the future: Some similarities and many differences between autism spectrum disorder and early onset schizophrenia. Clues to pathophysiology?](#) *Sci Bull (Beijing)*. 2024 Jun 15. PMID: 38969537.



Dr. Castellanos also coauthored this open access Perspective in *Neuropsychopharmacology*.

Uddin LQ, Castellanos FX, Menon V. [Resting state functional brain connectivity in child and adolescent psychiatry: where are we now?](#) *Neuropsychopharmacology*. 2024 May 22. PMID: 38778158.



Jean-Pierre Lindenmayer (Manhattan Schizophrenia Research Program) is a coauthor of this report in the *Journal of Clinical Psychopharmacology*.

Correll CU, Citrome L, Singer C, Lindenmayer JP, Zinger C, Liang G, Dunayevich E, Marder SR. [Sustained Treatment Response and Global Improvements with Long-term Valbenazine in Patients with Tardive Dyskinesia.](#) *J Clin Psychopharmacol*. 2024 Jul-Aug 01; 44(4):353-361. PMID: 38767901.



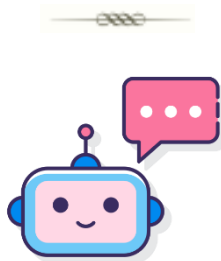
This open access article published in *Frontiers in Psychiatry* is by **Matthew Hoptman, Dan Iosifescu**, and colleagues (Clinical Research).

Hoptman MJ, Evans KT, Parincu Z, Sparpana AM, Sullivan EF, Ahmed AO, Iosifescu DV. [Emotion-related impulsivity and suicidal ideation and behavior in schizophrenia spectrum disorder: a pilot fMRI study.](#) *Front Psychiatry*. 2024 Jun 26; 15:1408083. PMID: 38988737.

INFO UPDATE

ClinicalTrials.gov

After a transition period, the modernized [ClinicalTrials.gov](https://www.clinicaltrials.gov) website has now replaced the classic site. If you want to familiarize yourself with the new site, this [brief overview](#) or [this FAQ](#) may be helpful. For more guidance on navigating the new ClinicalTrials.gov, check out this [webinar recording](#).



A recent [Career Column](#) in *Nature* gives some studied suggestions for how best to use chatbots to produce better science and increase efficiency. And for more articles on science in the age of AI, check out [this collection](#).



[PubMed Central® \(PMC\)](#) is a 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). PMC has grown from its inception in 2000 with only two journals to an archive of over [10 million](#) free full-text articles from thousands of journals. You can learn more about PMC [here](#).

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.

The library offers a comfortable, quiet space for reading, work, and small meetings. To use the library's Wi-Fi network, ask the library staff for the password.

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.).

DEPARTMENT OF WONDER

The New York Times Magazine

A recent article in *The New York Times Magazine*, "[The Woman Who Could Smell Parkinson's](#)," describes a "supersmeller" (hyperosmic) whose nose can detect disease. This person's ability led to the discovery that sebum, a substance secreted by the skin, may contain molecules that would enable the early detection of Parkinson's (and perhaps other diseases). Joy Milne, whose power of smell was the source of this discovery, has coauthored several [papers](#) that have resulted from this line of research. There is also an audio version of this article [here](#).

EVENTS & SEMINARS

Center for Biomedical Imaging and Neuromodulation Science Series

Held on Mondays at 11 am via Zoom

Manu Raghavan, PhD

Center for Neural Science
New York University

TITLE TBA

September 30th



The NKI Community
Building Committee
presents:

**Sweet September BBQ
2024**

Save the date:
Tuesday, Sept 10th (12-3pm)
Rain date: Sept 11th

Location: Outside the Atrium Entrance

The NKI Community Building Committee (CBC) is organizing a BBQ for the NKI Community where all personnel, researchers and staff are invited to join.

Vegetarian food options will be available.

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](#).



***NAMI Rockland's
Annual 5K Run/Walk for
Mental Wellness***

**Sunday, September 8th
9:00 am at Rockland Lake State Park**

NKI is a sponsor of this event, and everyone is encouraged to join the [Moving Forward with NKI](#) team and/or donate

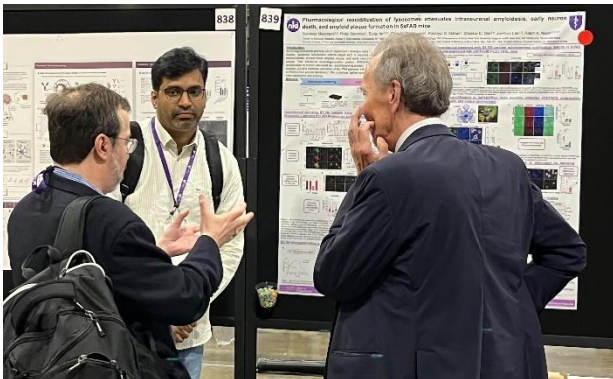
[Click here](#) to register your support.

NKI ON THE ROAD



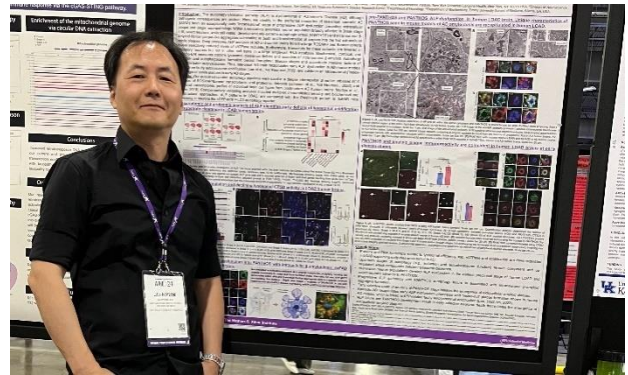
Two **Nixon Lab** members were selected to present posters at the recent Alzheimer's Association International Conference (AAIC) in Philadelphia.

Dr. Sandeep Malampati's presentation, titled "Pharmacological reacidification of lysosomes attenuates intraneuronal amyloidosis, early neuron death, and amyloid plaque formation in 5xFAD mice," depicted restoring lysosomal acidity via β 2-adrenergic receptor (β 2-AR) activation with Isoproterenol (ISO) which reverses autophagy-lysosomal pathway dysfunction in PSEN1-FAD fibroblasts.



Sandeep Malampati presenting as Dr. Nixon looks on

Dr. Ju-Hyun Lee's poster illustrated that beginning at a preclinical stage, vulnerable neuron populations in human sporadic AD develop the same PANTHOS pattern of autophagy-lysosomal pathway (ALP) dysfunction and neuronal cell death as observed uniquely in mouse models of AD, which arises from APP-dependent lysosomal acidification deficiency. ALP failure and PANTHOS development results in early selective neuronal death that initiates emergence of amyloid plaques. Dr. Lee's presentation was titled "A preclinical intraneuronal stage of autophagy-lysosomal dysfunction, amyloidosis, and neuron death yields senile plaques in human late-onset Alzheimer's Disease."



Ju-Hyun Lee presents at AAIC 2024



Michael Milham, MD, PhD, Director of the Center for Biomedical Imaging & Neuromodulation, made major contributions to the Organization for Human Brain Mapping (OHBM) conference held recently in Seoul, South Korea. And as Chief Science Officer of the Child Mind Institute, **Dr. Milham led a team** of CMI scientists who participated in numerous conference programs. Dr. Milham anchored an OHBM Roundtable in which leaders weighed in on central issues in the field. He also presented in a Symposium on fostering international collaboration opportunities for young investigators. In addition, Dr. Milham contributed to 14 posters that were presented at the conference.

Also in attendance at OHBM 2024 were **Karl-Heinz Nening** and **Arielle Tambini** from NKI's Design, Acquisition & Neuromodulation Laboratories. Dr. Nening presented two posters and Dr. Tambini presented one.



Salvador Dura-Bernal (Translational Neuroscience Laboratories) participated in “AI in Life Sciences Today,” a live online Q&A event hosted by MetaCell on July 30th.



Department of Psychiatry Grand Rounds

On June 27th, NKI Director and NYU Department of Psychiatry Marvin Stern Professor and Vice Chair for Research **Donald Goff** gave the Grand Rounds presentation on “Schizophrenia: Diagnosis and Treatment”.

And on June 13th, NKI Clinical Research Director **Dan Iosifescu** was the Discussant for David Liebers’ presentation on “Using Novel Antidiabetic Medications to Target Brain Bioenergetic Metabolism in Psychiatric Disorders”.

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 7,400 items dating back to 1995 and can be searched from the [myNKI website](#).

Bay S, Digwal CS, Rodilla Martín AM, Sharma S, Stanisavljevic A, Rodina A, Attaran A, Roychowdhury T, Parikh K, Toth E, Panchal P, Rosiek E, Pasala C, Arancio O, Fraser PE, Alldred MJ, Prado MAM, Ginsberg SD, Chiosis G. Synthesis and Characterization of Click Chemical Probes for Single-Cell Resolution Detection of Epichaperomes in Neurodegenerative Disorders. *Biomedicines*. 2024 Jun 4;12(6):1252. PMID: 38927459.

Berg MJ, Veeranna, Rosa CM, Kumar A, Mohan PS, Stavrides P, Marchionini DM, Yang DS, Nixon RA. Pathobiology of the autophagy-lysosomal pathway in the Huntington's disease brain. *bioRxiv* [Preprint]. 2024 May 30:2024.05.29.596470. PMID: 38854113.

Biskaduros A, Glodzik L, Saint Louis LA, Rusinek H, Pirraglia E, Osorio R, Butler T, Li Y, Xi K, Tanzi E, Harvey P, Zetterberg H, Blennow K, de Leon MJ. Longitudinal trajectories of Alzheimer's disease CSF biomarkers and blood pressure in cognitively healthy subjects. *Alzheimers Dement*. 2024 Jul;20(7):4389-4400. PMID: 38808676.

Canet G, Monteiro FDG, Rocaboy E, Diego-Diaz S, Khelaifia B, Kim J, Valencia D, Yin A, Wu HT, Howell J, Blank E, Laliberté F, Fortin N, Boscher E, Fereydouni-Forouzandeh P, Champagne S, Guisle I, Hébert S, Pernet V, Liu H, Lu W, Debure L, Rapoport D, Ayappa I, Varga A, Parekh A, Osorio R, Lacroix S, Lucey B, Blessing E, Planel E. Sleep-wake body temperature regulates tau secretion in mice and correlates with CSF and plasma tau in humans. *Res Sq* [Preprint]. 2024 May 14:rs.3.rs-4384494. PMID: 38798432.

Castellanos FX. Back to the future: Some similarities and many differences between autism spectrum disorder and early onset schizophrenia. Clues to pathophysiology? *Sci Bull (Beijing)*. 2024 Jun 15:S2095-9273(24)00441-9. PMID: 38969537.

Chakrabarty S, Wang S, Roychowdhury T, Ginsberg SD, Chiosis G. Introducing dysfunctional Protein-Protein Interactome (dfPPI) - A platform for systems-level protein-protein interaction (PPI) dysfunction investigation in disease. *Curr Opin Struct Biol.* 2024 Jul 13; 88:102886. PMID: 39003916.

Chartampila E, Elayouby KS, Leary P, LaFrancois JJ, Alcantara-Gonzalez D, Jain S, Gerencer K, Botterill JJ, Ginsberg SD, Scharfman HE. Choline supplementation in early life improves and low levels of choline can impair outcomes in a mouse model of Alzheimer's disease. *Elife.* 2024 Jun 21;12:RP89889. PMID: 38904658.

Correll CU, Citrome L, Singer C, Lindenmayer JP, Zinger C, Liang G, Dunayevich E, Marder SR. Sustained Treatment Response and Global Improvements with Long-term Valbenazine in Patients with Tardive Dyskinesia. *J Clin Psychopharmacol.* 2024 Jul-Aug 01;44(4):353-361. PMID: 38767901.

Cowan ET, Chanales AJ, Davachi L, Clewett D. Goal Shifts Structure Memories and Prioritize Event-defining Information in Memory. *J Cogn Neurosci.* 2024 Jul 10:1-17. PMID: 38991135.

Coyle-Eastwick S, Escobar M, Wimmer J, Lindsey M, Thompson J, Warner CM. Social anxiety disorder in Black American adolescents: Cultural considerations in conceptualization, assessment, and treatment. *Bull Menninger Clin.* 2024 Spring;88(2):171-195. PMID: 38836849.

Cushing CA, Lau H, Hofmann SG, LeDoux JE, Taschereau-Dumouchel V. Metacognition as a window into subjective affective experience. *Psychiatry Clin Neurosci.* 2024 Jun 17. PMID: 38884177.

Elorette C, Fujimoto A, Stoll FM, Fujimoto SH, Bienkowska N, London L, Fleysher L, Russ BE, Rudebeck PH. The neural basis of resting-state fMRI functional connectivity in fronto-limbic circuits revealed by chemogenetic manipulation. *Nat Commun.* 2024 May 31;15(1):4669. PMID: 38821963.

Eng GK, De Nadai AS, Collins KA, Recchia N, Tobe RH, Bragdon LB, Stern ER. Identifying subgroups of urge suppression in Obsessive-Compulsive Disorder using machine learning. *J Psychiatr Res.* 2024 Jun 29; 177:129-139. PMID: 39004004.

Fujimoto SH, Fujimoto A, Elorette C, Seltzer A, Andraka E, Verma G, Janssen WG, Fleysher L, Folloni D, Choi KS, Russ BE, Mayberg HS, Rudebeck PH. Deep brain stimulation induces white matter remodeling and functional changes to brain-wide networks. *bioRxiv [Preprint].* 2024 Jun 14:2024.06.13.598710. PMID: 38915600.

Griffith EY, ElSayed M, Dura-Bernal S, Neymotin SA, Uhlrich DJ, Lytton WW, Zhu JJ. Mechanism of an Intrinsic Oscillation in Rat Geniculate Interneurons. *bioRxiv [Preprint].* 2024 Jun 8:2024.06.06.597830. PMID: 38895250.

Gui Y, Kim Y, Brenna S, Wilmes M, Zaghen G, Goulbourne CN, Kuchenbecker-Pöls L, Siebels B, Voß H, Gocke A, Schlüter H, Schweizer M, Altmeppen HC, Magnus T, Levy E, Puig B. Cystatin C loaded in brain-derived extracellular vesicles rescues synapses after ischemic insult in vitro and in vivo. *Cell Mol Life Sci.* 2024 May 20;81(1):224. PMID: 38769196.

Hoptman MJ, Evans KT, Parincu Z, Sparpana AM, Sullivan EF, Ahmed AO, Iosifescu DV. Emotion-related impulsivity and suicidal ideation and behavior in schizophrenia spectrum disorder: a pilot fMRI study. *Front Psychiatry.* 2024 Jun 26; 15:1408083. PMID: 38988737.

Jacobs T, Jacobson SR, Fortea J, Berger JS, Vedvyas A, Marsh K, He T, Gutierrez-Jimenez E, Fillmore NR, Gonzalez M, Figueredo L, Gaggi NL, Plaska CR, Pomara N, Blessing E, Betensky R, Rusinek H, Zetterberg H, Blennow K, Glodzik L, Wisniweski TM, de Leon MJ, Osorio RS, Ramos-Cejudo J; Alzheimer's Disease Neuroimaging Initiative. The neutrophil to lymphocyte ratio associates with markers of Alzheimer's disease pathology in cognitively unimpaired elderly people. *Immun Ageing.* 2024 May 17;21(1):32. PMID: 38760856.

Jha MK, Wilkinson ST, Krishnan K, Collins KA, Sanacora G, Murrrough J, Goes F, Altinay M, Aloysi A, Asghar-Ali A, Barnett B, Chang L, Costi S, Malone D, Nikayin S, Nissen SE, Ostroff R, Reti I, Wolski K, Wang D, Hu B, Mathew SJ, Anand A. Ketamine vs Electroconvulsive Therapy for Treatment-Resistant Depression: A Secondary Analysis of a Randomized Clinical Trial. *JAMA Netw Open*. 2024 Jun 3;7(6):e2417786. PMID: 38916891.

Kim Y, D'Acunzo P, Levy E. Biogenesis and secretion of mitovesicles, small extracellular vesicles of mitochondrial origin at the crossroads between brain health and disease. *Current Opinion in Physiology* 2024; 40:100765.

Kitaj M, Goff DC. Why Do Veterans Not Respond as Well as Civilians to Trauma-Focused Therapies for PTSD? *Harv Rev Psychiatry*. 2024 Jul 1;32(4):160-163. PMID: 38990904.

Lapate RC, Heckner MK, Phan AT, Tambini A, D'Esposito M. Information-based TMS to mid-lateral prefrontal cortex disrupts action goals during emotional processing. *Nat Commun*. 2024 May 20;15(1):4294. PMID: 38769359.

Michel C, Schmidt M, Mann JJ, Herzog S, Ochsner K, Davachi L, Schneck N. Temporal Interactions between Neural Proxies for Memory Recall, Negative Affect, and Emotion Regulation in Major Depression. *Res Sq [Preprint]*. 2024 May 30:rs.3.rs-4298308. PMID: 38854145.

Mullins AE, Pehel S, Parekh A, Kam K, Bubu OM, Tolbert TM, Rapoport DM, Ayappa I, Varga AW, Osorio RS. The stability of slow-wave sleep and EEG oscillations across two consecutive nights of laboratory polysomnography in cognitively normal older adults. *J Sleep Res*. 2024 Jun 27:e14281. PMID: 38937887.

Nenning KH, Xu T, Tambini A, Franco AR, Margulies DS, Colcombe SJ, Milham MP. Fast connectivity gradient approximation: maintaining spatially fine-grained connectivity gradients while reducing computational costs. *Commun Biol*. 2024 Jun 6;7(1):697. PMID: 38844612.

Ortiz C, Pearson A, McCartan R, Roche S, Carothers N, Browning M, Perez S, He B, Ginsberg SD, Mullan M, Mufson EJ, Crawford F, Ojo J. Overexpression of pathogenic tau in astrocytes causes a reduction in AQP4 and GLT1, an immunosuppressed phenotype and unique transcriptional responses to repetitive mild TBI without appreciable changes in tauopathy. *J Neuroinflammation*. 2024 May 15;21(1):130. PMID: 38750510.

Park S, Haak KV, Oldham S, Cho H, Byeon K, Park BY, Thomson P, Chen H, Gao W, Xu T, Valk S, Milham MP, Bernhardt B, Di Martino A, Hong SJ. A shifting role of thalamocortical connectivity in the emergence of cortical functional organization. *Nat Neurosci*. 2024 Jun 10. PMID: 38858608.

Peng KY, Liemisa B, Pasato J, D'Acunzo P, Pawlik M, Heguy A, Penikalapati SC, Labuza A, Pidikiti H, Alldred MJ, Ginsberg SD, Levy E, Mathews PM. Apolipoprotein E2 Expression Alters Endosomal Pathways in a Mouse Model with Increased Brain Exosome Levels During Aging. *Traffic*. 2024 May;25(5):e12937. PMID: 38777335.

Poojar P, Oiyie IE, Aggarwal K, Jimeno MM, Vaughan JT, Geethanath S. Repeatability of image quality in very low-field MRI. *NMR Biomed*. 2024 Jun 5:e5198. PMID: 38840502.

Ramos-Cejudo J, Scott MR, Tanner JA, Pase MP, McGrath ER, Ghosh S, Osorio RS, Thibault E, El Fakhri G, Johnson KA, Beiser A, Seshadri S. Associations of Plasma Tau with Amyloid and Tau PET: Results from the Community-Based Framingham Heart Study. *J Alzheimers Dis*. 2024 Jun 8. PMID: 38875034.

Reichert Plaska C, Heslegrave A, Bruno D, Ramos-Cejudo J, Han Lee S, Osorio R, Imbimbo BP, Zetterberg H, Blennow K, Pomara N. Evidence for reduced anti-inflammatory microglial phagocytic response in late-life major depression. *Brain Behav Immun*. 2024 May 23; 120:248-255. PMID: 38795783.

Shen FX, Wolf SM, Lawrenz F, Comeau DS, Dzirasa K, Evans BJ, Fair D, Farah MJ, Han SD, Illes J, Jackson JD, Klein E, Rommelfanger KS, Rosen MS, Torres E, Tuite P, Vaughan JT, Garwood M. Ethical, legal, and policy challenges in field-based neuroimaging research using emerging portable MRI technologies: guidance for investigators and for oversight. *J Law Biosci.* 2024 Jun 7;11(1):lsae008. PMID: 38855036.

Smith RC, Sershen H, Chen A, Jin H, Guidotti A, Davis JM. Relationship of cognitive measures to mRNA levels in lymphocytes from patients with schizophrenia and controls. *Schizophrenia Research: Cognition* 2024; 38:100321.

Stavrides P, Goulbourne CN, Peddy J, Huo C, Rao M, Khetarpal V, Marchionini DM, Nixon RA, Yang DS. mTOR inhibition in Q175 Huntington's disease model mice facilitates neuronal autophagy and mutant huntingtin clearance. *bioRxiv [Preprint]*. 2024 May 30:2024.05.29.596471. PMID: 38854023.

Stephens GS, Park J, Eagle A, You J, Silva-Pérez M, Fu CH, Choi S, Romain CPS, Sugimoto C, Buffington SA, Zheng Y, Costa-Mattioli M, Liu Y, Robison AJ, Chin J. Persistent Δ FosB expression limits recurrent seizure activity and provides neuroprotection in the dentate gyrus of APP mice. *Prog Neurobiol.* 2024 Jun; 237:102612. PMID: 38642602.

Sydnor VJ, Bagautdinova J, Larsen B, Arcaro MJ, Barch DM, Bassett DS, Alexander-Bloch AF, Cook PA, Covitz S, Franco AR, Gur RE, Gur RC, Mackey AP, Mehta K, Meisler SL, Milham MP, Moore TM, Müller EJ, Roalf DR, Salo T, Schubiner G, Seidlitz J,

Shinohara RT, Shine JM, Yeh FC, Cieslak M, Satterthwaite TD. A sensorimotor-association axis of thalamocortical connection development. *bioRxiv [Preprint]*. 2024 Jun 14:2024.06.13.598749. PMID: 38915591.

Teipel S, Grazia A, Dyrba M, Grothe MJ, Pomara N. Basal forebrain volume and metabolism in carriers of the Colombian mutation for autosomal dominant Alzheimer's disease. *Sci Rep.* 2024 May 17;14(1):11268. PMID: 38760448.

Teng Y, Li HX, Chen SX, Castellanos FX, Yan CG, Hu X. Mapping the neural mechanism that distinguishes between holistic thinking and analytic thinking. *Neuroimage.* 2024 Jul 1; 294:120627. PMID: 38723877.

Uddin LQ, Castellanos FX, Menon V. Resting state functional brain connectivity in child and adolescent psychiatry: where are we now? *Neuropsychopharmacology.* 2024 May 22. PMID: 38778158.

van der Heijden K, Patel P, Bickel S, Herrero JL, Mehta AD, Mesgarani N. Joint population coding and temporal coherence link an attended talker's voice and location features in naturalistic multi-talker scenes. *bioRxiv [Preprint]*. 2024 May 14:2024.05.13.593814. PMID: 38798551.

Zhao K, Xie H, Fonzo GA, Carlisle NB, Osorio RS, Zhang Y. Dementia Subtypes Defined Through Neuropsychiatric Symptom-Associated Brain Connectivity Patterns. *JAMA Netw Open.* 2024 Jul 1; 7(7):e2420479. PMID: 38976268.