

The NKI Informer



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

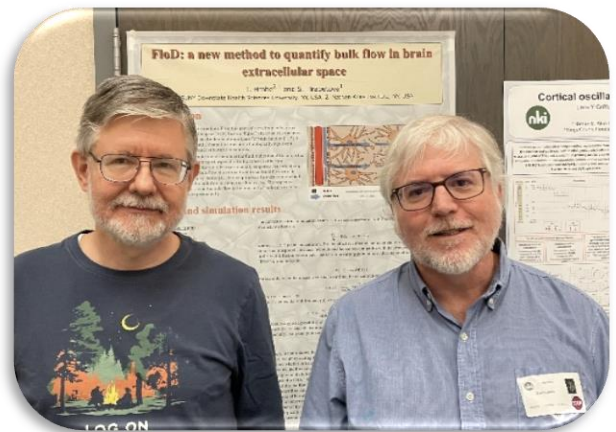
Donald C. Goff, MD, Director
Antonio Convit, MD, Deputy Director
Thomas Cunningham, MBA, Deputy Director, Institute Administration

May – July 2023

Stuart Moss, MLS, Editor

SCIENCE DAY 2023

Science Day at NKI returned on May 23rd after a three-year hiatus due to COVID. Organized by the Community Building Committee, Science Day featured short presentations by five young researchers, followed by refreshments and then a poster session. Forty-five posters were accepted for the exhibition. The full program and abstracts, along with additional photos, can be found [on the NKI website](#).



MIKI KOHN (1933 – 2023)



Photo courtesy of Jeremy Cohen (@jermcohen)

Dr. Michael (“Miki”) Kohn passed away on May 16th at the age of 90. Miki arrived at NKI (then called the Research Facility at Rockland State Hospital) in 1957 and worked here for the rest of his life. His 66 years of service will surely remain a record for longevity. To him, NKI was simply “the place”. On May 16th, 2022, the NKI auditorium was dedicated in his honor, recognizing his many contributions to the Institute over the years.

Miki Kohn was born in Budapest, Hungary, and he survived the Holocaust before coming to the U.S. in 1950. When he arrived here, he had two dollars in his pocket and barely spoke English. Nevertheless, he put himself through high school and then City College. Later, he earned a Ph.D. in Electrical Engineering from NYU. For more about Miki’s career, see the [June 2022 issue](#) of *The Informer*.

Dr. Kohn is survived by two sons and six grandchildren. He and his life partner, Elinor Grayzel, recently celebrated 35 years together. In addition to his dedication to NKI, Miki loved opera, travel, and books.

HAPPY TRAILS



Arthur Saltzman (right) pictured with earlier NKI retiree Art Fleischer

On June 27th, colleagues and friends gathered to celebrate the retirement of **Arthur Saltzman** after 32+ years at NKI. Arthur originally worked in the lab of Seymour Levine before joining Steve Ginsberg’s lab. He plans to move to Florida for his retirement.



The Ginsberg Lab – Front row: Gisele Ferrari, Harshitha Pidikiti, Aleksandra Stanisavljevic, Amanda Labuza and baby, Melissa Alldred; Back row: Kyrillos Ibrahim, Stephen Ginsberg, Arthur Saltzman

NKI SUMMER SCHOLARS '23

The seventh year of the NKI Summer Scholars [Internship Program](#) is entering the home stretch for 2023. This year's students were mentored by Internship Program Co-Directors Kristin Dietz Trautman, LCSW, and Anna MacKay-Brandt, PhD; Chelsea Reichert, PhD; Stan Colcombe, PhD; Babak Ardekani, PhD; Eduardo Gonzalez-Moreira, PhD; Jean-Pierre Lindenmayer, MD; and Sharifa Williams, PhD. At least four of this year's Summer Scholars obtained competitive awards through their academic institutions for stipends to support their unpaid NKI internships. These are: Riya Chaturvedi (Temple); Isabel Coca (Wheaton); Nicole Deng (Wesleyan); and Jonathan Yohannan (Cornell).

NKI faculty presented the Wednesday afternoon [internship seminar series](#). Speakers were Drs. Anna MacKay-Brandt, Stan Colcombe, Chelsea Reichert, Sharifa Williams, Pam Butler, Alex Franco, Russell Tobe, and Matt Hoptman. The series will wrap up on August 2nd with a session led by Kristin Dietz Trautman and Anna MacKay-Brandt in which the Summer Scholars will give presentations and receive career development feedback.

The Summer 2024 application window opens in mid-September and preliminary interviews are

conducted in January. Faculty interested in participating in the 2024 Summer program as a mentor or seminar presenter are welcome to contact the internship directors for more information.

The 2023 Summer Scholars

- Ibrahim Bukhari *NYU*
- Riya Chaturvedi *Temple University*
- Isabel Coca *Wheaton College*
- Nicole Deng *Wesleyan University*
- Mia Giaever *Middlebury College*
- Adithi Jayaraman *Dartmouth College*
- Lexuan Jiang *Teachers Coll., Columbia*
- Mohan Liu *NYU*
- Andrea Vijil Morin *Macalaster College*
- Sankhepo Ndlovu *S. New Hampshire U.*
- Giovanna Novi *Colby College*
- Furqan Qureshi *Colby College*
- Andrea Suazo Rivas *Grinnell College*
- Jocelyn Wang *NYU*
- Zhiyan Yang *NYU*
- Jonathan Yohannan *Cornell University*

IS YOUR CHILD DEPRESSED, DOWN, OR STRUGGLING?

IRB NUMBER: 2019-10819
IRB APPROVAL DATE: 03/02/2023

**THE PEDIATRIC MOOD DISORDERS AT MONTEFIORE EINSTEIN IS
LOOKING FOR PAID RESEARCH STUDY PARTICIPANTS!**

ELIGIBILITY:

- AGES 12-21

THE RESEARCH STUDY:

- PARTICIPANT AND A PARENT WILL GO THROUGH A CLINICAL EVALUATION
(REMOTELY OR IN-PERSON)
- THE PARTICIPANT WILL HAVE A BLOOD DRAW AND MRI SCAN

COMPENSATION:

- YOUR CHILD WILL BE COMPENSATED FOR THE BLOOD DRAW AND SCAN AND YOU
CAN WIN UP TO \$60 IN A GAME PLAYED IN THE SCANNER (TOTALING ABOUT \$400)

CONTACT US!

516-847-2019

gabbay.lab@einsteinmed.edu

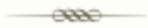
Montefiore | EINSTEIN



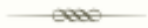
GRANTS RECEIVED



Drs. Charles Schroeder and **Michael Milham** (Center for Biomedical Imaging & Neuromodulation) received a five-year renewal of the Silvio O. Conte Centers for Basic Neuroscience or Translational Mental Health Research P50 grant titled "[Neurobiology and Cognitive Role of Slow Brain Network Fluctuations.](#)"



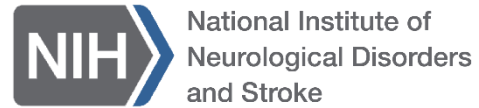
Dr. Charles Schroeder (Center for Biomedical Imaging & Neuromodulation) with his collaborator at Columbia University, Dr. Serge Przedborski, received a two-year UG3 award titled "[Circuit-specific, chemogenetic neuromodulation in nonhuman primates.](#)"



Drs. Dan Javitt (Schizophrenia Research), **Sam Neymotin** (C-BIN), **Noelle O'Connell** (C-BIN), and **Robert Sears** (Emotional Brain Institute) received an R01 titled "[Auditory event-related potentials as in vivo preclinical assays of circuit engagement for E/I-based therapeutic development.](#)"



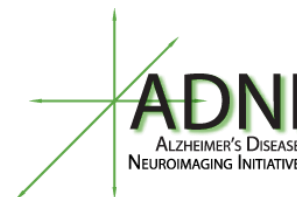
Dr. Tarek Sobeih (Information Sciences) and **NKI's Innovative Clinical Research Solutions (ICRS)** will be providing data management support for the R01 grant titled "[A Multimodal Imaging Study of Dopamine in Early Psychosis.](#)" This R01 grant is a collaboration with Dr. Ragy Girgis at NYSPI.



Dr. Helen Scharfman (Center for Dementia Research) received a five-year renewal of the R01 grant titled "[The Role of Hippocampal area CA2 in Epilepsy.](#)"



In collaboration with Dr. Amit Anand at Brigham and Women's Hospital, **Dr. Katherine Collins** (Clinical Research) received a grant from [Patient Centered Outcomes Research Institute \(PCORI\)](#) titled "Rapid Reversal of Suicidal Depression: Comparative Effectiveness of ECT vs. Ketamine Over the Lifespan."



Dr. Nunzio Pomara (Geriatric Psychiatry) received a subcontract from the University of Southern California for the clinical trial titled "[Alzheimer's Disease Neuroimaging Initiative \(ADNI4\).](#)"



FROM AROUND THE INSTITUTE

Welcome (Back) Aboard

A familiar face is back at NKI with a new role. **Anina Klein**, JD, MSW, CCRA, worked here for 11 years as a Senior Clinical Research Associate with the Innovative Clinical Research Solutions (ICRS) group. Now Anina has returned as the Director of Research Education. She will be based at NKI but oversee research education for all OMH researchers.



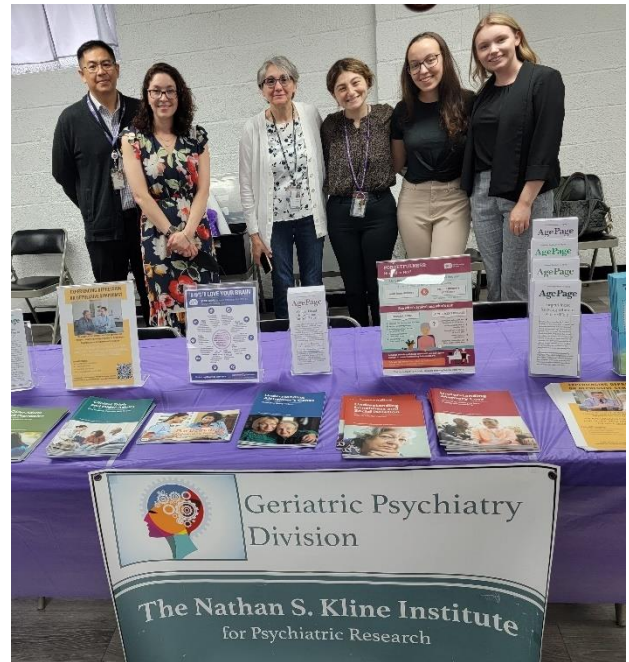
Judy A. Moore, MPH, is the new Regulatory Core Director for the NYS Office of Mental Health Human Research Protection Program. In this position, Judy will oversee legal and institutional requirements related to reliance agreements; review IRB submissions and grant materials for internal congruency; and evaluate ongoing research activities to check for potential participant safety issues. Judy has a Master of Public Health (MPH) Degree from CUNY Lehman. Before joining OMH, she spent over 15 years as an Oncology Clinical Research Manager at Memorial Sloan Kettering Cancer Center and Westchester Medical Center where she was involved in overseeing the daily operations of all departmental protocols.



The next issue of the *Informer* will include a description of the OMH Human Research Protections Program.

ALZHEIMER'S ASSOCIATION®

On June 24th, the **Geriatric Psychiatry** department held a memory screening event in collaboration with the Alzheimer's Association at the Pilgrim Baptist Church in Nyack, NY. The event was titled "Healthy Living Education Program" and after the educational event, Dr. Pomara's team conducted mobile memory screenings for any community members who attended.



From left to right Antero Sarreal, Chelsea Reichert Plaska, Vita Pomara, Annie Schatz, Giovanna Novi, and Ann Marie McGrory.

Center for Dementia Research

Dr. Pasquale D'Acunzo (Levy Lab) gave the [CDR Neuroscience Seminar Series](#) presentation on May 4th. His topic was "Mitovesicles: a novel subtype of brain extracellular vesicles altered with aging and disease."



Center for Dementia Research Director **Dr. Ralph Nixon** contributed his latest [comments on new papers](#) to the Alzforum website. One of these comments was coauthored by CDR investigator **Dr. Ju-Hyun Lee**.

Friday afternoon pickup soccer has returned to NKI for the summer. Everyone is welcome to join in, Fridays at 5:00 next to the parking lot in front of building 35. For those who are interested, there is also a new chat link for this:

<https://chat.whatsapp.com/GQCkSiGNLm49vPDIJf15JK>



PUBLICATIONS OF NOTE

nature

Regina Sullivan (Emotional Brain Institute) is a coauthor of this article recently published in *Nature*.

Mei L, Yan R, Yin L, Sullivan RM, Lin D. [Antagonistic circuits mediating infanticide and maternal care in female mice](#). *Nature*. 2023 Jun 7. PMID: 37286598.

Psychiatric Services

This Open Forum piece in *Psychiatric Services* was coauthored by **Marilena Lekas**, **Crystal Lewis**, and **Kerstin Pahl** (Social Solutions & Services).

Lekas HM, Lewis C, Bradley MV, Pahl K. [The Color of Autonomy: Examining Racial Inequity in Coercive Institutional Practices](#). *Psychiatr Serv*. 2023 May 5. PMID: 37143336.

nature reviews neuroscience

Helen Scharfman (Dementia Research) coauthored this Perspective piece appearing in *Nature Reviews Neuroscience*.

Borzello M, Ramirez S, Treves A, Lee I, Scharfman H, Stark C, Knierim JJ, Rangel LM. [Assessments of dentate gyrus function: discoveries and debates](#). *Nat Rev Neurosci*. 2023 Jun 14. PMID: 37316588.



This recent paper coauthored by **Lila Davachi** (Biomedical Imaging & Neuromodulation) was published in *PNAS*.

Halpern DJ, Tubridy S, Davachi L, Gureckis TM. [Identifying causal subsequent memory effects](#). Proc Natl Acad Sci U S A. 2023 Mar 28; 120(13):e2120288120. PMID: 36952384.



nature methods

Center for Biomedical Imaging & Neuromodulation Director **Michael Milham** is the senior author of this paper recently published in *Nature Methods*.

Xu T, Kiar G, Cho JW, Bridgeford EW, Nikolaidis A, Vogelstein JT, Milham MP. [ReX: an integrative tool for quantifying and optimizing measurement reliability for the study of individual differences](#). Nat Methods. 2023 Jun 1. PMID: 37264147.



Clinical Evaluation Center Director **Russell Tobe** is the corresponding author of this clinical trials report published in *Neuropsychopharmacology*.

Tobe R, Zhu Y, Gleissl T, Rossomanno S, Veenstra-VanderWeele J, Smith J, Hollander E. [Predictors of placebo response in three large clinical trials of the V1a receptor antagonist balovaptan in autism spectrum disorder](#). Neuropsychopharmacology. 2023 Apr 12. PMID: 37045991.



The NEW ENGLAND
JOURNAL of MEDICINE

Katherine Collins (Clinical Research) is a coauthor of this recent paper in *The New England Journal of Medicine*. The publication was highlighted in a posting by the Brain & Behavior Research Foundation: "[Trial Finds Ketamine and ECT About Equally Effective for Most Patients with Resistant Major Depression](#)"

Anand A, Mathew SJ, Sanacora G, Murrugh JW, Goes FS, Altinay M, Aloysi AS, Asghar-Ali AA, Barnett BS, Chang LC, Collins KA, Costi S, Iqbal S, Jha MK, Krishnan K, Malone DA, Nikayin S, Nissen SE, Ostroff RB, Reti IM, Wilkinson ST, Wolski K, Hu B. [Ketamine versus ECT for Nonpsychotic Treatment-Resistant Major Depression](#). N Engl J Med. 2023 May 24. PMID: 37224232.

A letter to the editor by **Nunzio Pomara** (Geriatric Psychiatry) and a colleague also recently appeared in *The New England Journal of Medicine*.

Pomara N, Imbimbo BP. [Lecanemab in Early Alzheimer's Disease](#). N Engl J Med. 2023 Apr 27; 388(17):1630-1631. PMID: 37099353.



Karl-Heinz Nenning, **Alex Franco**, **Arielle Tambini**, **Stan Colcombe**, and **Michael Milham** (Biomedical Imaging & Neuromodulation) are among the authors of this open access article in *Neuroimage*.

Nenning KH, Xu T, Franco AR, Swallow KM, Tambini A, Margulies DS, Smallwood J, Colcombe SJ, Milham MP. [Omnipresence of the sensorimotor-association axis topography in the human connectome](#). Neuroimage. 2023 May 15; 272:120059. PMID: 37001835.

The American Journal of
Psychiatry

NKI authors contributed to two recent papers published in *The American Journal of Psychiatry*. Director of Clinical Research **Dan Iosifescu** is a coauthor of this clinical trial report, which was featured in a [Psychiatric News Alert](#):

Clayton AH, Lasser R, Parikh SV, Iosifescu DV, Jung J, Kotecha M, Forrestal F, Jonas J, Kanis SJ, Doherty J. [Zuranolone for the Treatment of Adults with Major Depressive Disorder: A Randomized, Placebo-Controlled Phase 3 Trial](#). *Am J Psychiatry*. 2023 May 3. PMID: 37132201.

And **Ayana Jordan** (Social Solutions & Services) is a coauthor of this Review & Overview:

Widge AS, Jordan A, Kraguljac NV, Sullivan CRP, Wilson S, Benton TD, Alpert JE, Carpenter LL, Krystal JH, Nemeroff CB, Dzirasa K. [Structural Racism in Psychiatric Research Careers: Eradicating Barriers to a More Diverse Workforce](#). *Am J Psychiatry*. 2023 Apr 19. PMID: 37073513.



Ayana Jordan is also the first author of this paper appearing in the *Journal of Substance Use & Addiction Treatment*.

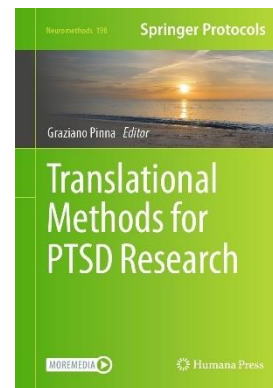
Jordan A, Costa M, Nich C, Swarbrick M, Babuscio T, Wyatt J, O'Connell M, Guy K, Blackman K, Anderson RR, Reis G, Ocasio L, Crespo M, Bellamy C. [Breaking through social determinants of health: Results from a feasibility study of Imani Breakthrough, a community developed substance use intervention for Black and Latinx people](#). *J Subst Use Addict Treat*. 2023 May 18. PMID: 37207836.

Clinics Review Articles

Psychiatric Clinics

Dan Iosifescu (Clinical Research) is a coauthor of this review of photobiomodulation therapy published in the June issue of *Psychiatric Clinics of North America*.

Vieira WF, Iosifescu DV, McEachern KM, Gersten M, Cassano P. [Photobiomodulation: An Emerging Treatment Modality for Depression](#). *Psychiatr Clin North Am*. 2023 Jun; 46(2):331-348. PMID: 37149348.



NKI investigators contributed to two chapters in this book on [Translational Methods for PTSD Research](#), part of the *Neuromethods* book series. The first chapter is by **Regina Sullivan, Christopher Cain**, and colleagues (Emotional Brain Institute):

Zanca RM, Stanciu S, Ahmed I, Cain CK, Sullivan RM. Translational Model of Infant PTSD Induction: Methods for Infant Fear Conditioning. In: Pinna G, editor. *Translational Methods for PTSD Research*. New York: Humana; 2023. p. 1-22.

And **Mohammed Milad** (Clinical Research) is the corresponding author of this chapter:

Miller DB, Rassaby MM, Wen Z, Milad MR. Pavlovian Conditioning and Extinction Methods for Studying the Neurobiology of Fear Learning in PTSD. In: Pinna G, editor. *Translational Methods for PTSD Research*. New York: Humana; 2023. p. 97-115.

Biological Psychiatry

This clinical trial report appearing in *Biological Psychiatry* is by first author **Pejman Sehatpour**, corresponding author **Joshua Kantrowitz** (Schizophrenia Research, and coauthors including **Dan Iosifescu** and **Connie Shope** (Clinical Research).

Sehatpour P, Iosifescu DV, De Baun HM, Shope C, Mayer MR, Gangwisch J, Dias E, Sobeih T, Choo TH, Wall MM, Medalia A, Saperstein AM, Kegeles LS, Girgis RR, Carlson M, Kantrowitz JT. [Dose-Dependent Augmentation of Neuroplasticity-Based Auditory Learning in Schizophrenia: A Double-Blind, Placebo-Controlled, Randomized, Target Engagement Clinical Trial of the NMDA Glutamate Receptor Agonist d-serine](#). *Biol Psychiatry*. 2023 Jan 28. PMID: 36958998.



These two papers recently published in the open access journal *Frontiers in Neuroscience* are by **Mariko Saito**, **John Smiley**, **Donald Wilson**, and NKI colleagues.

Smiley JF, Bleiwas C, Marino BM, Vaddi P, Canals-Baker S, Wilson DA, Saito M. [Estimates of total neuron number show that neonatal ethanol causes immediate and lasting neuron loss in cortical and subcortical areas](#). *Front Neurosci*. 2023 May 2; 17:1186529. PMID: 37205048.

Saito M, Subbanna S, Zhang X, Canals-Baker S, Smiley JF, Wilson DA, Das BC. [Effects of retinoic acid receptor \$\alpha\$ modulators on developmental ethanol-induced neurodegeneration and neuroinflammation](#). *Front Neurosci*. 2023 May 2; 17:1170259. PMID: 37205047.



Stephen Ginsberg (Dementia Research) coauthored this editorial published in *Frontiers in Aging Neuroscience*.

Ginsberg SD, Tarantini S. [Editorial: Hippocampal mechanisms in aging and clinical memory decline](#). *Front Aging Neurosci*. 2023 May 5; 15:1204954. PMID: 37213539.



Eduardo Gonzalez-Moreira (Biomedical Imaging & Neuromodulation) is the first author of this open access article in *Brain Sciences*.

Gonzalez-Moreira E, Harmony T, Hinojosa-Rodríguez M, Carrillo-Prado C, Juárez-Colín ME, Gutiérrez-Hernández CC, Carlier MEM, Cubero-Rego L, Castro-Chavira SA, Fernández T. [Prevention of Neurological Sequelae in Preterm Infants](#). *Brain Sci*. 2023 May 2; 13(5):753. PMID: 37239225.



This systematic review in the open access journal *Life* is by corresponding author **Umit Tural**, **Allison Sparpana**, **Elizabeth Sullivan**, and senior author **Dan Iosifescu** (Clinical Research).

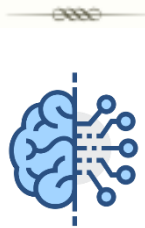
Tural U, Sparpana A, Sullivan E, Iosifescu DV. [Comparison of Adiponectin Levels in Anorexia Nervosa, Bulimia Nervosa, Binge-Eating Disorder, Obesity, Constitutional Thinness, and Healthy Controls: A Network Meta-Analysis](#). *Life (Basel)*. 2023 May 13; 13(5):1181. PMID: 37240826.

INFO UPDATE



[FindSupport.gov](#) is a new website launched by the U.S. Department of Health and Human Services. It is designed for the general public, to help people identify available resources, explore unbiased information about various treatment options, and learn how to reach out to get the support they need for issues related to mental health, drugs, or alcohol.

[Another new web page](#) provides consumer-friendly information about the No Surprises Act, which protects people from unexpected medical bills.



In the last six months or so, artificial intelligence (AI) tools such as ChatGPT have exploded into the mainstream. Some see AI as [a threat to life on earth](#), while others think that [it is going to save humanity](#). What seems certain is that AI is going to have far-reaching consequences in many areas of our lives. To give just one example, AI has already created a stir in the world of scientific publishing, prompting a debate about the appropriateness and ethics of its use in the production of articles. See "[Is ChatGPT a Friend or Foe of Medical Publishing](#)" on Medscape for a discussion of some of the issues.

Healthy Minds

Season 8 of the public television series *Healthy Minds with Dr. Jeffrey Borenstein* is now available to watch on [PBS.org](#). The Emmy nominated series is produced by the Brain & Behavior Research Foundation. Episodes from previous seasons can be viewed [here](#).



April 30th marked the 30th anniversary of the public launch of the World Wide Web, an event which forever changed the way the world works, plays, and learns. [This piece on NPR](#) ran on the anniversary day.

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.).

EVENTS AND SEMINARS

Center for Biomedical Imaging and Neuromodulation Science Series

Held on Mondays at 11 am via Zoom

<https://childmind.zoom.us/j/87444738909?pwd=TEI4TVduMVp1WS9QV0VWUkVKU2xvQT09&from=addon>

Meeting ID: 874 4473 8909
Passcode: 987767

Ernst Schwartz, PhD

Medical University of Vienna

***Evolution of cortical geometry and its link to
function, behavior, and ecology***

July 31st

Carolina Makowski, PhD

UC San Diego

August 7th

Erika Raven, PhD

NYU Langone

September 11th



Center for Dementia Research Neuroscience Seminar Series

Held on Thursdays in the Miki Kohn
conference room.

Christine A. Denny, PhD

Columbia University

***Identification and manipulation of
individual memory traces in cognitive and
psychiatric diseases***

September 14th

Victor Luna, PhD

Temple University

***Hippocampal neurogenesis and aging-related
cognitive decline***

September 21st

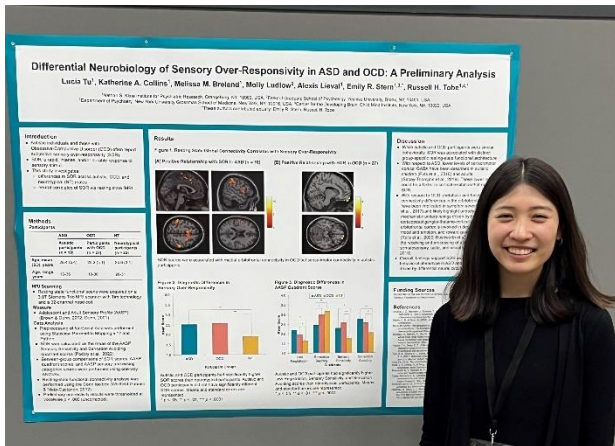
The New York State Office of Mental Health (OMH) regularly hosts an interactive video broadcast covering the latest research, technology, and treatment implementation in the fields of psychiatry and psychology. These programs are recorded, and the archived Statewide Grand Rounds programs can be viewed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

NKI ON THE ROAD



Lucia Tu, a senior research assistant in NKI’s Clinical Evaluation Center (CEC), presented her work at the [International Society for Autism Research \(INSAR\) Annual Meeting](#) in Stockholm in May:

Tu L, Collins KA, Breland MM, Ludlow M, Lieval A, Stern ER, and Tobe RH. Differential Neurobiology of Sensory Over-Responsivity in ASD and OCD: A Preliminary Analysis.



Lucia Tu at INSAR

CEC Director **Dr. Russ Tobe** also presented at the meeting:

Tobe RH, Zhu Y, Gleiss T, Rossomanno S, Veenstra-VanderWeele J, Smith J, Hollander E. Predictors of Placebo Response in Three Large Clinical Trials with the V1a Receptor Antagonist Balovaptan in Autism.



Dr. Crystal Lewis, Director of Social Solutions & Services, presented at the [Population Health Innovation Summit](#) on June 6th in Albany. The topic of her talk was “Minoritized Women Involved in Substance Use: A Call to Action”.



Dr. Esther Blessing (Clinical Research) presented on “Age-related brain temperature alterations and tau pathology in Alzheimer’s disease” at the 13th Annual NYU Neuroscience Retreat, held in April at the Edith Macy Conference Center in Briarcliff Manor, NY.



Dr. Robert Smith (Neurochemistry) presented a poster at the Schizophrenia International Research Conference held in Toronto in May:

Odor Discrimination and identification in Schizophrenia: Relationship to mRNA in Lymphocytes and MATRICS Battery scores.

Neurochemistry colleague **Dr. Henry Sershen** was the principal coauthor of this work.

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 7,200 items dating back to 1995 and can be searched from the [myNKI website](#).

Allred MJ, Ginsberg SD. Microisolation of Spatially Characterized Single Populations of Neurons for RNA Sequencing from Mouse and Postmortem Human Brain Tissues. *J Clin Med*. 2023 May 5; 12(9):3304. PMID: 37176744.

Allred MJ, Pidikiti H, Heguy A, Roussos P, Ginsberg SD. Basal forebrain cholinergic neurons are vulnerable in a mouse model of Down syndrome and their molecular fingerprint is rescued by maternal choline supplementation. *FASEB J*. 2023 Jun;37(6):e22944. PMID: 37191946.

Amer T, Davachi L. Extra-hippocampal contributions to pattern separation. *Elife*. 2023 Mar 27;12:e82250. PMID: 36972123.

Anand A, Mathew SJ, Sanacora G, Murrough JW, Goes FS, Altinay M, Aloysi AS, Asghar-Ali AA, Barnett BS, Chang LC, Collins KA, Costi S, Iqbal S, Jha MK, Krishnan K, Malone DA, Nikayin S, Nissen SE, Ostroff RB, Reti IM, Wilkinson ST, Wolski K, Hu B. Ketamine versus ECT for Nonpsychotic Treatment-Resistant Major Depression. *N Engl J Med*. 2023 May 24. PMID: 37224232.

Bach DR, Sporrer J, Abend R, Beckers T, Dunsmoor JE, Fullana MA, Gamer M, Gee DG, Hamm A, Hartley CA, Herringa RJ, Jovanovic T, Kalisch R, Knight DC, Lissek S, Lonsdorf TB, Merz CJ, Milad M, Morriss J, Phelps EA, Pine DS, Olsson A, van Reekum CM, Schiller D. Consensus design of a calibration experiment for human fear conditioning. *Neurosci Biobehav Rev*. 2023 May; 148:105146. PMID: 36990370.

Badarnee M, Wen Z, Nassar N, Milad MR. Gray matter associations with extinction-induced neural activation in patients with anxiety disorders. *J Psychiatr Res*. 2023 Jun; 162:180-186. PMID: 37167838.

Bonilla H, Peluso MJ, Rodgers K, Aberg JA, Patterson TF, Tamburro R, Baizer L, Goldman JD, Roupheal N, Deitchman A, Fine J, Fontelo P, Kim AY, Shaw G, Stratford J, Ceger P, Costantine MM, Fisher L, O'Brien L, Maughan C, Quigley JG, Gabbay V, Mohandas S, Williams D, McComsey GA. Therapeutic trials for long COVID-19: A call to action from the interventions taskforce of the RECOVER initiative. *Front Immunol*. 2023 Mar 9; 14:1129459. PMID: 36969241.

Bruin WB, Abe Y, Alonso P, Anticevic A, et al. The functional connectome in obsessive-compulsive disorder: resting-state mega-analysis and machine learning classification for the ENIGMA-OCD consortium. *Mol Psychiatry*. 2023 May 2. PMID: 37131072.

Cable J, Witwer KW, Coffey RJ, Milosavljevic A, von Lersner AK, Jimenez L, Pucci F, Barr MM, Dekker N, Barman B, Humphrys D, Williams J, de Palma M, Guo W, Bastos N, Hill AF, Levy E, Hantak MP, Crewe C, Aikawa E, Adamczyk AM, Zanotto TM, Ostrowski M, Arab T, Rabe DC, Sheikh A, da Silva DR, Jones JC, Okeoma C, Gaborski T, Zhang Q, Gololobova O. Exosomes, microvesicles, and other extracellular vesicles—a Keystone Symposia report. *Ann N Y Acad Sci*. 2023 May; 1523(1):24-37. PMID: 36961472.

Caravella RA, Ying P, Siegel C, Vaughn R, Deutch AB, Caroff A, Madanes S, Ackerman MG, Lewis C. Quality Improvement (QI) Framework to Examine Health Care Disparities in Behavioral Emergency Management in the Inpatient Medical Setting: A Consultation-Liaison (CL) Psychiatry Health Equity Project. *J Acad Consult Liaison Psychiatry*. 2023 Apr 13. PMID: 37060945.

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. *bioRxiv* [Preprint]. 2023 May 12. PMID: 37214805.

Clayton AH, Lasser R, Parikh SV, Iosifescu DV, Jung J, Kotecha M, Forrestal F, Jonas J, Kanesh SJ, Doherty J. Zuranolone for the Treatment of Adults with Major Depressive Disorder: A Randomized, Placebo-Controlled Phase 3 Trial. *Am J Psychiatry*. 2023 May 3. PMID: 37132201.

Colombel N, Ferreira G, Sullivan RM, Coureaud G. Dynamic developmental changes in neurotransmitters supporting infant attachment learning. *Neurosci Biobehav Rev*. 2023 May 29; 151:105249. PMID: 37257712.

Colwell ZA, DelaBarre L, Idiyatullin D, Adriany G, Garwood M, Vaughan JT, Sohn SM. Standalone RF Self-Interference Cancellation System for In-vivo Simultaneous Transmit and Receive (STAR) MRI. *IEEE Trans Biomed Circuits Syst*. 2023 May 12. PMID: 37171925.

Correll CU, Lindenmayer JP, Farahmand K, Jen E, Siegert S, Dunayevich E. Sustained Treatment Response with Long-Term Valbenazine in Patients with Tardive Dyskinesia. *CNS Spectrums* 28[2], 240. 2023. [Abstract]

Criscuolo C, Chartampila E, Ginsberg SD, Scharfman HE. Stability of dentate gyrus granule cell mossy fiber BDNF protein expression with age and resistance of granule cells to Alzheimer's disease neuropathology in a mouse model. *bioRxiv* [Preprint]. 2023 May 8. PMID: 37214931.

Proteostasis Consortium; Overall coordination; Elsasser S, Elia LP, Morimoto RI, Powers ET ... Nixon RA. A Comprehensive Enumeration of the Human Proteostasis Network. 2. Components of the Autophagy-Lysosome Pathway. *bioRxiv* [Preprint]. 2023 Mar 24. PMID: 36993380.

Gasser C, Davachi L. Cross-Modal Facilitation of Episodic Memory by Sequential Action Execution. *Psychol Sci*. 2023 May; 34(5):581-602. PMID: 37027172.

Ginsberg SD, Tarantini S. Editorial: Hippocampal mechanisms in aging and clinical memory decline. *Front Aging Neurosci*. 2023 May 5; 15:1204954. PMID: 37213539.

Gonzalez-Moreira E, Harmony T, Hinojosa-Rodríguez M, Carrillo-Prado C, Juárez-Colín ME, Gutiérrez-Hernández CC, Carlier MEM, Cubero-Rego L, Castro-Chavira SA, Fernández T. Prevention of Neurological Sequelae in Preterm Infants. *Brain Sci*. 2023 May 2; 13(5):753. PMID: 37239225.

Halpern DJ, Tubridy S, Davachi L, Gureckis TM. Identifying causal subsequent memory effects. *Proc Natl Acad Sci U S A*. 2023 Mar 28; 120(13):e2120288120. PMID: 36952384.

Hoffmann MS, Moore TM, Axelrud LK, Tottenham N, Pan PM, Miguel EC, Rohde LA, Milham MP, Satterthwaite TD, Salum GA. An Evaluation of Item Harmonization Strategies Between Assessment Tools of Psychopathology in Children and Adolescents. *Assessment*. 2023 Apr 12. PMID: 37042304.

Irvin M, Sparpana A, Sullivan E, Parincu Z, Arnold M, Tural U et al. Social Support Significantly Mediates the Relationship Between Gender Role Nonconformity and Sexual Dysfunction. *Journal of Sexual Medicine* 20[Suppl. 1], 125-126. 2023. [Abstract]

Iulita MF, Bejanin A, Vilaplana E, et al. Association of biological sex with clinical outcomes and biomarkers of Alzheimer's disease in adults with Down syndrome. *Brain Commun*. 2023 Mar 17;5(2):fcad074. PMID: 37056479.

Javitt D, Sehatpour P, Kreither J, Lopez-Calderon J, Shastry A, De-Baun H, Martinez A. Network-level mechanisms underlying effects of transcranial direct current stimulation (tDCS) on visuomotor learning impairments in schizophrenia. *Res Sq* [Preprint]. 2023 Apr 6. PMID: 37066410.

Jordan A, Costa M, Nich C, Swarbrick M, Babuscio T, Wyatt J, O'Connell M, Guy K, Blackman K, Anderson RR, Reis G, Ocasio L, Crespo M, Bellamy C. Breaking through social determinants of health: Results from a feasibility study of Imani Breakthrough, a community developed substance use intervention for Black and Latinx people. *J Subst Use Addict Treat.* 2023 May 18. PMID: 37207836.

Kishore Jain A, Tansey G, Hartig R, Mitchell AS, Basso MA. Trends and Treatment Approaches for Complications in Neuroscience Experiments with Monkey Species. *Comp Med.* 2023 May 19. PMID: 37208151.

Kiss MG, Mindur JE, Yates AG, Lee D, Fullard JF, Anzai A, Poller WC, Christie KA, Iwamoto Y, Roudkov V, Downey J, Chan CT, Huynh P, Janssen H, Ntranos A, Hoffmann JD, Jacob W, Goswami S, Singh S, Leppert D, Kuhle J, Kim-Schulze S, Nahrendorf M, Kleinstiver BP, Probert F, Roussos P, Swirski FK, McAlpine CS. Interleukin-3 coordinates glial-peripheral immune crosstalk to incite multiple sclerosis. *Immunity.* 2023 May 2. PMID: 37160117.

Koumoula A, Marchionatti LE, Caye A, et al. The science of child and adolescent mental health in Greece: a nationwide systematic review. *Eur Child Adolesc Psychiatry.* 2023 May 14. PMID: 37179505.

Lee S, Shirinpour S, Alekseichuk I, Perera N, Linn G, Schroeder CE, Falchier AY, Opitz A. Experimental validation of computational models for the prediction of phase distribution during multi-channel transcranial alternating current stimulation. *bioRxiv [Preprint].* 2023 Apr 8. PMID: 37066288.

Lekas HM, Lewis C, Bradley MV, Pahl K. The Color of Autonomy: Examining Racial Inequity in Coercive Institutional Practices. *Psychiatr Serv.* 2023 May 5. PMID: 37143336.

Lisgaras CP, Oliva A, McKenzie S, LaFrancois J, Siegelbaum SA, Scharman HE. Hippocampal area CA2 controls seizure dynamics, interictal EEG abnormalities and social comorbidity in mouse models of temporal lobe epilepsy. *bioRxiv [Preprint].* 2023 Jan 18. PMID: 36711983.

Lisgaras CP, Scharfman HE. Interictal Spikes in Animal Models of Alzheimer's Disease: Dominance of the Dentate Gyrus and Cholinergic Control by Medial Septum. *bioRxiv [Preprint].* 2023 Apr 24. PMID: 37163065.

Lohnas LJ, Healey MK, Davachi L. Neural temporal context reinstatement of event structure during memory recall. *J Exp Psychol Gen.* 2023 Apr 10. PMID: 37036669.

Mahoney JR, Blumen HM, De Sanctis P, Fleysher R, Frankini C, Hoang A, Hoptman MJ, Jin R, Lipton M, Nunez V, Twizer L, Uy N, Valdivia A, Verghese T, Wang C, Weiss EF, Zwerling J, Verghese J. Visual-somatosensory integration (VSI) as a novel marker of Alzheimer's disease: A comprehensive overview of the VSI study. *Front Aging Neurosci.* 2023 Mar 30; 15:1125114. PMID: 37065459.

Martinez Agulleiro L, Patil B, Firth J, Sawyer C, Amann BL, Fonseca F, Torrens M, Perez V, Castellanos FX, Kane JM, Guinart D. A systematic review of digital interventions for smoking cessation in patients with serious mental illness. *Psychol Med.* 2023 May 10. PMID: 37161690.

Martin D, Basodi S, Panta S, Rootes-Murdy K, Prae P, Sarwate AD, Kelly R, Romero J, Baker BT, Gazula H, Bockholt J, Turner J, Esper NB, Franco AR, Plis S, Calhoun VD. Enhancing Collaborative Neuroimaging Research: Introducing COINSTAC Vaults for Federated Analysis and Reproducibility. *bioRxiv [Preprint].* 2023 May 11. PMID: 37214791.

Miller DB, Rassaby MM, Wen Z, Milad MR. Pavlovian Conditioning and Extinction Methods for Studying the Neurobiology of Fear Learning in PTSD. In: Pinna G, editor. *Translational Methods for PTSD Research.* New York: Humana; 2023. p. 97-115.

Nepping KH, Xu T, Franco AR, Swallow KM, Tambini A, Margulies DS, Smallwood J, Colcombe SJ, Milham MP. Omnipresence of the sensorimotor-association axis topography in the human connectome. *Neuroimage.* 2023 May 15; 272:120059. PMID: 37001835.

Nentwich M, Leszczynski M, Russ BE, Hirsch L, Markowitz N, Sapru K, Schroeder CE, Mehta AD, Bickel S, Parra LC. Semantic novelty modulates neural responses to visual change across the human brain. *Nat Commun.* 2023 May 22; 14(1):2910. PMID: 37217478.

Neufeld NH, Oliver LD, Mulsant BH, Alexopoulos GS, Hoptman MJ, Tani H, Marino P, Meyers BS, Rothschild AJ, Whyte EM, Bingham KS, Flint AJ, Voineskos AN. Effects of antipsychotic medication on functional connectivity in major depressive disorder with psychotic features. *Mol Psychiatry.* 2023 May 31. PMID: 37258617.

Parincu Z, Iosifescu DV. Combinations of dextromethorphan for the treatment of mood disorders - a review of the evidence. *Expert Rev Neurother.* 2023 Mar; 23(3):205-212. PMID: 36943010.

Paz-Linares D, Gonzalez-Moreira E, Areces-Gonzalez A, Wang Y, Li M, Vega-Hernandez M, Wang Q, Bosch-Bayard J, Bringas-Vega ML, Martinez-Montes E, Valdes-Sosa MJ, Valdes-Sosa PA. Minimizing the distortions in electrophysiological source imaging of cortical oscillatory activity *via* Spectral Structured Sparse Bayesian Learning. *Front Neurosci.* 2023 Mar 15; 17:978527. PMID: 37008210.

Perera N, Shirinpour S, Alekseichuk I, Wischniewski M, Linn G, Schroeder C et al. Dose and location-dependent effects of transcranial magnetic stimulation in nonhuman primates. *Brain Stimulation* 16[1], 290. 2023. [Abstract]

Pomara N, Imbimbo BP. Lecanemab in Early Alzheimer's Disease. *N Engl J Med.* 2023 Apr 27; 388(17):1630-1631. PMID: 37099353.

Ponzi A, Dura-Bernal S, Migliore M. Theta-gamma phase amplitude coupling in a hippocampal CA1 microcircuit. *PLoS Comput Biol.* 2023 Mar 23; 19(3):e1010942. PMID: 36952558.

Rubinstein TB, Breslow AS, Zayde A, Ding O, Alpert JE, Gabbay V. Psychological impact of the COVID-19 pandemic on healthcare worker parents. *J Psychosom Res.* 2023 Jul; 170:111359. PMID: 37182436.

Sadler JR, Thapaliya G, Ranganath K, Gabay A, Chen L, Smith KR, Osorio RS, Convit A, Carnell S. Paediatric obesity and metabolic syndrome associations with cognition and the brain in youth: Current evidence and future directions. *Pediatr Obes.* 2023 May 18. PMID: 37202148.

Saito M, Subbanna S, Zhang X, Canals-Baker S, Smiley JF, Wilson DA, Das BC. Effects of retinoic acid receptor α modulators on developmental ethanol-induced neurodegeneration and neuroinflammation. *Front Neurosci.* 2023 May 2; 17:1170259. PMID: 37205047.

Saletti PG, Casillas-Espinosa PM, Lisgaras CP, Mowrey WB, Li Q, Liu W, Brady RD, Ali I, Silva J, Yamakawa G, Hudson M, Li C, Braine EL, Coles L, Cloyd JC, Jones NC, Shultz SR, Moshé SL, O'Brien TJ, Galanopoulou AS. Tau Phosphorylation Patterns in the Rat Cerebral Cortex After Traumatic Brain Injury and Sodium Selenate Effects: An Epibios4rx Project 2 Study. *J Neurotrauma.* 2023 May 2. PMID: 36950806.

Schwartz E, Nanning KH, Heuer K, Jeffery N, Bertrand OC, Toro R, Kasprian G, Prayer D, Langs G. Evolution of cortical geometry and its link to function, behaviour and ecology. *Nat Commun.* 2023 Apr 20; 14(1):2252. PMID: 37080952.

Sehatpour P, Iosifescu DV, De Baun HM, Shope C, Mayer MR, Gangwisch J, Dias E, Sobeih T, Choo TH, Wall MM, Medalia A, Saperstein AM, Kegeles LS, Girgis RR, Carlson M, Kantrowitz JT. Dose-Dependent Augmentation of Neuroplasticity-Based Auditory Learning in Schizophrenia: A Double-Blind, Placebo-Controlled, Randomized, Target Engagement Clinical Trial of the NMDA Glutamate Receptor Agonist d-serine. *Biol Psychiatry.* 2023 Jan 28. PMID: 36958998.

Smiley JF, Bleiwas C, Marino BM, Vaddi P, Canals-Baker S, Wilson DA, Saito M. Estimates of total neuron number show that neonatal ethanol causes immediate and lasting neuron loss in cortical and subcortical areas. *Front Neurosci.* 2023 May 2; 17:1186529. PMID: 37205048.

Smith RC, Sershen H, Youssef M, Lajtha A, Jin H, Zhang M, Chen A, Guidotti A, Davis JM. Deficits in odor discrimination versus odor identification in patients with schizophrenia and negative correlations with GABAergic and DNA methyltransferase mRNAs in lymphocytes. *Front Psychiatry.* 2023 Mar 28; 14:1115399. PMID: 37056402.

Svalina MN, Sullivan R, Restrepo D, Huntsman MM. From circuits to behavior: Amygdala dysfunction in fragile X syndrome. *Front Integr Neurosci.* 2023 Mar 9; 17:1128529. PMID: 36969493.

Tambini A, Miller J, Ehlert L, Kiyonaga A, Dâ Esposito M. Structured memory representations develop at multiple time scales in hippocampal-cortical networks. *bioRxiv [Preprint].* 2023 Apr 7. PMID: 37066263.

Theilenberg S, Shang Y, Ghazouani J, Kumaragamage C, Nixon TW, McIntyre S, Vaughan JT, Parkinson B, Garwood M, de Graaf RA, Juchem C. Design and realization of a multi-coil array for B₀ field control in a compact 1.5T head-only MRI scanner. *Magn Reson Med.* 2023 May 5. PMID: 37145035.

Tobe R, Zhu Y, Gleissl T, Rossomanno S, Veenstra-VanderWeele J, Smith J, Hollander E. Predictors of placebo response in three large clinical trials of the V1a receptor antagonist balovaptan in autism spectrum disorder. *Neuropsychopharmacology.* 2023 Apr 12. PMID: 37045991.

Tofighi B, Marini C, Lee JD, Garland EL. Patient Perceptions of Integrating Meditation-based Interventions in Office-based Opioid Treatment with Buprenorphine: A Mixed-methods Survey. *J Addict Med.* 2023 Mar 28. PMID: 36976646.

Tofighi B, Badiei B, Badolato R, Lewis CF, Nunes E, Thomas A, Lee JD. Integrating Text Messaging in a Low Threshold Telebuprenorphine Program for New York City Residents with Opioid Use Disorder during COVID-19: A Pilot Randomized Controlled Trial. *J Addict Med.* 2023 Mar 31. PMID: 37000557.

Truong D, Gao Y, Thomas C, Valter Y, Martinez A, Huang Y et al. Parcel-guided TMS: virtual and online neuronavigation. *Brain Stimulation* 16[2], 690. 2023. [Abstract]

Tural U, Sparpana A, Sullivan E, Iosifescu DV. Comparison of Adiponectin Levels in Anorexia Nervosa, Bulimia Nervosa, Binge-Eating Disorder, Obesity, Constitutional Thinness, and Healthy Controls: A Network Meta-Analysis. *Life (Basel).* 2023 May 13; 13(5):1181. PMID: 37240826.

Vieira WF, Iosifescu DV, McEachern KM, Gersten M, Cassano P. Photobiomodulation: An Emerging Treatment Modality for Depression. *Psychiatr Clin North Am.* 2023 Jun; 46(2):331-348. PMID: 37149348.

Vieira W, Cassano P, Hurtado A, Collins K, Gersten M, De Taboada L et al. Transcranial photobiomodulation in major depressive disorder: dose-dependent effects on depression and anxiety scores. *Brain Stimulation* 16[1], 360-361. 2023. [Abstract]

Widge AS, Jordan A, Kraguljac NV, Sullivan CRP, Wilson S, Benton TD, Alpert JE, Carpenter LL, Krystal JH, Nemeroff CB, Dzirasa K. Structural Racism in Psychiatric Research Careers: Eradicating Barriers to a More Diverse Workforce. *Am J Psychiatry.* 2023 Apr 19. PMID: 37073513.

Wilson DA, Fleming G, Williams CRO, Teixeira CM, Smiley JF, Saito M. Somatostatin neuron contributions to cortical slow wave dysfunction in adult mice exposed to developmental ethanol. *Front Neurosci.* 2023 Mar 20; 17:1127711. PMID: 37021136.

Xerxa Y, White T, Busa S, Trasande L, Hillegers MHJ, Jaddoe VW, Castellanos FX, Ghassabian A. Gender Diversity and Brain Morphology Among Adolescents. *JAMA Netw Open*. 2023 May 1; 6(5):e2313139. PMID: 37171820.

Xu T, Kiar G, Cho JW, Bridgeford EW, Nikolaidis A, Vogelstein JT, Milham MP. ReX: an integrative tool for quantifying and optimizing measurement reliability for the study of individual differences. *Nat Methods*. 2023 Jun 1. PMID: 37264147.

Zanca RM, Stanciu S, Ahmed I, Cain CK, Sullivan RM. Translational Model of Infant PTSD Induction:

Methods for Infant Fear Conditioning. In: Pinna G, editor. *Translational Methods for PTSD Research*. New York: Humana; 2023. p. 1-22.

Zemon V, Butler PD, Legatt ME, Gordon J. The spatial contrast sensitivity function and its neurophysiological bases. *Vision Res*. 2023 May 27; 210:108266. PMID: 37247511.

Zhou ZX, Chen LZ, Milham MP, Zuo XN; Lifespan Brain Chart Consortium (LBCC). Six cornerstones for translational brain charts. *Sci Bull (Beijing)*. 2023 Apr 30; 68(8):795-799. PMID: 37029029.