

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 O'Hara, MBA, Deputy Director, Institute Administration

March – April 2019

Stuart Moss, MLS, Editor

NEW FACES OF NKI



Kate Collins, PhD, joined NKI's clinical research group in January as a research scientist. Kate received her MSW from NYU in 2006 and her Neuroscience PhD in 2014 from the Icahn School of Medicine at Mount Sinai. She has expertise in the conduct of mood and anxiety disorder clinical trials and the application of functional magnetic resonance imaging as a tool to identify the substrates of psychiatric illness. Kate is especially interested in studies designed to interrogate novel therapies and improve treatment algorithms. At NKI, she will work closely with Drs. Dan Iosifescu, Emily Stern, Matt Hoptman, and Pam Butler.



Stuart Linder also recently joined NKI, as Project Manager. While new to NKI, Stu has many years of administrative experience, which he describes briefly here:

Over the past forty years I have been responsible for progressively more complex issues related to the administrative aspects of large health care facilities and university-affiliated research institutes. My work experience includes time as Deputy Director, Administration at several NYS OMH facilities such as Rockland Children's Psychiatric Center; Kirby Forensic PC; Manhattan PC, and most recently NYS Psychiatric Institute.

My various responsibilities included oversight of multi-million-dollar budgets, facility support services such as Security/Safety; Maintenance; Environmental Services; Nutrition Services, and various oversight of administrative departments, including Human Resources and Business Office operations. Additional responsibilities included leadership roles in compliance-related activities such as Joint Commission, CMS, and AAALAC accreditation.

I am very excited about my new opportunity at NKI, where I will be working closely with Tom O'Hara in my capacity as Project Manager. I am hopeful that my years of experience can be an asset to the exceptional staff and culture here at NKI.

KUDOS



The National Council for Behavioral Health has recognized NYS OMH's **Lloyd Sederer, MD**, for excellence in behavioral health, with its 2019 **Doc of the Year Award**. This award recognizes a psychiatrist or physician who has gone above and beyond the call of duty, empowering patients to define their own goals and providing the encouragement and support to help them achieve their dreams.

Dr. Sederer recently stepped down from his role as Chief Medical Officer of OMH, a position he held for nearly 12 years. He remains with OMH in an advisory capacity.



Efrat Levy, PhD (Center for Dementia Research) has been promoted to the rank of Professor in the Departments of Psychiatry and Biochemistry & Molecular Pharmacology at the New York University School of Medicine. **Dr. Levy's laboratory** studies the factors that initiate and propagate pathology in neurodegenerative disorders. She is currently the principal or co-principal investigator on five active NIH grants.



Paul O'Connor of the Information Sciences Division (ISD) was recently recognized by the International Consortium to Predict PTSD (ICPP) at the 34th Annual Symposium of the International Society for Traumatic Stress Studies (ISTSS) for his assistance with data management, editing and quality assurance in a study funded by Public Health Service Research Grant MH101227, entitled "Predicting Acute PTSD from Peritraumatic Experience: Results from the International Consortium to Predict PTSD".

Traumatic injury is common in the general population and can be a significant antecedent of post-traumatic stress disorder (PTSD). An early assessment of PTSD risk following traumatic injury is paramount to preventing the disorder. Ideally,

such an assessment should be implemented upon survivors' acute care admission.

Previous work by the ICPP revealed that incremental severity scores of the Clinician Administered PTSD Scale (CAPS) accurately predict the likelihood of chronic PTSD. The CAPS can only be reliably administered two to four weeks *after* acute care admission. Its administration is burdensome, requiring clinical expertise. Obtainable during acute care admission, peritraumatic reactions inconsistently predict chronic PTSD, but might efficiently predict early CAPS symptoms, thereby offering a stepwise prediction of chronic PTSD. This work used the Peritraumatic Dissociative Experiences Questionnaire (PDEQ) to examine the feasibility of predicting early CAPS scores (CAPS > 40) that infer high likelihood of chronic PTSD.

Participants were 647 longitudinally evaluated traumatic injury survivors from five studies conducted by members of the ICPP. Participants had PDEQ assessments *within* 30 days of trauma exposure and CAPS assessments 30-60 days *after* trauma exposure. A CAPS score of 40, indicative of moderate PTSD, was used as the predicted outcome of the PDEQ score. Logistic regression was used to derive the probability of a CAPS score > 40 given the PDEQ total score.

PDEQ severity scores significantly predicted having CAPS score > 40. Age, gender, type of trauma and data source produced negligible improvements in prediction accuracy. Incremental PDEQ severity scores reliably estimated the likelihood of early CAPS scores predicting chronic PTSD and requiring clinical attention. Responses to traumatic events, exemplified by the PDEQ, can be used as a screener in a stepwise PTSD prediction strategy. This proof of concept finding may be extended to other measures of peritraumatic responses.



COMPLIANCE CORNER



IT Governance, Risk Management and Compliance

*By Kathryn Cook, M.S., MCSE, MCSA, CCA
IT Project Manager*

Since the record-breaking bankruptcy of Enron and WorldCom in the early 2000's, compliance has gained growing importance tied to business processes. As data and information sharing increased due to more reliance on technology and consumer expectations, businesses found themselves guilty of information failures because of inadequate infrastructure and weak or non-existent compliance measures. As a result, most of today's industries – both public sector and private sector – grapple with the pressures, policies, and procedural upheavals of increased regulation.

When it comes to compliance management, the ability to maintain and protect information, remediate problems, and provide adequate compliance reports are essential. Governance, Risk and Compliance (GRC) refers to a strategy for management and compliance with required regulations. In other words, GRC represents a structured approach to aligning IT with business objectives, while effectively managing risk and meeting compliance requirements. With increasing automation of all core business processes, IT keeps gaining in importance and serves as a driver of business processes.

[Click here](#) to continue reading about GRC and application at NKI. The complete document can be found on myNKI under Administration → Institute Manuals and Policies → Information Technology.

FROM AROUND THE INSTITUTE



Yoga and exercise groups are now meeting regularly in the NKI library at 4:30 on Tuesdays (yoga) and Thursdays (exercise). Beginners are welcome! Please arrive 5 minutes early and bring your own yoga mat. If you have any questions, please email Catia Teixeira or Lindsay Laughlin.

Please note that these activities are an informal get-together on personal time (not work time). Also, neither the person guiding the exercises nor NKI bear any liability related to the activities.

Leading the yoga group is **Lindsay Laughlin**, a research assistant in Dr. Christopher Cain's lab (Emotional Brain Institute), which she joined after interning with Dr. Catia Teixeira during pre-medical studies at NYU, where she majored in Biology with a minor in Psychology. Although she is not a certified yoga instructor, Lindsay has been practicing yoga for a number of years and has found that it has greatly improved her mood, focus, and ability to balance stress. She says, "It's an honor to do a service for the NKI community which has given me so much personally and professionally."

Need more incentive to try it out? Check out "[Increased well-being: Another reason to try yoga](#)".



Esketamine nasal spray was recently approved by the US FDA for treatment-resistant depression. In an interview with *MD Magazine*, Clinical Research Director **Dan Iosifescu, MD**, offered some insight about what to expect from this new drug. You can see the video or read the transcript [here](#).



The week of April 21-27 is [National Medical Laboratory Week](#). It's a great time to thank the health professionals who work in the laboratory – Clinical Laboratory Scientists, also known as Medical Technologists. Clinical laboratory professionals are responsible for performing laboratory tests that provide over 70% of the information for medical decision making. Laboratorians work tirelessly for patient health and do so with little recognition, but the impact of their work is significant.



Staff of the OMH Clinical Laboratories at NKI

PUBLICATIONS OF NOTE

JAMA Psychiatry

NKI Director **Donald Goff** contributed this Editorial to *JAMA Psychiatry*. The piece comments on two articles that will be published in the same monthly issue.

Goff DC. [Can Adjunctive Pharmacotherapy Reduce Hospitalization in Schizophrenia?: Insights from Administrative Databases](#). *JAMA Psychiatry*. 2019 Feb 20. PMID: 30785617.

Neurology®

Anna MacKay-Brandt (Outpatient Research) coauthored this recent article in *Neurology*.

Stern Y, MacKay-Brandt A, Lee S, McKinley P, McIntyre K, Razlighi Q, Agarunov E, Bartels M, Sloan RP. [Effect of aerobic exercise on cognition in younger adults: A randomized clinical trial](#). *Neurology*. 2019 Feb 26;92(9):e905-e916. PMID: 30700591.

Psychiatry Research

Robert Smith (Neurochemistry) is a corresponding author of this large study of cognitive function in a wide spectrum of patients at risk for schizophrenia, prodromal patients, and those with acute and chronic schizophrenia.

Liu Y, Wang G, Jin H, Lyu H, Liu Y, Guo W, Shi C, Meyers J, Wang J, Zhao J, Wu R, Smith RC, Davis JM. [Cognitive deficits in subjects at risk for psychosis, first-episode and chronic schizophrenia patients](#). *Psychiatry Res*. 2019 Feb 1; 274: 235-242. PMID: 30818145.



Ricardo Osorio (Clinical Research) is a corresponding author of this article in the open access journal *Molecular Neurodegeneration*.

Kam K, Parekh A, Sharma RA, Andrade A, Lewin M, Castillo B, Bubu OM, Chua NJ, Miller MD, Mullins AE, Glodzik L, Mosconi L, Gosselin N, Prathamesh K, Chen Z, Blennow K, Zetterberg H, Bagchi N, Cavedoni B, Rapoport DM, Ayappa I, de Leon MJ, Petkova E, Varga AW, Osorio RS. [Sleep oscillation-specific associations with Alzheimer's disease CSF biomarkers: novel roles for sleep spindles and tau](#). *Mol Neurodegener*. 2019 Feb 21;14(1):10. PMID: 30791922.



Dr. Osorio is also a corresponding author of this paper published online in *Sleep*, on the relationship between obstructive sleep apnea and Alzheimer's disease biomarkers.

Bubu OM, Pirraglia E, Andrade AG, Sharma RA, Gimenez-Badia S, Umasabor-Bubu OQ, Hogan MM, Shim AM, Mukhtar F, Sharma N, Mbah AK, Seixas AA, Kam K, Zizi F, Borenstein AR, Mortimer JA, Kip KE, Morgan D, Rosenzweig I, Ayappa I, Rapoport DM, Jean-Louis G, Varga AW, Osorio RS; [Alzheimer's Disease Neuroimaging Initiative. Obstructive Sleep Apnea and Longitudinal Alzheimer's disease biomarker changes](#). *Sleep*. 2019 Feb 22. PMID: 30794315.



Maya Opendak and **Regina Sullivan** (Emotional Brain Institute) are coauthors of this paper in the 2019 *Annual Review of Clinical Psychology*.

Callaghan B, Meyer H, Opendak M, Van Tieghem M, Harmon C, Li A, Lee FS, Sullivan RM, Tottenham N. [Using A Developmental Ecology Framework to Align Fear Neurobiology Across Species](#). *Annu Rev Clin Psychol*. 2019 Feb 20. PMID: 30786246.

Neuropsychopharmacology

At the intersection of brain, behavior, and therapeutics

Drs. Opendak and **Sullivan**, with others from the Emotional Brain Institute, also published recently in *Neuropsychopharmacology*. Another new article appearing online in this journal was coauthored by **Dan Iosifescu** (Clinical Research).

Opendak M, Robinson-Drummer P, Blomkvist A, Zanca RM, Wood K, Jacobs L, Chan S, Tan S, Woo J, Venkataraman G, Kirschner E, Lundström JN, Wilson DA, Serrano PA, Sullivan RM. [Neurobiology of maternal regulation of infant fear: the role of mesolimbic dopamine and its disruption by maltreatment](#). *Neuropsychopharmacology*. 2019 Feb 13. PMID: 30758321.

Costi S, Soleimani L, Glasgow A, Brallier J, Spivack J, Schwartz J, Levitch CF, Richards S, Hoch M, Wade E, Welch A, Collins KA, Feder A, Iosifescu DV, Charney DS, Murrough JW. [Lithium continuation therapy following ketamine in patients with treatment resistant unipolar depression: a randomized controlled trial](#). *Neuropsychopharmacology*. 2019 Mar 11. PMID: 30858518.

Hippocampus

Two new papers by NKI investigators appear in *Hippocampus*. The first is by **Lila Davachi** (Biomedical Imaging & Neuromodulation) and colleagues. The second is by **Helen Scharfman** and members of her lab (Dementia Research).

Clewett D, DuBrow S, Davachi L. [Transcending time in the brain: How event memories are constructed from experience](#). *Hippocampus*. 2019 Mar; 29(3):162-183. PMID: 30734391.

Jain S, LaFrancois JJ, Botterill JJ, Alcantara-Gonzalez D, Scharfman HE. [Adult neurogenesis in the mouse dentate gyrus protects the hippocampus from neuronal injury following severe seizures](#). *Hippocampus*. 2019 Jan 23. PMID: 30672046.



These two new publications in *Nature Communications* include NKI coauthors **Michael Milham** (Biomedical Imaging and Neuro-modulation) and **Donald Wilson** (Emotional Brain Institute), respectively.

Hong SJ, de Wael RV, Bethlehem RAI, Lariviere S, Paquola C, Valk SL, Milham MP, Di Martino A, Margulies DS, Smallwood J, Bernhardt BC. [Atypical functional connectome hierarchy in autism](#). *Nat Commun*. 2019 Mar 4;10(1):1022. PMID: 30833582.

Zhou G, Lane G, Noto T, Arabkheradmand G, Gottfried JA, Schuele SU, Rosenow JM, Olofsson JK, Wilson DA, Zelano C. [Human olfactory-auditory integration requires phase synchrony between sensory cortices](#). *Nat Commun*. 2019 Mar 11; 10(1):1168. PMID: 30858379.

International Journal of
**Developmental
Neuroscience**

Mariko Saito (Neurochemistry) and **Mitsuo Saito** (Analytical Psychopharmacology) coauthored this paper published in the *International Journal of Developmental Neuroscience*.

Saito M, Saito M, Das BC. [Involvement of AMP-activated protein kinase in neuroinflammation and neurodegeneration in the adult and developing brain](#). Int J Dev Neurosci. 2019 Jan 29. PMID: 30707928.

Radiology

In this Letter to the Editor, **Nunzio Pomara** (Geriatric Psychiatry) and colleague Davide Bruno suggest novel approaches to overcome the current therapeutic limitations of amyloid beta-lowering-based treatments in AD and related disorders.

Pomara N, Bruno D. [Basal Forebrain Resting Functional Activity Associated with Brain Amyloid- \$\beta\$ Burden in \$\epsilon 4\$ Carriers and Older Women: Possible Implications for Baseline Cognition and Response to Amyloid- \$\beta\$ -based Preventive Trials](#). Radiology. 2019 Mar;290(3):850-851. PMID: 30720398.



Jean Pierre Lindenmayer (Manhattan Psychiatric Center) is one of nine experts in the field who published these consensus recommendations for the diagnosis and clinical management of treatment-resistant schizophrenia.

Kane JM, Agid O, Baldwin ML, Howes O, Lindenmayer JP, Marder S, Olfson M, Potkin SG, Correll CU. [Clinical Guidance on the Identification and Management of Treatment-Resistant Schizophrenia](#). J Clin Psychiatry. 2019 Mar 5;80(2). PMID: 30840788.

INFO UPDATE

PSYCHIATRY online

The new third edition of the [Textbook of Traumatic Brain Injury](#) has been added to the PsychiatryOnline Premium Package, available online at NKI. This package includes [journals](#) published by the American Psychiatric Association, the [DSM-V](#), and [over a dozen textbooks](#) covering various areas of psychiatry.



The National Center for Biotechnology Information (NCBI) continuously works to improve PubMed. [PubMed Labs](#) is a test site where new features and tools can be assessed. Eventually, these new elements may be incorporated into PubMed. Some of the current experimental features, such as enhanced search results and responsive design, are described in "[An Updated PubMed Is on Its Way](#)". At PubMed Labs, you can try out the new features and offer feedback.

My NCBI — My Bibliography

Also coming soon is a new version of My Bibliography. As with PubMed, you can preview the new look and feel [using the NCBI Labs site](#), and provide feedback if you wish. You can safely try out this new version without affecting anything in your existing My Bibliography.



NOVELNY (the New York Online Virtual Electronic Library) is an online virtual library connecting New Yorkers to 21st century information via libraries and library systems statewide. Recently, the New York State Library announced that the current collection of NOVELNY resources are contracted to continue through June 30, 2021. These [freely available databases](#) include Encyclopedia Britannica, newspapers, periodicals, resources for students, health information, business information, and much more. If you have any questions about NOVELNY, [the NKI librarian](#) can help.

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](#), [PsychiatryOnline](#), etc.). Remote access is available using NKI's VPN.

DEPARTMENT OF WONDER

A Psychiatric History Lesson

The original Rockland State Hospital dates back to about 1930, and the Rockland campus was once very different from the way it is today. In a two-part *Psychiatric News* article titled "The Rise and Demise of America's Psychiatric Hospitals: a Tale of Dollars Trumping Decency", Jeffrey Geller, MD, MPH (incoming president of the American Psychiatric Association) briefly recounts the history of psychiatric hospitals in this country. The [first part](#) covers the 19th century, and the [second part](#) covers the 20th century. Among other sobering facts, he notes that "In 1955, 50 percent of all hospital beds in the United States were psychiatric beds". Rockland even gets a passing mention.



the Takeaway

A recent segment on the WNYC show *The Takeaway* discussed *Right to Fail*, a new documentary about the housing of mentally ill patients, and the balance between care and protection on one hand, and freedom and independence on the other. You can listen to the segment and find a link to the documentary here: ["A Court Said New York's Mentally Ill Should Be Able to Live on Their Own. But Can They?"](#).



We like to complain when weather forecasters get it wrong, but the fact is that forecasts up to about 10 days are currently very accurate. The "butterfly effect", however, may limit the extent of future progress on this front. That's according to ["A 2-week weather forecast may be as good as it gets"](#) in *Science*.

EVENTS AND SEMINARS



Icahn School of Medicine at Mount Sinai
Translational and Molecular Imaging Institute

9th Annual Translational and Molecular Imaging Institute Symposium

Friday, April 26th

Icahn School of Medicine at Mount Sinai

[Click here](#) for details.

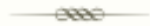


First-ever Columbia Magnetic Resonance Research Center Symposium

Tuesday, May 28th

All faculty, students, and staff are welcome to attend this day-long event featuring talks by leading Columbia MR researchers, networking opportunities, poster sessions, and an evening reception.

Question about this event can be sent to Kathleen Durkin, MR Research Administrator, at kd2649@columbia.edu.



RPC Grand Rounds

Ricardo Osorio, MD

Clinical Research, NKI
NYU Department of Psychiatry

Sleep Disorders

Thursday, April 25th at 11 am

Building 57, 8th floor north conference room



Center for Dementia Research Seminar Series

Held on Thursdays at 10 am

Michael Strong, MD

Western University, Ontario

Pathological tau protein metabolism in ALS

May 2nd

Virgil Muresan, PhD

Rutgers

New Aspects of APP Biology: Relevance to Alzheimer's Disease and Amyotrophic Lateral Sclerosis

May 23rd

Neil MacLusky, PhD

University of Guelph

Neuroprotective Effects of Androgen Metabolites – are they the basis for sex differences in the incidence of Alzheimer's disease?

May 30th



Center for Biomedical Imaging and Neuromodulation Seminar Series

*Held on Mondays at 11 am
unless otherwise noted*

Amy Margolis, PhD

Columbia University Irving Medical Center

Nonverbal Learning Disability: Phenomenology, Frequency and Neurobiology

April 8th

Daniel Margulies, PhD

Centre National de la Recherche Scientifique (CNRS)

Large-Scale Gradients in Cortical Organization

April 8th at 2 pm

Alessandro Gozzi, PhD

Istituto Italiano di Tecnologia

***Mapping the Neuro-Connective Landscape
in Autism with Cross-Species fMRI***

WEDNESDAY, April 10th

Conor Liston, MD, PhD

Weill Cornell Medicine

***Sexually Dimorphic Functional Connectivity
Biomarkers Predict Distinct Symptom
Clusters in Depression***

April 15th

Gary Kennedy, MD

Albert Einstein College of Medicine

He's at the office:

***How the neuroscientific basis of affect
regulation explains the benefits of behavioral
interventions for neurocognitive disorders***

April 22nd

Zarrar Shehzad, PhD

Yale University

TBA

May 6th

Stewart H. Mostofsky, PhD

Kennedy Krieger Institute

Johns Hopkins University

Movement in ADHD: Through Space and Time

May 13th

Jacek Dmochowski, PhD

City College of New York

***Increased Blood Flow and Oxidative
Metabolism in the Human Brain by
Transcranial Laser Stimulation***

June 3rd



Statewide Grand Rounds

***Managing Emotional Dysregulation &
Minimizing Violence***

Merrill Rotter, MD

Senior Forensic Advisor to the Commissioner,
NYS OMH

Michal Kunz, MD

Clinical Director, Kirby Psychiatric Center

Joseph DiPrisco, RN

PMCS Coach, Pilgrim Psychiatric Center

Wednesday, April 17th

1:00 – 2:30 pm

Broadcast in the Director's conference room

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 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 6,000 items dating back to 1995, and can be searched from the [myNKI website](#).

Arcos-Burgos M, Vélez JI, Martínez AF, Ribasés M, Ramos-Quiroga JA, Sánchez-Mora C, Richarte V, Roncero C, Cormand B, Fernández-Castillo N, Casas M, Lopera F, Pineda DA, Palacio JD, Acosta-López JE, Cervantes-Henriquez ML, Sánchez-Rojas MG, Puentes-Rozo PJ, Molina BSG; MTA Cooperative Group, Boden MT, Wallis D, Lidbury B, Newman S, Eastal S, Swanson J, Patel H, Volkow N, Acosta MT, Castellanos FX, de Leon J, Mastronardi CA, Muenke M. ADGRL3 (LPHN3) variants predict substance use disorder. *Transl Psychiatry*. 2019 Jan 29;9(1):42. PMID: 30696812.

Ardekani BA, Hadid SA, Blessing E, Bachman AH. Sexual Dimorphism and Hemispheric Asymmetry of Hippocampal Volumetric Integrity in Normal Aging and Alzheimer Disease. *AJNR Am J Neuroradiol*. 2019 Feb;40(2):276-282. PMID: 30655257.

Baril AA, Osorio RS, Carrier J, Kaminska M, Gosselin N. Reply to: Obstructive Sleep Apnea and Cognitive Decline in Older Adults. *Am J Respir Crit Care Med*. 2019 Jan 16. PMID: 30648882.

Basavarajappa BS, Subbanna S. Potential Mechanisms Underlying the Deleterious Effects of Synthetic Cannabinoids Found in Spice/K2 Products. *Brain Sci*. 2019 Jan 16;9(1). pii: E14. PMID: 30654473.

Bubu OM, Pirraglia E, Andrade AG, Sharma RA, Gimenez-Badia S, Umasabor-Bubu OQ, Hogan MM, Shim AM, Mukhtar F, Sharma N, Mbah AK, Seixas AA, Kam K, Zizi F, Borenstein AR, Mortimer JA, Kip KE, Morgan D, Rosenzweig I, Ayappa I, Rapoport DM, Jean-Louis G, Varga AW, Osorio RS; Alzheimer's Disease Neuroimaging Initiative. Obstructive Sleep Apnea and Longitudinal Alzheimer's disease biomarker changes. *Sleep*. 2019 Feb 22. PMID: 30794315.

Buchweitz A, de Azeredo LA, Sanvicente-Vieira B, Metsavaht Cará V, Bianchini Esper N, Soder RB, da Costa JC, Portuguez MW, Franco AR, Grassi-Oliveira R. Violence and Latin-American preadolescents: A study of social brain function and cortisol levels. *Dev Sci*. 2019 Jan 16:e12799. PMID: 30648778.

Callaghan B, Meyer H, Opendak M, Van Tieghem M, Harmon C, Li A, Lee FS, Sullivan RM, Tottenham N. Using A Developmental Ecology Framework to Align Fear Neurobiology Across Species. *Annu Rev Clin Psychol*. 2019 Feb 20. PMID: 30786246.

Clewett D, DuBrow S, Davachi L. Transcending time in the brain: How event memories are constructed from experience. *Hippocampus*. 2019 Mar; 29(3):162-183. PMID: 30734391.

Costi S, Soleimani L, Glasgow A, Brallier J, Spivack J, Schwartz J, Levitch CF, Richards S, Hoch M, Wade E, Welch A, Collins KA, Feder A, Iosifescu DV, Charney DS, Murrough JW. Lithium continuation therapy following ketamine in patients with treatment resistant unipolar depression: a randomized controlled trial. *Neuropsychopharmacology*. 2019 Mar 11. PMID: 30858518.

Dadi K, Rahim M, Abraham A, Chyzhyk D, Milham M, Thirion B, Varoquaux G; Alzheimer's Disease Neuroimaging Initiative. Benchmarking functional connectome-based predictive models for resting-state fMRI. *Neuroimage*. 2019 Mar 2. PMID: 30836146.

Dunsmoor JE, Kroes MCW, Li J, Daw ND, Simpson HB, Phelps EA. Role of human ventromedial prefrontal cortex in learning and recall of enhanced extinction. *J Neurosci*. 2019 Feb 19. PMID: 30782974.

Fan X, Copeland P, Nawras S, Harrington A, Freudenreich O, Goff DC, Henderson DC. Adjunctive telmisartan treatment on body metabolism in clozapine or olanzapine treated patients with schizophrenia: a randomized, double blind, placebo controlled trial. *Psychopharmacology*. 2019 Feb 12. PMID: 30747254.

Fleming LM, Javitt DC, Carter CS, Kantrowitz JT, Girgis RR, Kegeles LS, Ragland JD, Maddock RJ, Lesh TA, Tanase C, Robinson J, Potter WZ, Carlson M, Wall MM, Choo TH, Grinband J, Lieberman J, Krystal JH, Corlett PR. A multicenter study of ketamine effects on functional connectivity: Large scale network relationships, hubs and symptom mechanisms. *Neuroimage Clin.* 2019 Feb 28; 22:101739. PMID: 30852397.

Freeman MP, Papakostas GI, Hoepfner B, Mazzone E, Judge H, Cusin C, Mathew S, Sanacora G, Iosifescu D, DeBattista C, Trivedi MH, Fava M. Sex differences in response to ketamine as a rapidly acting intervention for treatment resistant depression. *J Psychiatr Res.* 2019 Mar; 110: 166-171. PMID: 30641350.

Goff DC, Freudenreich O, Cather C, Holt D, Bello I, Diminich E, Tang Y, Ardekani BA, Worthington M, Zeng B, Wu R, Fan X, Li C, Troxel A, Wang J, Zhao J. Citalopram in first episode schizophrenia: The DECIFER trial. *Schizophr Res.* 2019 Jan 29. PMID: 30709746.

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Harvey PD, Khan A, Atkins A, Keefe RS. Virtual reality assessment of functional capacity in people with Schizophrenia: Associations with reduced emotional experience and prediction of functional outcomes. *Psychiatry Res.* 2019 Jan 15. PMID: 30679049.

Henin S, Shankar A, Hasulak N, Friedman D, Dugan P, Melloni L, Flinker A, Sarac C, Fang M, Doyle W, Tcheng T, Devinsky O, Davachi L, Liu A. Hippocampal gamma predicts associative memory performance as measured by acute and chronic intracranial EEG. *Sci Rep.* 2019 Jan 24;9(1):593. PMID: 30679734.

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Huang H, Botao Z, Jiang Y, Tang Y, Zhang T, Tang X, Xu L, Wang J, Li J, Qian Z, Liu X, Wang H, Luo C, Li C, Xu J, Goff D, Wang J. Aberrant resting-state functional connectivity of salience network in first-episode schizophrenia. *Brain Imaging Behav.* 2019 Jan 28. PMID: 30689171.

Jain S, LaFrancois JJ, Botterill JJ, Alcantara-Gonzalez D, Scharfman HE. Adult neurogenesis in the mouse dentate gyrus protects the hippocampus from neuronal injury following severe seizures. *Hippocampus.* 2019 Jan 23. PMID: 30672046.

Jovanovic T, Duncan EJ, Kaye J, Garza K, Norrholm SD, Inslicht SS, Neylan TC, Mathew SJ, Iosifescu D, Rothbaum BO, Mayberg HS, Dunlop BW. Psychophysiological treatment outcomes: Corticotropin-releasing factor type 1 receptor antagonist increases inhibition of fear-potentiated startle in PTSD patients. *Psychophysiology.* 2019 Feb 26: e13356. PMID: 30807663.

Kam K, Parekh A, Sharma RA, Andrade A, Lewin M, Castillo B, Bubu OM, Chua NJ, Miller MD, Mullins AE, Glodzik L, Mosconi L, Gosselin N, Prathamesh K, Chen Z, Blennow K, Zetterberg H, Bagchi N, Cavedoni B, Rapoport DM, Ayappa I, de Leon MJ, Petkova E, Varga AW, Osorio RS. Sleep oscillation-specific associations with Alzheimer's disease CSF biomarkers: novel roles for sleep spindles and tau. *Mol Neurodegener.* 2019 Feb 21;14(1):10. PMID: 30791922.

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