The NKInformer



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

September – October, 2018

Stuart Moss, MLS, Editor

C-BIN WELCOMES NEW MEMBERS



Alexandre R. Franco, PhD, joined the Center for Biomedical Imaging and Neuromodulation (C-BIN) department in March as the new director of the Computational Neuroimaging Laboratories (CNL).

With a strong signal processing background, he brings extensive knowledge of neuroinformatics and MRI image processing and analysis methods to support several research initiatives at NKI. Through functional and structural neuroimaging, he aims to create novel techniques to understand how brain patterns are altered by mental illnesses. His research is also focused on developing new realtime fMRI methods. In addition, Dr. Franco has experience assisting clinical researchers with computational and statistical methods.

Prior to joining NKI, Dr. Franco was an Associate Professor at Pontifícia Universidade Católica do Rio Grande do Sul since 2011, in Brazil, his native country. Dr. Franco was a pioneer in neuroimaging in southern Brazil, where he built а neuroinformatics laboratory. His lab was responsible for processing and analyzing the images of all MRI studies at the Brain Institute of Rio Grande do Sul. This generated a wide network of collaboration, which led Dr. Franco to study a variety of neurological and psychiatric illnesses, including multiple sclerosis, epilepsy, Parkinson's disease, Alzheimer's disease, dyslexia, microcephaly (caused by Zika virus), and ADHD, as well as conditions such as use of crack cocaine, excessive use of social media, biological effects on children in violent communities, and adolescent obesity.

Dr. Franco was also a pioneer in teaching researchers in Brazil how to conduct neuroimaging studies. He has led an annual hands-on fMRI course in Brazil, which is taught in partnership with the Nathan Kline Institute.



John Orczyk, PhD, recently joined the laboratory of Yoshinao Kajikawa as a postdoctoral Visiting Scientist. Here he describes his background and research interests.

My passion for science extends from my early formative years. In my junior year of high school, I started to work in a cancer

research laboratory at Purdue University under the mentorship of Dr. D. James Morré. While an undergraduate, I discovered that neuroscience blended my love of the humanities, as they relate to the study of the human experience, with a of the scientific rigorous examination underpinnings of our perceptual experience. My graduate work at Indiana University in the laboratory of Preston E. Garraghty explored plasticity in the rat barrel cortex in response to infra-orbital nerve (ION) transection as a model used to distinguish and characterize usedependent and homeostatic driven changes in gene expression. While plasticity models show how sensory experiences alter neuronal properties over days and weeks, they do not explain the momentto-moment stream of consciousness we experience as a congruent perceptual experience. Thus, I am shifting the timescale of my observations from hours and days to milliseconds and shifting methodology from **RNA** sequencing to electrophysiology.

A central aspect of our perceptual experience is the ability to both focus on salient features and ignore extraneous ones. Neuronal oscillations have been suggested as a mechanism through which selective attention operates by integrating multimodal sensory information in such a way that salient information from different modalities are reinforced. This neuronal oscillation hypothesis has already been successfully tested in primary and some secondary auditory areas (core and belt). My most immediate objective is to extend our observations to the para-belt region of the auditory system. Long-term, I hope to combine electrophysiology with pharmacology to improve our understanding, diagnosis, and treatment of mental disorders.

New Systems Administrator

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Albert Rozalski joins NKI as a Senior Systems Administrator to take on the fast-paced challenges of IT with over two decades of experience in information sciences. He graduated from Synergistics Computer Learning Center in 1996 with a degree in Computer Systems Administration and obtained numerous Microsoft Windows operating system certifications throughout his years as an IT professional. His experience includes desktop support, cybersecurity, software upgrade and implementation, management of various Windows/Linux servers, as well as monitoring network performance and analyzing and isolating issues. His passion for computers has led him to a long and exciting career. "My first computer was a 'Commodore 64' in 1987 and it gave me the opportunity to witness what can be accomplished with technology in every aspect of life."

GRANTS RECEIVED

For the first time, *The Informer* needs a full page to announce the latest funding awards. Congratulations to all the grant recipients!



Dr. John Orczyk (C-BIN) received a Ruth L. Kirschstein National Research Service fellowship award for the grant titled "<u>Neural Mechanism</u> <u>underlying audio visual vocalization processing in</u> <u>the macaque</u>."



Dr. Daniel Javitt (Schizophrenia Research) received a new 5-year segment on his grant titled "<u>Early</u> <u>Cortical Processing in Schizophrenia</u>."



Dr. Maya Opendak (Emotional Brain Institute) received a NARSAD award from the <u>Brain &</u> <u>Behavior Research Foundation</u> for a grant titled "A Circuit-Based Analysis of Infant Trauma and Repair."



Dr. Matthew Hoptman (Clinical Research) received an award from the <u>American Foundation for</u> <u>Suicide Prevention</u> for the project titled "Neural Correlates of Emotion Regulation in Psychosis with Suicidal Ideation and Behavior."



Dr. Ralph Nixon (Dementia Research) received an R01 for the grant titled "Endosome Dysfunction in <u>Alzheimer's Disease</u>." This grant is a collaboration with NYU.

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Dr. Michael Milham (C-BIN) received a <u>Neuroimaging Core</u> on Dr. Charles Schroeder's Conte P50, "Neurobiology and Dynamics of Active Sensing." This is collaboration with Columbia University.



Dr. James Clelland (Clinical Research) received an R21 award for the project titled "<u>Negative</u> <u>Symptoms in Clinical High Risk and First Episode</u> <u>Psychiatric Illness: Investigation of a New</u> <u>Candidate for Targeted Treatment</u>." This a collaboration with Dr. Catherine Clelland at Columbia University.



National Institute of Neurological Disorders and Stroke

Dr. Helen Scharfman (Dementia Research) received an R01 grant for the project titled "The role of CA2 in epilepsy and social comorbidity." This is a collaboration with Dr. Steven Siegelbaum at Columbia University.

KUDOS



Veronica Ozog, MA, formerly a Study Coordinator at the Manhattan Psychiatric Center Research Unit, received a scholarship from the <u>Melanie</u> <u>Foundation</u>. Veronica is currently a PhD candidate in Clinical Psychology at the Derner Institute of Advanced Psychological Studies at Adelphi University.



Nigel Bark, MD, who is currently Chair of the NKI Institutional Review Board, was one of the award recipients at <u>NAMI Rockland's Annual Awards</u> <u>Celebration</u> on October 3rd in Stony Point. In attendance were Liz Falco, Miki Kohn, Alexis Lieval, Tom O'Hara, Henry Sershen, Aileen Snider, and Russ Tobe.

FROM AROUND THE INSTITUTE



OMH Medical Director **Dr. Lloyd Sederer** recently published a Personal Account – <u>"Opioids: From</u> <u>Being a Doctor to Being a Patient</u>" – in *Psychiatric Services*. His new book, <u>The Addiction Solution:</u> <u>Treating Our Dependence on Opioids and Other</u> <u>Drugs</u>, was published by Scribner earlier this year.

PUBLICATIONS OF NOTE



Ralph Nixon, Director of the Center for Dementia Research, coauthored this paper appearing in the September issue of *Nature Reviews Drug Discovery*.

Boland B, Yu WH, Corti O, Mollereau B, Henriques A, Bezard E, Pastores GM, Rubinsztein DC, Nixon RA, Duchen MR, Mallucci GR, Kroemer G, Levine B, Eskelinen EL, Mochel F, Spedding M, Louis C, Martin OR, Millan MJ. Promoting the clearance of neurotoxic proteins in neurodegenerative disorders of ageing. Nat Rev Drug Discov. 2018 Sep;17(9):660-688. PMID: 30116051.

Neuropsychopharmacology

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Emily Stern (Clinical Research) is the first author of this paper appearing online in *Neuropsychopharmacology*.

Stern ER, Shahab R, Grimaldi SJ, Leibu E, Murrough JW, Fleysher L, Parides MK, Coffey BJ, Burdick KE, Goodman WK. <u>High-dose</u> <u>ondansetron reduces activation of</u> <u>interoceptive and sensorimotor brain regions</u>. Neuropsychopharmacology. 2018 Aug 8. PMID: 30116006.

Also published in *Neuropsychopharmacology* is a new paper from the lab of **Raj Balappal** and colleagues (Analytical Psychopharmacology).

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Joshi V, Subbanna S, Shivakumar M, Basavarajappa BS. <u>CB1R regulates CDK5</u> <u>signaling and epi-genetically controls Rac1</u> <u>expression contributing to neurobehavioral</u> <u>abnormalities in mice post-natally exposed to</u> <u>ethanol</u>. Neuropsychopharmacology. 2018 Aug 22. PMID: 30143782.



Michael Milham, Xavier Castellanos, and Stan Colcombe (Biomedical Imaging & Neuromodulation) are among the authors of this article published in the online, open access journal Nature Communications.

Milham MP, Craddock RC, Son JJ, Fleischmann M, Clucas J, Xu H, Koo B, Krishnakumar A, Biswal BB, Castellanos FX, Colcombe S, Di Martino A, Zuo XN, Klein A. <u>Assessment of the impact of</u> <u>shared brain imaging data on the scientific</u> <u>literature</u>. Nat Commun. 2018 Jul 19;9(1):2818. PMID: 30026557.



Babak Ardekani (Biomedical Imaging & Neuromodulation) is a coauthor of this article published online in *Alcoholism: Clinical & Experimental Research*. Dr. Ardekani provided a summary:

"Despite evidence of structural and functional brain recovery following abstinence from longterm heavy alcohol use, some residual brain abnormalities persist in individuals with Alcohol Use Disorder (AUD). The present study found volumetric and microstructural abnormalities and their associations with poorer performance on visuospatial memory and problem-solving ability in abstinent individuals with AUD. These findings have important implications in planning and implementation of intervention and rehabilitation strategies in AUD."

Pandey AK, Ardekani BA, Kamarajan C, Zhang J, Chorlian DB, Byrne KN, Pandey G, Meyers JL, Kinreich S, Stimus A, Porjesz B. Lower Prefrontal and Hippocampal Volume and Diffusion Tensor Imaging Differences Reflect Structural and Functional Abnormalities in Abstinent Individuals with Alcohol Use Disorder. Alcohol Clin Exp Res. 2018 Aug 17. PMID: 30118142.

Translational Psychiatry

David Yuan and **Ralph Nixon** (Dementia Research), along with many NKI coauthors, published this research in the online, open access journal *Translational Psychiatry*. This work involved collaboration among several departments at NKI.

Yuan A, Veeranna, Sershen H, Basavarajappa BS, Smiley JF, Hashim A, Bleiwas C, Berg M, Guifoyle DN, Subbanna S, Darji S, Kumar A, Rao MV, Wilson DA, Julien JP, Javitt DC, Nixon RA. <u>Neurofilament light interaction with GluN1</u> <u>modulates Neurotransmission and</u> <u>schizophrenia-associated behaviors</u>. Transl Psychiatry. 2018 Aug 24;8(1):167. PMID: 30143609.



John and Diana Sidtis (Brain & Behavior Laboratory) have a new open access paper in *Brain* and Cognition.

Van Lancker Sidtis D, Sidtis JJ. <u>Cortical-subcortical production of formulaic language:</u> <u>A review of linguistic, brain disorder, and</u> <u>functional imaging studies leading to a</u> <u>production model</u>. Brain Cogn. 2018 Oct; 126:53-64. PMID: 30176549.



The laboratory of **Raj Balapal** (Analytical Psychopharmacology) is responsible for this publication in *Neuroscience*.

Subbanna S, Joshi V, Basavarajappa BS. <u>Activity-dependent</u> Signaling and Epigenetic <u>Abnormalities in Mice Exposed to Postnatal</u> <u>Ethanol</u>. Neuroscience. 2018 Jul 20. PMID: 30031835.

eNeuro

Catia Teixeira and colleagues in the Emotional Brain Institute published this article recently in *eNeuro*, the online, open access journal of the Society for Neuroscience. The paper was selected for promotion by the Society, which prepared a summary and <u>press release</u>, leading to some <u>media attention</u>. In addition, the article was featured in a <u>Research Highlight</u> piece published by the journal. From the press release: "A mother's presence may have immediate and long-term effects on her child's developing brain by modulating the serotonin system ... The research provides a potential mechanism by which separating a child from his or her mother early in life could derail development."

Courtiol E, Wilson DA, Shah R, Sullivan RM, Teixeira CM. <u>Maternal Regulation of Pups'</u> <u>Cortical Activity: Role of Serotonergic</u> <u>Signaling</u>. eNeuro. 2018 Jul 31;5(4). PMID: 30073196.



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Nunzio Pomara (Geriatric Psychiatry) and coauthor Davide Bruno have published a Commentary piece in the open access *Journal of Alzheimer's Disease Reports*. Dr. Bruno's explanatory article for a general audience, "<u>Alzheimer's disease – don't</u> give up on plaque-busting drugs just yet," appears on The Conversation website.

Pomara N, Bruno D. <u>Pathological Increases in</u> <u>Neuronal Hyperactivity in Selective Cholinergic</u> <u>and Noradrenergic Pathways May Limit the</u> <u>Efficacy of Amyloid-β-Based Interventions in</u> <u>Mild Cognitive Impairment and Alzheimer's</u> <u>Disease</u>. Journal of Alzheimer's Disease Reports. 2018 Sept 21; 2(1):165-7.



This open access *Frontiers* paper was authored by **Vinod Yaragudri** (Emotional Brain Institute and Analytical Psychopharmacology) and colleagues from NKI and NYU.

Alper K, Dong B, Shah R, Sershen H, Vinod KY. <u>LSD Administered as a Single Dose Reduces</u> <u>Alcohol Consumption in C57BL/6J Mice</u>. Frontiers in Pharmacology 2018; 9:994. PMID: 30233372.

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Menahem Krakowski's (Clinical Research) latest paper appears in *Schizophrenia Research*.

Krakowski MI, Czobor P. <u>Distinctive profiles of</u> <u>traits predisposing to violence in schizophrenia</u> <u>and in the general population</u>. Schizophr Res. 2018 Jul 16. PMID: 30021703.



This article in *Neurobiology of Disease* comes from the laboratory of **Efrat Levy** (Dementia Research) and NKI colleagues.

Kaur G, Gauthier SA, Perez-Gonzalez R, Pawlik M, Singh AB, Cosby B, Mohan PV, Smiley JF, Levy E. <u>Cystatin C prevents neuronal loss and behavioral deficits via the endosomal pathway in a mouse model of down syndrome</u>. Neurobiol Dis. 2018 Aug 31. PMID: 30176349.

NeuroImage

Alexander Opitz, Michael Milham, and Charles Schroeder (Biomedical Imaging & Neuromodulation) are among the coauthors of this recent *Neuroimage* paper.

Opitz A, Yeagle E, Thielscher A, Schroeder C, Mehta AD, Milham MP. <u>On the importance of</u> <u>precise electrode placement for targeted</u> <u>transcranial electric stimulation</u>. Neuroimage. 2018 Jul 25; 181:560-567. PMID: 30010008.

Improved Search Now Available Across NCBI Databases

In other NCBI news, an improved search feature developed at NCBI Labs that interprets plain language to give better results for common searches is now available on NCBI's Nucleotide, Protein, Assembly, and Genome database searches. Whether you are searching for a specific gene or for a whole genome, you will now retrieve NCBI's best results regardless of the database you search. The *NLM Technical Bulletin* has the <u>full announcement</u>.

INFO UPDATE

naturebriefing

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The Things You Can Do with an NCBI Account!

Here are just some of the tasks an NCBI account can help with:

- Getting alerts when new records are available
- Creating collections of materials
- Managing your own publication list (bibliography)
- Complying with NIH's Public Access Policy for your funded grants
- Customizing the display of search results

It's almost like having a personal assistant. For more details (and a video tutorial), see this NCBI Insights <u>blog</u>.

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Nature Briefing delivers a free daily roundup of science news, analysis, and opinion to your email inbox. You can <u>sign up here</u>.

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

An Aspirin a Day ... May Not Be All Its Cracked Up To Be

Clinical trial results recently published in the *New England Journal of Medicine* call into question the popular belief that a daily low dose of aspirin is beneficial for older people (including healthy ones). The upshot of this research is that while aspirin is recommended for many people at high risk for heart attack or stroke, it does not appear to be helpful for older people who are not at risk, and in fact it may be harmful. You can read more about the ASPREE study in <u>NIH Research Matters</u>, in <u>The</u> *New York Times*, and <u>on NPR</u>.

Center for Dementia Research Seminar Series

Held on Thursdays at 10 am

Philip Wong, PhD

Boston University School of Medicine

Recent progress in microglias and exosome mediated progression of Alzheimers's disease

October 18th

Wenquan Zou, MD, PhD

Case Western Reserve Univ. School of Medicine

Title TBD

October 25th

Neil MacLusky, PhD

University of Guelph, Ontario, Canada

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

November 15th

Wenbiao Gan, PhD

New York University

Title TBD

November 29th

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 <u>on the OMH website</u>.

EVENTS AND SEMINARS

NAMI-NYS 2018 Education Conference

Moving Forward: Identifying and Advocating for the Latest Breakthroughs in Research and Treatment of Mental Health Issues and Neurobiological Disorders

2018 Education Conference

Friday – Sunday, October 26th – 28th The Albany Marriott

Click here for conference details.



2018 International Mental Health Research Symposium

Hear the 2018 Outstanding Achievement Prizewinners and two Young Investigator Grantees present updates on leading research discoveries across brain and behavior disorders, as well as featured speakers Dr. Altha Stewart and Judge Steven Leifman.

> Friday, October 26th 9:00 am – 4:30 pm

Kaufman Music Center 129 West 67th Street, New York, NY 10023

<u>Click here</u> for more information.

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 5,900 items dating back to 1995 and can be searched from the <u>myNKI website</u>.

Auksztulewicz R, Schwiedrzik CM, Thesen T, Doyle W, Devinsky O, Nobre AC, Schroeder CE, Friston KJ, Melloni L. Not all predictions are equal: 'What' and 'When' predictions modulate activity in auditory cortex through different mechanisms. J Neurosci. 2018 Aug 24. PMID: 30143578.

Barczak A, O'Connell MN, McGinnis T, Ross D, Mowery T, Falchier A, Lakatos P. Top-down, contextual entrainment of neuronal oscillations in the auditory thalamocortical circuit. Proc Natl Acad Sci U S A. 2018 Aug 7;115(32):E7605-E7614. PMID: 30037997. Boland B, Yu WH, Corti O, Mollereau B, Henriques A, Bezard E, Pastores GM, Rubinsztein DC, Nixon RA, Duchen MR, Mallucci GR, Kroemer G, Levine B, Eskelinen EL, Mochel F, Spedding M, Louis C, Martin OR, Millan MJ. Promoting the clearance of neurotoxic proteins in neurodegenerative disorders of ageing. Nat Rev Drug Discov. 2018 Sep;17(9):660-688. PMID: 30116051.

Courtiol E, Wilson DA, Shah R, Sullivan RM, Teixeira CM. Maternal Regulation of Pups' Cortical Activity: Role of Serotonergic Signaling. eNeuro. 2018 Jul 31;5(4). PMID: 30073196.

Demireva EY, Suri D, Morelli E, Mahadevia D, Chuhma N, Teixeira CM, Ziolkowski A, Hersh M, Fifer J, Bagchi S, Chemiakine A, Moore H, Gingrich JA, Balsam P, Rayport S, Ansorge MS. 5-HT2C receptor blockade reverses SSRI-associated basal ganglia dysfunction and potentiates therapeutic efficacy. Mol Psychiatry. 2018 Aug 17. PMID: 30120415.

Elmaghrabi S, Nahmias MJ, Adamo N, Di Martino A, Somandepalli K, Patel V, McLaughlin A, De Sanctis V, Castellanos FX. Is Increased Response Time Variability Related to Deficient Emotional Self-Regulation in Children With ADHD? J Atten Disord. 2018 Jul 26:1087054718788950. PMID: 30047295.

Ezzyat Y, Inhoff M, Davachi L. Differentiation of human medial prefrontal cortex activity underlies long-term resistance to forgetting in memory. J Neurosci. 2018 Jul 16. PMID: 30012697.

Fernandes TMP, Silverstein SM, Butler PD, Kéri S, Santos LG, Nogueira RL, Santos NA. Color vision impairments in schizophrenia and the role of antipsychotic medication type. Schizophr Res. 2018 Sep 7. PMID: 30201549.

García Murillo L, Ramos-Olazagasti MA, Klein RG, Mannuzza S, Castellanos FX. Correlates of nicotine dependence in men with childhood attentiondeficit/hyperactivity disorder: a 33-year follow-up. Atten Defic Hyperact Disord. 2018 Aug 31. PMID: 30171588. Girgis RR, Zoghbi AW, Javitt DC, Lieberman JA. The past and future of novel, non-dopamine-2 receptor therapeutics for schizophrenia: A critical and comprehensive review. J Psychiatr Res. 2018 Jul 21. PMID: 30055853.

Gosselin N, Baril AA, Osorio RS, Kaminska M, Carrier J. Obstructive Sleep Apnea and the Risk of Cognitive Decline in Older Adults. Am J Respir Crit Care Med. 2018 Aug 16. PMID: 30113864.

Gould F, Dunlop BW, Rosenthal JB, Iosifescu DV, Mathew SJ, Neylan TC, Rothbaum BO, Nemeroff CB, Harvey PD. Temporal Stability of Cognitive Functioning and Functional Capacity in Women with Posttraumatic Stress Disorder. Arch Clin Neuropsychol. 2018 Aug 15. PMID: 30124744.

Green C, Stein REK, Storfer-Isser A, Garner AS, Kerker BD, Szilagyi M, Hoagwood KE, Horwitz SM. Do Subspecialists Ask About and Refer Families with Psychosocial Concerns? A Comparison with General Pediatricians. Matern Child Health J. 2018 Jul 20. PMID: 30030742.

Joshi V, Subbanna S, Shivakumar M, Basavarajappa BS. CB1R regulates CDK5 signaling and epigenetically controls Rac1 expression contributing to neurobehavioral abnormalities in mice postnatally exposed to ethanol. Neuropsychopharmacology. 2018 Aug 22. PMID: 30143782.

Kaur G, Gauthier SA, Perez-Gonzalez R, Pawlik M, Singh AB, Cosby B, Mohan PV, Smiley JF, Levy E. Cystatin C prevents neuronal loss and behavioral deficits via the endosomal pathway in a mouse model of down syndrome. Neurobiol Dis. 2018 Aug 31. PMID: 30176349.

Krakowski MI, Czobor P. Distinctive profiles of traits predisposing to violence in schizophrenia and in the general population. Schizophr Res. 2018 Jul 16. PMID: 30021703.

Lohnas LJ, Duncan K, Doyle WK, Thesen T, Devinsky O, Davachi L. Time-resolved neural reinstatement and pattern separation during memory decisions in human hippocampus. Proc Natl Acad Sci U S A. 2018 Jul 31; 115(31):E7418-E7427. PMID: 30006465. Milham MP, Craddock RC, Son JJ, Fleischmann M, Clucas J, Xu H, Koo B, Krishnakumar A, Biswal BB, Castellanos FX, Colcombe S, Di Martino A, Zuo XN, Klein A. Assessment of the impact of shared brain imaging data on the scientific literature. Nat Commun. 2018 Jul 19;9(1):2818. PMID: 30026557.

Murty VP, DuBrow S, Davachi L. Decision-making Increases Episodic Memory via Postencoding Consolidation. J Cogn Neurosci. 2018 Jul 31:1-10. PMID: 30063181.

Opitz A, Yeagle E, Thielscher A, Schroeder C, Mehta AD, Milham MP. On the importance of precise electrode placement for targeted transcranial electric stimulation. Neuroimage. 2018 Jul 25; 181:560-567. PMID: 30010008.

Pandey AK, Ardekani BA, Kamarajan C, Zhang J, Chorlian DB, Byrne KN, Pandey G, Meyers JL, Kinreich S, Stimus A, Porjesz B. Lower Prefrontal and Hippocampal Volume and Diffusion Tensor Imaging Differences Reflect Structural and Functional Abnormalities in Abstinent Individuals with Alcohol Use Disorder. Alcohol Clin Exp Res. 2018 Aug 17. PMID: 30118142.

Qian X, Loo BRY, Castellanos FX, Liu S, Koh HL, Poh XWW, Krishnan R, Fung D, Chee MW, Guan C, Lee TS, Lim CG, Zhou J. Brain-computer-interface-based intervention re-normalizes brain functional network topology in children with attention deficit/ hyperactivity disorder. Transl Psychiatry. 2018 Aug 10;8(1):149. PMID: 30097579.

Ramos-Olazagasti MA, Castellanos FX, Mannuzza S, Klein RG. Predicting the Adult Functional Outcomes of Boys with ADHD 33 Years Later. J Am Acad Child Adolesc Psychiatry. 2018 Aug;57(8):571-582.e1. PMID: 30071978.

Santiago AN, Lim KY, Opendak M, Sullivan RM, Aoki C. Early life trauma increases threat response of peri-weaning rats, reduction of axo-somatic synapses formed by parvalbumin cells and perineuronal net in the basolateral nucleus of amygdala. J Comp Neurol. 2018 Aug 23. PMID: 30136731. Schiller D, Monfils MH, Raio CM, Johnson DC, LeDoux JE, Phelps EA. Addendum: Preventing the return of fear in humans using reconsolidation update mechanisms. Nature. 2018 Jul 26. PMID: 30050064.

Schneier FR, Slifstein M, Whitton AE, Pizzagalli DA, Reinen J, McGrath PJ, Iosifescu DV, Abi-Dargham A. Dopamine Release in Antidepressant-Naive Major Depressive Disorder: A Multimodal [(11)C]-(+)-PHNO Positron Emission Tomography and Functional Magnetic Resonance Imaging Study. Biol Psychiatry. 2018 May 25. PMID: 30041971.

Sidtis DVL, Sidtis JJ. The Affective Nature of Formulaic Language: A Right-Hemisphere Subcortical Process. Front Neurol. 2018 Jul 24; 9:573. PMID: 30087650.

Stern ER, Shahab R, Grimaldi SJ, Leibu E, Murrough JW, Fleysher L, Parides MK, Coffey BJ, Burdick KE, Goodman WK. High-dose ondansetron reduces activation of interoceptive and sensorimotor brain regions. Neuropsychopharmacology. 2018 Aug 8. PMID: 30116006.

Subbanna S, Joshi V, Basavarajappa BS. Activitydependent Signaling and Epigenetic Abnormalities in Mice Exposed to Postnatal Ethanol. Neuroscience. 2018 Jul 20. PMID: 30031835.

Van Lancker Sidtis D, Sidtis JJ. Cortical-subcortical production of formulaic language: A review of linguistic, brain disorder, and functional imaging studies leading to a production model. Brain Cogn. 2018 Oct; 126:53-64. PMID: 30176549.

Yang J, Zhang M, Ahn H, Zhang Q, Jin TB, Li IA, Nemesure M, Joshi N, Jiang H, Miller JM, Ogden RT, Petkova E, Milak MS, Sublette ME, Sullivan GM, Trivedi MH, Weissman M, McGrath PJ, Fava M, Kurian BT, Pizzagalli DA, Cooper CM, McInnis M, Oquendo MA, Mann JJ, Parsey RV, DeLorenzo C. Development and evaluation of a multimodal marker of major depressive disorder. Hum Brain Mapp. 2018 Aug 16. PMID: 30113112. Yuan A, Veeranna, Sershen H, Basavarajappa BS, Smiley JF, Hashim A, Bleiwas C, Berg M, Guifoyle DN, Subbanna S, Darji S, Kumar A, Rao MV, Wilson DA, Julien JP, Javitt DC, Nixon RA. Neurofilament light interaction with GluN1 modulates Neurotransmission and schizophrenia-associated behaviors. Transl Psychiatry. 2018 Aug 24;8(1):167. PMID: 30143609.

Alper K, Dong B, Shah R, Sershen H, Vinod KY. LSD Administered as a Single Dose Reduces Alcohol Consumption in C57BL/6J Mice. Frontiers in Pharmacology 2018; 9:994.

Coureaud G, Fleming G, Thomas-Danguin T, Wilson DA. Cross-species configural perception of binary odor mixtures. Chemical Senses 43[7], e173. 2018. [Abstract]

East BS, Fleming G, Peng K, Olofsson JK, Levy E, Mathews PM et al. Human Apolipoprotein E Genotype Differentially Affects Olfactory Behavior and Sensory Physiology in Mice. Chemical Senses 43[7], e262-e263. 2018. [Abstract]

Harte-Hargrove LC, Galanopoulou AS, French JA, Pitkanen A, Whittemore V, Scharfman HE. Common data elements (CDEs) for preclinical epilepsy research: Introduction to CDEs and description of core CDEs. A TASK3 report of the ILAE/AES joint translational task force. Epilepsia Open 2018.

Krakowski M, Czobor P. Psychopathy, impulsivity and trait aggression as predisposing factors to violence in schizophrenia and in the general population: A profile analysis. European Psychiatry 48[Suppl. 1], S124-S125. 2018. [Abstract]

Marcelle ET, Ho EJ, Kaplan MS, Adler LA, Castellanos FX, Milham MP. Cogmed Working Memory Training Presents Unique Implementation Challenges in Adults With ADHD. Frontiers in Psychiatry 2018; 9:388. Scharfman HE, Galanopoulou AS, French JA, Pitkanen A, Whittemore V, Harte-Hargrove LC. Preclinical common data elements (CDEs) for epilepsy: A joint ILAE/AES and NINDS translational initiative [Supplement Preface]. Epilepsia Open 2018. Siyanova-Chanturia A, Van Lancker-Sidtis D. What on-line processing tells us about formulaic language. In: Siyanova-Chanturia A, Pellicer-Sánchez A, editors. Understanding Formulaic Language: A Second Language Acquisition Perspective. New York: Routledge; 2019.