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

July – August 2021 Stuart Moss, MLS, Editor

PETER LAKATOS (1972-2021)

An Outstanding Scientist, Gone Too Soon

Jonas Obleser's <u>excellent tribute</u> to Peter Lakatos in *Nature Neuroscience* said a great deal about Peter and his contributions to science. It was, if anything, understated. I won't try to add to it here. Rather, I'll speak on a more personal level.

I met Peter when he was still a PhD student in the lab of Professor Gyorgy (George) Karmos at the Hungarian Academy of Sciences. One of my first recollections of Peter was during the 1999 meeting of the international Conference of Cognitive Neuroscience (ICON), Budapest, in June 1999. Among other things that occurred at that memorable meeting, Peter was assigned to be the DJ for the dance party at the end of the conference. He tried "Techno-Music," with moderate success, but fortunately he was also a big fan of Bruce Springsteen, The Eagles, and Tom Petty and the Heartbreakers, so we did indeed dance the night away.

Peter came to work with us in 2002, and with the exception of a short break to return to Budapest to defend his PhD thesis, he lived on City Island in the Bronx and worked at NKI for the rest of his life. He started at NKI as a post-doc but worked his way rapidly through the Research Scientist ranks to the

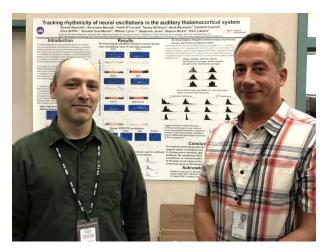
highest level, RS-VI. Peter also met his wife Noelle at NKI and they worked closely together from then on. This is a tribute to both of them. I don't know many married couples who could pull that off. Noelle and Peter became permanent residents in the US and eventually US citizens. During this same time two wonderful daughters — Lili (now 10 years old) and Nora (now 7 years old) — were born into their family.

Peter was remarkable for his impact on science, but he was even more remarkable for the joyful way he pursued life and for his impact on a wide circle of friends. Peter lived on City Island for almost 20 years. In that time, he made countless friends, many of whom none of us at NKI knew at all. Peter's memorial service was held at a place where many City Islanders end up when they die (Schuyler Hill on Tremont Avenue in the Bronx). Half of the people there were Peter's friends from outside of his professional life ... the owner of the wine store, the owner of the photo gallery, the parents of his daughters' friends, the people on Bay Street, where Peter lived, the members of the beach club at the end of Bay Street where Peter was the chairman of the beach maintenance committee. At NKI, Peter was the perennial organizer of "team building"

efforts of all sorts, but especially happy-hour excursions to Bailey's and other local watering holes (always after NKI work hours). The thousands of pictures Peter took at these and other occasions including his travels with his friends and family will bring us smiles for many years to come. Peter taught me and others how to pronounce many (basically unpronounceable) words and phrases in Hungarian, such as his mentor's name (hint - Gyorgy is pronounced nothing like it reads). He also taught us how to give well wishes in Hungarian - e.g., "egeszsegedre" (to your health) – without making the slight mispronunciation that would make it mean "up your you-know-what." Thinking of these things brings to me the sound of Peter's deep melodious voice, vibrant with humor.

Upon hearing of Peter's passing, his good friend and colleague Gyorgy Buzsaki said to me: "How tragic it is to lose a young and prosperous life. If we (older people) die it's one thing but young people should be enjoying life." I could not agree more. I will miss Peter. We will all miss Peter.

Charles E. Schroeder, Ph.D.



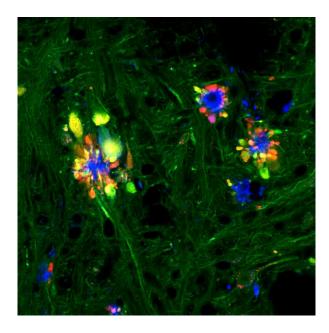
Peter (right) with fellow Research Scientist Sam Neymotin at NKI Science Day in 2019

FROM AROUND THE INSTITUTE

NKI recently got a major aesthetic upgrade with the installation of new artwork created from scientific images. Numerous stunning images are now displayed in the main lobby, the center hallway on the second floor of building 35, and the executive conference room. Many of these images were provided by NKI researchers, while some were obtained from other sources.

This project was spearheaded by NKI Community Building Committee members Melissa Alldred, Brian Russ, and Emily Stern, along with project manager Stuart Linder and Deputy Director Antonio Convit. Funding for the project was provided by NYS OMH Capital Operations.

The wall art project coincides with other building improvements that have gradually been taking place around the Institute. Painting and wall treatment upgrades are being completed step by step, and now the beautiful neuroimages add a very suitable finishing touch to some of the key spaces at NKI.



"Flower blossoms in brain of Alzheimer's disease mouse model" by Dr. Ju-hyun Lee (Center for Dementia Research).

GRANTS RECEIVED



Dr. Jean-Pierre Lindenmayer (Manhattan Psychiatric Center) received a collaborative R01 with Dr. Ragy Girgis at NYSPI titled "Clozapine for the Prevention of Violence in Schizophrenia: a Randomized Clinical Trial". NKI is one of seven sites participating in this clinical trial.



-06660-

Drs. Michael Milham and Stan Colcombe (Center for Biomedical Imaging & Neuromodulation) received an R01 for their project titled "The NKI Rockland Sample II: An Open Resource of Multimodal Brain, Physiology & Behavior Data from a Community Lifespan Sample".



Dr. Mariko Saito (Neurochemistry) in collaboration with Dr. Bhaskar Das at Long Island University received an Administrative Supplement for the R01 titled "Development of Novel MetAP2 inhibitors as potential therapeutics for Microsporidiosis".

-0000



Dr. Stephen Ginsberg (Dementia Research) in collaboration with Dr. Gabriela Chiosis at Sloan Kettering Institute for Cancer Research received a one-year R56 titled "Selective interactome vulnerability across the Alzheimer's disease spectrum".



-0660

Dr. Arnaud Falchier (Translational Neuroscience Laboratories, Center for Biomedical Imaging & Neuromodulation) received a two-year R34 grant from the National Institute of Neurological Disorders and Stroke, with **Charles Schroeder** as coprincipal investigator. The title is "Changing the neuromodulation game: ultrasound fenestration of the blood brain barrier for noninvasive viral transfection of primate CNS neurons".

Rockland County

-00000

Dr. Nunzio Pomara (Geriatric Psychiatry) received a grant from Rockland County to continue "The Memory Education and Research Initiative (MERI)".

-0000

BON VOYAGE!



To mark Gail Silipo's recent retirement, Dr. Dan Javitt sent this tribute.

Gail Silipo began her research career working with Dr. Bert Winsberg on attention deficit disorders in children before starting a research collaboration with me at Bronx Psychiatric Center in the late 1990's. In 1995, Gail moved with me to the Nathan Kline Institute to help found the newly formed Schizophrenia Research Division. Following a short stint in the since-demolished building 37, she moved into her new offices in building 35, where she remained until July 2021 as the guiding force of our Division. She ended her research career with over 50 publications, and fond memories of her colleagues and of the Institute. Ultimately, it came down to a choice between the advancement of science versus travelling with her husband and spending time with family. Science lost, but her family won. The Division and the Institute wish her well!

-00000

DEPARTMENT OF VERSE

Until recently, **Rebecca Zaritsky** was a research assistant in the labs of Drs. Efrat Levy and Mariko Saito. Rebecca is currently an MD/PhD student at New Jersey Medical School and is volunteering on a NYS Psychiatric Institute project. Her poem below was published in the June issue of *Annals of Internal Medicine*.

To Alois Alzheimer, From Auguste Deter

I cannot remember if you had loved me. Somebody must have, once—must have held me and stroked my hair. I think I remember his hands the most, stained with oil.

I remember his shouting, but not his name.

You only remember the sprouting applause inside my head when you opened me.

You see, good sir, I have lost myself, so to say.

Where am I? You tell me I am in a castle, of sorts. But I have lost myself.

Where might my bed be?

Did you love me, sir? I cannot remember, so I will believe anything.

© 2021 American College of Physicians

0000

The Rise of Ransomware

By Des Moloney Director of Information Technology

Ransomware is a type of malware, or computer virus, that encrypts the data on your computer and makes it inaccessible to everyone. To regain access to your data, a monetary ransom needs to be paid to the perpetrator(s). If a ransom is not paid, your data will be permanently deleted. You may have heard of recent ransomware attacks, such as the Colonial Pipeline being brought down. Other lesser-known attacks have also occurred in school districts, local governments, private corporations, and public utilities.

There are two main reasons for the rise of ransomware:

- 1) **It pays:** According to information security vendor Tripwire, the average payout in 2020 was \$300,000. The highest ransom paid was \$10 million.
- 2) It's easy: Hackers don't have to worry about firewalls, VPNs and other security technologies. 99% of ransomware is spread through email so we are all susceptible to ransomware.

NKI IT is taking the following proactive measures to guard against ransomware:

- Maintaining and monitoring anti-virus systems, Intrusion Detection System, Internet Website Filters, Firewalls, Group Policy Restrictions, and internal network micro-segmentation.
- Assessing permissions to ensure that in the event of an outbreak, the damage would be limited.
- Installing Windows Security Updates on computer and servers at NKI.

What you can do to prevent Ransomware:

- Don't click on links in emails: Although this cannot be completely avoided, it should be avoided as much as possible. Links in spam emails typically lead to websites that download and install software that would spread ransomware.
- Don't install unknown software: NKI IT recognizes the fact that there is a myriad of free and open-source software to aid in your research. Don't install software from unknown sources. If there is an open-source tool you are looking to use, NKI IT is happy to help you evaluate it to ensure it is legitimate software.
- Don't give out your information: Some spam emails will ask you for your username and password. The NKI Helpdesk will not ask for your password, particularly over email.

If you suspect that may have installed ransomware, do the following:

- Unplug the network connection and call the NKI Helpdesk (845-398-6521).
- If you are on a laptop, disable the network connection by doing the following:
 - Windows: Click the Start Menu -> Settings -> Network & Internet -> Airplane Mode and enable Airplane Mode.
 - Mac: Click the Apple Menu -> System Preferences -> Network -> Wi-Fi -> Turn Wi-Fi off.
- Worst case, unplug the PC or hold the power button down on the laptop.

PUBLICATIONS OF NOTE

BIOMARKERS IN NEUROPSYCHIATRY

Henry Sershen (first author) and Robert Smith (corresponding author) are the principal authors of this open access paper in *Biomarkers in Neuropsychiatry*. The data for this study were collected and analyzed at NKI.

Sershen H, Guidotti A, Auta J, Drnevich J, Grayson DR, Veldic M et al. <u>Gene expression of methylation cycle and related genes in lymphocytes and brain of patients with schizophrenia and non-psychotic controls</u>. Biomarkers in Neuropsychiatry 2021; 5:100038.



-00000-

John Orczyk and **Yoshinao Kajikawa** (Translational Neuroscience, C-BIN) published their latest work in *Brain Topography*.

Orczyk JJ, Kajikawa Y. <u>Magnifying Traveling</u> <u>Waves on the Scalp</u>. Brain Topogr. 2021 Jun 4. PMID: 34086189.



Christos Lisgaras (Scharfman Lab, Center for Dementia Research) coauthored this paper published recently in *Neuroscience*.

Lisgaras CP, Mikroulis A, Psarropoulou C. Regionspecific Effects of Early- life Status Epilepticus on the Adult Hippocampal CA3 - Medial Entorhinal Cortex Circuitry In vitro: Focus on Interictal Spikes and Concurrent High-frequency Oscillations. Neuroscience. 2021 Jul 1; 466:235-247. PMID: 33961962.



Panos Roussos (Dementia Research) is a coauthor of this paper appearing in *Science*. The paper is accompanied by a Perspective piece titled "White matter and human behavior".

Zhao B, Li T, Yang Y, Wang X, Luo T, Shan Y, Zhu Z, Xiong D, Hauberg ME, Bendl J, Fullard JF, Roussos P, Li Y, Stein JL, Zhu H. Common genetic variation influencing human white matter microstructure. Science. 2021 Jun 18; 372(6548):eabf3736. PMID: 34140357.



Dr. Roussos is also a principal author of this new publication in *Biological Psychiatry*.

Hoffman GE, Ma Y, Montgomery KS, Bendl J, Jaiswal MK, Kozlenkov A, Peters MA, Dracheva S, Fullard JF, Chess A, Devlin B, Sieberts SK, Roussos P. Sex Differences in the Human Brain Transcriptome of Cases with Schizophrenia. Biol Psychiatry. 2021 Mar 25. PMID: 34154796.

Neuroscience & Biobehavioral Reviews

-0000

This review by **Catia Teixeira**, **Edenia Menezes**, and former EBI member Emmanuelle Courtiol (Emotional Brain Institute) appears in *Neuroscience* & *Biobehavioral Reviews*.

Courtiol E, Menezes EC, Teixeira CM. Serotonergic regulation of the dopaminergic system: Implications for reward-related functions. Neurosci Biobehav Rev. 2021 Jun 15; 128:282-293. PMID: 34139249.



Melissa Alldred (Dementia Research), Stephen Ginsberg (Dementia Research), and Sang Han Lee (Biomedical Imaging & Neuromodulation) recently published this paper in the open access *Journal of Clinical Medicine*. The article is part of a special issue on "Aging in Down Syndrome: Latest Clinical Advances and Prospects" for which Dr. Alldred was a co-guest editor.

Alldred MJ, Lee SH, Ginsberg SD. <u>Adiponectin</u> <u>Modulation by Genotype and Maternal Choline</u> <u>Supplementation in a Mouse Model of Down</u> <u>Syndrome and Alzheimer's Disease</u>. Journal of Clinical Medicine 2021; 10(13):2994.



Stephen Ginsberg (Dementia Research) is the first author of this Emerging Methods and Technologies paper published in *The FEBS Journal*.

Ginsberg SD, Neubert TA, Sharma S, Digwal CS, Yan P, Timbus C, Wang T, Chiosis G. <u>Disease-specific interactome alterations via epichaperomics: the case for Alzheimer's disease</u>. FEBS J. 2021 May 24. PMID: 34028172.



Joshua Kantrowitz (Schizophrenia Research) contributed this editorial to *Expert Opinion on Pharmacotherapy*.

Kantrowitz JT. How do we address treating the negative symptoms of schizophrenia pharmacologically? Expert Opin Pharmacother. 2021 Jun 16:1-3. PMID: 34130578.

NeuroImage

Brian Russ (Biomedical Imaging & Neuromodulation) is the first author of this new open access publication in *NeuroImage*.

Russ BE, Petkov CI, Kwok SC, Zhu Q, Belin P, Vanduffel W, Hamed SB. <u>Common functional localizers to enhance NHP & cross-species neuroscience imaging research</u>. Neuroimage. 2021 Aug 15; 237:118203. PMID: 34048898.



John and Diana Sidtis (Brain and Behavior Laboratory, Geriatric Psychiatry) are the lead authors of this paper recently published in the open access journal *Frontiers in Neurology*.

Sidtis JJ, Sidtis DVL, Dhawan V, Tagliati M, Eidelberg D. <u>Stimulation of the Subthalamic Nucleus Changes Cortical-Subcortical Blood Flow Patterns During Speech: A Positron Emission Tomography Study</u>. Front Neurol. 2021 May 26; 12:684596. PMID: 34122323.

Translational Psychiatry

Mohammed Milad (Clinical Research) is co-senior author of this article in the open access journal *Translational Psychiatry*.

Wen Z, Marin MF, Blackford JU, Chen ZS, Milad MR. <u>Fear-induced brain activations distinguish anxious and trauma-exposed brains</u>. Transl Psychiatry. 2021 Jan 13;11(1):46. PMID: 33441547.



This paper by **Babak Tofighi**, **Crystal Lewis**, and colleagues in the Social Solutions & Services Research group appears in the *Journal of Substance Abuse Treatment*.

Tofighi B, Lekas HM, Williams SZ, Martino D, Blau C, Lewis CF. Rural and small metro area naloxone-dispensing pharmacists' attitudes, experiences, and support for a frontline public health pharmacy role to increase naloxone uptake in New York State, 2019. J Subst Abuse Treat. 2021 Mar 27; 129:108372. PMID: 34080543.



-0660

Vilma Gabbay (Clinical Research) coauthored of this Preview piece in the open access journal *Cell Reports Medicine*.

Radulovic J, Gabbay V. <u>PFC mTOR signaling as a biological signature for cognitive deficits in bipolar disorder without psychosis</u>. Cell Rep Med. 2021 May 18;2(5):100282. PMID: 34095884.



This new paper from the lab of **Mariko Saito** (Neurochemistry) was published in *Neurochemical Research*.

Landfield Q, Saito M, Hashim A, Canals-Baker S, Sershen H, Levy E, Saito M. <u>Cocaine Induces Sex-Associated Changes in Lipid Profiles of Brain Extracellular Vesicles</u>. Neurochem Res. 2021 Jul 10. PMID: 34245421.

INFO UPDATE



NKI employees are eligible to register with the New York State Library in order to access the Library's substantial <u>electronic resources</u>. (Note that all New York residents can register, but NYS government employees have access to a lot more.) Instructions to register are <u>here</u>:

http://www.nysl.nysed.gov/apply.htm

(If you need assistance verifying your agency employment while at home, the NKI librarian can do that for you.)



The Journal of Neuroscience was launched in 1981 and to celebrate its 40th anniversary, the journal is publishing a series of articles by authors who published papers in the journal's inaugural year. You can find these reflections on 40 years of progress in neuroscience here.

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

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

You can <u>link to the NKI Library's website</u> 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 (<u>journal finder</u>, <u>online catalog</u>, etc.).

DEPARTMENT OF WONDER



The gene editing technology known as <u>CRISPR</u> has received a lot of attention in recent years for its potential to revolutionize medicine, and there have been some early clinical successes in helping people with sickle cell disease and some other disorders. Now a new report describes another striking success in which patients with amyloidosis improved after receiving an infusion of gene-editing cells. You can read (or listen to) the story <u>on NPR</u>.



There is no doubt that heat waves, wildfires, and other devastating results of climate change are becoming more and more commonplace. But if you have ever wondered just how much hotter it has gotten where you live, *The New York Times* has the answer on this interactive website.

EVENTS AND SEMINARS

NKI All Career Trajectories (ACT) Series

The NKI All Career Trajectories (ACT) Series continues on Monday, August 9th at 12pm. Our next presenter is Dr. Brett East. Dr. East received his PhD in Neuroscience from Tulane University where he studied memory and aging. Following a postdoctoral fellowship at the Nathan Kline Institute and NYU, Dr. East transitioned to his current position as a Scientific Associate with VMLY&R. Dr. East will discuss his recent decision to move from academia to industry and how his new position is going. We look forward to seeing you on August 9th.

The series takes place on the following zoom channel: https://us02web.zoom.us/j/89540284886

Center for Biomedical Imaging and Neuromodulation Works in Progress (WIP)

Please join us for the Works in Progress (WIP) seminar series. These seminars, originally the inperson C-BIN Science Series at the Nathan Kline Institute, have been converted to an online "Works in Progress" format, where researchers may discuss data sets from ongoing experiments and get feedback, as well as give finished presentations. WIP are held via Zoom on Mondays from 11am – 12pm (Eastern time).

Upcoming schedule:

Nov. 29:

Karl-Heinz Nenning, NKI
Serdar Akkol, Northwell
Owen Muir
[available]
NKI Holiday
Kristina Teresa Johnson, MIT
Khena Marie Iyer Swallow, Cornell
[available]
[available]
NKI Holiday
[available]
[available]
[available]
[available]
Arish Alreja, CMU
[available]

To join a meeting, go to **zoom.us** and enter Meeting ID: **919 544 345**

[available]

If you can only join by phone, call: +1 646-558-8656, then enter the zoom meeting ID above.

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 (VIRTUAL) ROAD



Dr. Jean-Pierre Lindenmayer (Manhattan Psychiatric Center) presented the NYU Department of Psychiatry Grand Rounds on June 17. His topic was "Updates in Treatment-Resistant Schizophrenia".



-0000

Dr. Robert Smith (Neurochemistry) co-chaired a symposium panel on "Sulforaphane as a Potential Add-On Treatment Strategy for Schizophrenia and Autism: Basic and Clinical Experimental Findings" at the Schizophrenia International Research Society virtual meeting in April.



-00000

Dr. Smith also chaired a symposium panel on the same topic at the American Society for Clinical Psychopharmacology virtual annual meeting in June.

In both cases, Dr. Smith's own panel presentation was titled "Sulforaphane as a Treatment for Autism: Report of a Randomized Double-Blind Study in Subjects with and without Severe Cognitive Impairment".

-0000

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 6,600 items dating back to 1995 and can be searched from the myNKI website.

Alldred MJ, Lee SH, Ginsberg SD. Adiponectin Modulation by Genotype and Maternal Choline Supplementation in a Mouse Model of Down Syndrome and Alzheimer's Disease. Journal of Clinical Medicine 2021; 10(13):2994.

Badawi A, Sobeih T, Jasmina V. Periocular rejuvenation using a unique non- ablative long-pulse 2940 nm Er:YAG laser. Lasers Med Sci. 2021 Jun 19. PMID: 34146192.

Bejanin A, Iulita MF, Vilaplana E, Carmona-Iragui M, Benejam B, et al. Association of Apolipoprotein E ε4 Allele With Clinical and Multimodal Biomarker Changes of Alzheimer Disease in Adults With Down Syndrome. JAMA Neurol. 2021 Jul 6:e211893. PMID: 34228042.

Cieslak M, Cook PA, He X, Yeh FC, Dhollander T, et al. QSIPrep: an integrative platform for preprocessing and reconstructing diffusion MRI data. Nat Methods. 2021 Jul;18(7):775-778. PMID: 34155395.

Courtiol E, Menezes EC, Teixeira CM. Serotonergic regulation of the dopaminergic system: Implications for reward-related functions. Neurosci Biobehav Rev. 2021 Jun 15; 128:282-293. PMID: 34139249.

Dong Z, Grunebaum MF, Lan MJ, Wagner V, Choo TH, Milak MS, Sobeih T, Mann JJ, Kantrowitz JT. Relationship of Brain Glutamate Response to D-Cycloserine and Lurasidone to Antidepressant Response in Bipolar Depression: A Pilot Study. Front Psychiatry. 2021 Jun 2; 12:653026. PMID: 34149476.

Dulman RS, Zhang H, Banerjee R, Krishnan HR, Dong B, Hungund BL, Vinod KY, Pandey SC. CB1 Receptor Neutral Antagonist Treatment Epigenetically Increases Neuropeptide Y Expression and Decreases Alcohol Drinking.

Neuropharmacology. 2021 May 25:108623. PMID: 34048869.

Elorette C, Fujimoto A, Fredericks JM, Stoll FM, Russ BE, Rudebeck PH. Piecing together the orbitofrontal puzzle. Behav Neurosci. 2021 Apr;135(2):301-311. PMID: 34060882.

Ercan ES, Unsel-Bolat G, Tufan AE, Karakoc Demirkaya S, Bilac O, Celik G, Kılıç BG, Akyol Ardic U, Yalin Sapmaz S, Aksu H, Yolga Tahiroglu A, Karacetin G, Tural U, et al. Effect of Impairment on the Prevalence and Comorbidities of Attention Deficit Hyperactivity Disorder in a National Survey: Nation-Wide Prevalence and Comorbidities of ADHD. J Atten Disord. 2021 May 25:10870547211017985. PMID: 34032170.

Feeney A, Hock RS, Freeman MP, Flynn M, Hoeppner B, Iosifescu DV, Trivedi MH, Sanacora G, Mathew SJ, Debattista C, Ionescu DF, Fava M, Papakostas GI. The effect of single administration of intravenous ketamine augmentation on suicidal ideation in treatment-resistant unipolar depression: Results from a randomized doubleblind study. Eur Neuropsychopharmacol. 2021 Jun 2; 49:122-132. PMID: 34090255.

Frontera JA, Yang D, Lewis A, Patel P, Medicherla C, et al. A prospective study of long-term outcomes among hospitalized COVID-19 patients with and without neurological complications. J Neurol Sci. 2021 Jul 15; 426:117486. PMID: 34000678.

Fuentes-Ibañez A, Siller-Pérez C, Serafín N, Prado-Alcalá RA, Roozendaal B, Quirarte GL.
Corticosterone in the dorsolateral striatum facilitates the extinction of stimulus-response memory. Neurobiol Learn Mem. 2021 Jun 21; 183:107481. PMID: 34166790.

Ginsberg SD, Neubert TA, Sharma S, Digwal CS, Yan P, Timbus C, Wang T, Chiosis G. Disease-specific interactome alterations via epichaperomics: the case for Alzheimer's disease. FEBS J. 2021 May 24. PMID: 34028172.

Goldfeld KS, Wu D, Tarpey T, Liu M, Wu Y, Troxel AB, Petkova E. Prospective individual patient data meta-analysis: Evaluating convalescent plasma for COVID-19. Stat Med. 2021 Jun 23. PMID: 34164838.

Hoffman GE, Ma Y, Montgomery KS, Bendl J, Jaiswal MK, Kozlenkov A, Peters MA, Dracheva S, Fullard JF, Chess A, Devlin B, Sieberts SK, Roussos P. Sex Differences in the Human Brain Transcriptome of Cases with Schizophrenia. Biol Psychiatry. 2021 Mar 25. PMID: 34154796.

Iovieno N, Papakostas GI, Feeney A, Fava M, Mathew SJ, Iosifescu DI, Murrough JW, Macaluso M, Hock RS, Jha MK. Vortioxetine Versus Placebo for Major Depressive Disorder: A Comprehensive Analysis of the Clinical Trial Dataset. J Clin Psychiatry. 2021 Jun 15; 82(4):20r13682. PMID: 34133089.

Jin T, Rehani P, Ying M, Huang J, Liu S, Roussos P, Wang D. scGRNom: a computational pipeline of integrative multi-omics analyses for predicting cell-type disease genes and regulatory networks. Genome Med. 2021 May 27;13(1):95. PMID: 34044854.

Kantrowitz JT. How do we address treating the negative symptoms of schizophrenia pharmacologically? Expert Opin Pharmacother. 2021 Jun 16:1-3. PMID: 34130578.

Kim Y, Sidtis DVL, Sidtis JJ. Emotional Nuance Enhances Verbatim Retention of Written Materials. Front Psychol. 2021 Jun 14; 12:519729. PMID: 34194352. Kreutzmann JC, Marin MF, Fendt M, Milad MR, Ressler K, Jovanovic T. Unconditioned response to an aversive stimulus as predictor of response to conditioned fear and safety: A cross-species study. Behav Brain Res. 2021 Mar 26; 402:113105. PMID: 33417995.

Lam M, Chen CY, Ge T, Xia Y, Hill DW, Trampush JW, Yu J, Knowles E, Davies G, Stahl EA, Huckins L, Liewald DC, Djurovic S, Melle I, Christoforou A, Reinvang I, DeRosse P, Lundervold AJ, Steen VM, Espeseth T, Räikkönen K, Widen E, Palotie A, Eriksson JG, Giegling I, Konte B, Hartmann AM, Roussos P, et al. Identifying nootropic drug targets via large-scale cognitive GWAS and transcriptomics. Neuropsychopharmacology. 2021 May 25. PMID: 34035472.

Landfield Q, Saito M, Hashim A, Canals-Baker S, Sershen H, Levy E, Saito M. Cocaine Induces Sex-Associated Changes in Lipid Profiles of Brain Extracellular Vesicles. Neurochem Res. 2021 Jul 10. PMID: 34245421.

Lisgaras CP, Mikroulis A, Psarropoulou C. Region-specific Effects of Early- life Status Epilepticus on the Adult Hippocampal CA3 - Medial Entorhinal Cortex Circuitry In vitro: Focus on Interictal Spikes and Concurrent High-frequency Oscillations. Neuroscience. 2021 Jul 1; 466:235-247. PMID: 33961962.

Liu Q, Ely BA, Simkovic S, Alonso CM, Gabbay V. Lack of Associations Between C-Reactive Protein and Mood and Anxiety Symptoms in Adolescents. J Child Adolesc Psychopharmacol. 2021 Jun 24. PMID: 34166062.

Logan RW, Xue X, Ketchesin KD, Hoffman G, Roussos P, Tseng G, McClung CA, Seney ML. Sex Differences in Molecular Rhythms in the Human Cortex. Biol Psychiatry. 2021 Mar 8. PMID: 33934884.

Marder SR, Lindenmayer JP, Shah C, Carmack T, Angelov AS, Lundt L. Onset and Resolution of Key Adverse Events in Valbenazine-Treated Patients with Tardive Dyskinesia: Pooled Analyses from Two Long-Term Clinical Trials. CNS Spectr. 2021 Apr; 26(2):151. PMID: 34127126.

Migó M, Guillory SB, McLaughlin CS, Isenstein EL, Grosman HE, Thakkar KN, Castellanos FX, Foss-Feig JH. Investigating Motor Preparation in Autism Spectrum Disorder With and Without Attention Deficit/Hyperactivity Disorder. J Autism Dev Disord. 2021 Jun 23. PMID: 34160725.

Mullins N, Forstner AJ, O'Connell KS, Coombes B, Coleman JRI, et al. Genome-wide association study of more than 40,000 bipolar disorder cases provides new insights into the underlying biology. Nat Genet. 2021 Jun; 53(6):817-829. PMID: 34002096.

Orczyk JJ, Kajikawa Y. Magnifying Traveling Waves on the Scalp. Brain Topogr. 2021 Jun 4. PMID: 34086189.

Pérez-Figueroa RE, Obonyo DJ, Santoscoy S, Surratt H, Lekas HM, Lewis CF, Lyons JS, Amesty S. Housing Instability, Structural Vulnerability, and Non-Fatal Opioid Overdoses Among People Who Use Heroin in Washington Heights, New York City. Behav Med. 2021 Jun 4:1-11. PMID: 34086534.

Radulovic J, Gabbay V. PFC mTOR signaling as a biological signature for cognitive deficits in bipolar disorder without psychosis. Cell Rep Med. 2021 May 18;2(5):100282. PMID: 34095884.

Romaro C, Najman FA, Lytton WW, Roque AC, Dura-Bernal S. NetPyNE Implementation and Scaling of the Potjans-Diesmann Cortical Microcircuit Model. Neural Computation 2021; 33(7):1993-2032.

Russ BE, Petkov CI, Kwok SC, Zhu Q, Belin P, Vanduffel W, Hamed SB. Common functional localizers to enhance NHP & cross-species neuroscience imaging research. Neuroimage. 2021 Aug 15; 237:118203. PMID: 34048898.

Sershen H, Guidotti A, Auta J, Drnevich J, Grayson DR, Veldic M et al. Gene expression of methylation cycle and related genes in lymphocytes and brain of patients with schizophrenia and non-psychotic controls. Biomarkers in Neuropsychiatry 2021; 5:100038.

Shen FX, Wolf SM, Bhavnani S, Deoni S, Elison JT, Fair D, Garwood M, Gee MS, Geethanath S, Kay K, Lim KO, Lockwood Estrin G, Luciana M, Peloquin D, Rommelfanger K, Schiess N, Siddiqui K, Torres E, Vaughan JT. Emerging ethical issues raised by highly portable MRI research in remote and resource-limited international settings.

Neuroimage. 2021 May 29; 238:118210. PMID: 34062266.

Shephard E, Batistuzzo MC, Hoexter MQ, Stern ER, Zuccolo PF, Ogawa CY et al. Neurocircuit models of obsessive-compulsive disorder: limitations and future directions for research. Brazilian Journal of Psychiatry 2021.

Sidtis JJ, Gomez CM. Genotypic Differences in Networks Supporting Regional Predictors of Speech Rate in Spinocerebellar Ataxia: Preliminary Observations. Brain Connect. 2021 Jun 29. PMID: 34030481.

Sidtis JJ, Sidtis DVL, Dhawan V, Tagliati M, Eidelberg D. Stimulation of the Subthalamic Nucleus Changes Cortical-Subcortical Blood Flow Patterns During Speech: A Positron Emission Tomography Study. Front Neurol. 2021 May 26; 12:684596. PMID: 34122323.

Teipel S, Bruno D, Plaska CR, Heslegrave A, Ramos-Cejudo J, Osorio RS, Zetterberg H, Blennow K, Pomara N. Association of CSF sTREM2, a marker of microglia activation, with cholinergic basal forebrain volume in major depressive disorder. J Affect Disord. 2021 Jun 24; 293:429-434. PMID: 34246952.

Tofighi B, Lekas HM, Williams SZ, Martino D, Blau C, Lewis CF. Rural and small metro area naloxone-dispensing pharmacists' attitudes, experiences, and support for a frontline public health pharmacy role to increase naloxone uptake in New York State, 2019. J Subst Abuse Treat. 2021 Mar 27; 129:108372. PMID: 34080543.

Tomaipitinca L, Petrungaro S, D'Acunzo P, Facchiano A, Dubey A, Rizza S, Giulitti F, Gaudio E, Filippini A, Ziparo E, Cecconi F, Giampietri C. c-FLIP regulates autophagy by interacting with Beclin-1 and influencing its stability. Cell Death Dis. 2021 Jul 8; 12(7):686. PMID: 34238932.

van Rooij SJH, Ravi M, Ely TD, Michopoulos V, Winters SJ, Shin J, Marin MF, Milad MR, Rothbaum BO, Ressler KJ, Jovanovic T, Stevens JS. Hippocampal activation during contextual fear inhibition related to resilience in the early aftermath of trauma. Behav Brain Res. 2021 Jun 25; 408:113282. PMID: 33819532.

Wen Z, Marin MF, Blackford JU, Chen ZS, Milad MR. Fear-induced brain activations distinguish anxious and trauma-exposed brains. Transl Psychiatry. 2021 Jan 13;11(1):46. PMID: 33441547.

Wen Z, Chen ZS, Milad MR. Fear extinction learning modulates large-scale brain connectivity. Neuroimage. 2021 Jun 11; 238:118261. PMID: 34126211.

Zaritsky R. To Alois Alzheimer, From Auguste Deter. Ann Intern Med. 2021 Jun;174(6):843. PMID: 34126028.

Zhao B, Li T, Yang Y, Wang X, Luo T, Shan Y, Zhu Z, Xiong D, Hauberg ME, Bendl J, Fullard JF, Roussos P, Li Y, Stein JL, Zhu H. Common genetic variation influencing human white matter microstructure. Science. 2021 Jun 18; 372(6548):eabf3736. PMID: 34140357.

23rd Annual Conference of the International Society for Bipolar Disorders, May 2021

Gunning F, Victoria L, Oberlin L, Solomonov N, Hoptman M, Alexopoulos G. Aging, connectivity of brain networks, and mood disturbances. Bipolar Disorders 23[S1], 26-27. 2021.

Society of Biological Psychiatry 2021 Annual Scientific Convention and Meeting Abstracts

Charan M, Eng GK, Collins K, Bragdon L, Belanger A, Tobe R et al. Neural Mechanisms of Symptom Dimensions During Provocation in Obsessive-Compulsive Disorder. Biological Psychiatry 89[9 Suppl.], S361-S362. 2021.

Vileisis J, Ely B, Kim-Schulze S, Simkovic S, Alexander J, Alonso CM et al. Trier Social Stress Test Does Not Produce a Cytokine Reaction in Adolescence. Biological Psychiatry 89[9 Suppl.], S378, 2021.

Ding O, Gabbay V, Ely B, Simkovic S, Shustik M, Kim-Schulze S et al. Inflammation in Adolescents with Mood Symptoms Who Use THC Compared to Non-THC Users. Biological Psychiatry 89[9 Suppl.], S115. 2021.

Bragdon L, Eng GK, Collins K, Belanger A, Charan M, Fleysher L et al. Urges-For-Action in OCD: Blink Suppression Failure Relates to Clinical Heterogeneity. Biological Psychiatry 89[9 Suppl.], S132. 2021.

Eng GK, Collins K, Bragdon L, Belanger A, Charan M, Tobe RH et al. Insula Functional Connectivity During Urge Suppression in Obsessive-Compulsive Disorder. Biological Psychiatry 89[9 Suppl.], S241. 2021.

Gee D, Hong SJ, Sisk L, Caballero C, Mekhanik A, Roy A et al. Leveraging a Data-Driven Approach to Parsing Heterogeneity in the Effects of Early Adversity on Brain Development. Biological Psychiatry 89[9 Suppl.], S61. 2021.

Grassi-Oliveira R, Tondo LP, Viola TW, Fries G, Kluwe-Schiavon B, Rothmann LM et al. Diffusion Tensor Imaging of Cocaine Users and Proteomic Analysis of Postmortem Brains of Subjects Reporting Cocaine Addiction Suggest White Matter Impairment in BA9 Region of Prefrontal Cortex. Biological Psychiatry 89[9 Suppl.], S233. 2021.

Seo J, Pace-Schott EF, Milad MR, Song H, Germain A. Partial and Total Sleep Deprivation Interferes with Neural Correlates of Consolidation of Fear

Extinction Memory. Biological Psychiatry 89[9 Suppl.], S176. 2021.

Hoptman M, Rette D, Arnold M, Shope C, McDonald E, Iosifescu D. Neural Correlates of Emotion Regulation in Suicidal Ideation and Behavior in Schizophrenia: A Preliminary Study. Biological Psychiatry 89[9 Suppl.], S268. 2021.

Neufeld N, Alexopoulos G, Dickie E, Jeyachandra J, Mulsant B, Whyte E et al. Resting State Functional Connectivity and Relapse in Psychotic Depression. Biological Psychiatry 89[9 Suppl.], S96-S97. 2021.

Meftah A, Kantrowitz J. D-Serine Safety: A Cross Species Review. Biological Psychiatry 89[9 Suppl.], S198. 2021.

Tondo LP, Borelli WV, Rothmann LM, Leal-Conceicao E, Franco AR, Ferreira PE et al. Cortical Thickness in Cocaine Use Disorder and its Relation to Age-Related Brain Atrophy. Biological Psychiatry 89[9 Suppl.], S368-S369. 2021.

O'Gorman C, Jones A, Iosifescu DV, Thomas Z, Tabuteau H. Rapid Effects of AXS-05, an Oral NMDA Receptor Antagonist, in Major Depressive Disorder: Results from Two Randomized, Double-Blind, Controlled Trials. Biological Psychiatry 89[9 Suppl.], S244. 2021.

Chase E, Ely B, Khodakhah D, Nguyen TNB, Shustik M, Kim-Schulze S et al. The Relationship Between Family Functioning and Cytokine Levels in Adolescents with Psychiatric Symptoms. Biological Psychiatry 89[9 Suppl.], S286-S287. 2021.

Sehatpour P, De Baun H, Javitt D, Margolin D, Brice N, Carlton M et al. CVN058, a 5-HT3 Receptor Antagonist, Shows Acute, Dose Dependent Improvement of Mismatch Negativity in a Double-Blind, Placebo-Controlled, Single Dose Cross-Over Study in Schizophrenia and Schizoaffective Disorder. Biological Psychiatry 89[9 Suppl.], S27. 2021.

Qi W, Wen Z, Chen J, Wang J, Milad M, Goff DC. Aberrant Resting-State Functional Connectivity of the Globus Pallidus Subregions in First-Episode Schizophrenia. Biological Psychiatry 89[9 Suppl.], S322. 2021.

Abstracts of the Research Society on Alcoholism jointly with the International Society for Biomedical Research on Alcoholism, June 2021

Saito M, Hui M, Canals-Baker S, Nandwana NK, Smiley JF, Wilson DA et al. RETINOIC ACID RECEPTOR AGONIST BT75 ATTENUATES LONG-LASTING INCREASES IN HIPPOCAMPAL GFAP-POSITIVE ASTROCYTES AND GABA CELL DEFICITS INDUCED BY NEONATAL ETHANOL EXPO. Alcoholism: Clinical & Experimental Research 45[S1], 160A. 2021.

Basavaraj BS. ENDOCANNABINOID SIGNALING IN ALCOHOL-INDUCED NEUROEPIGENETIC ABNORMALITIES. Alcoholism: Clinical & Experimental Research 45[S1], 19A. 2021.

Smiley JF, Bleiwas CB, Canals S, Sears R, Vaddi P, Teixeira CM et al. NEONATAL ETHANOL CAUSES PROFOUND CHOLINERGIC CELL LOSS IN THE BASAL FOREBRAIN OF ADULT ANIMALS. Alcoholism: Clinical & Experimental Research 45[S1], 160A. 2021.

Wilson DA, Shah P, Fleming G, Williams CRO, Smiley JF, Saito M. IMPOSED SLEEP DEPRIVATION

REVEALS NOVEL FUNCTIONAL CONNECTIVITY IN EMOTION-RELATED CIRCUITS IN ADULT MICE EXPOSED TO DEVELOPMENTAL ETHANOL. Alcoholism: Clinical & Experimental Research 45[S1], 163A. 2021.

Annual Meeting of the International Society for Extracellular Vesicles, May 2021

D'Acunzo P, Levy E. FA01 Mitochondrial Dysfunction Alters the Number and Content of Mitovesicles, Newly Identified Mitochondriaderived Extracellular Vesicles. Journal of Extracellular Vesicles 10[S1], 3. 2021.

Kim Y, Kurz M, Aroh A, Levy E. PS21.05 Sex effects on brain extracellular vesicles during aging. Journal of Extracellular Vesicles 10[S1], 265-266. 2021.

Rachmany L, Liemisa B, Newbury SF, Aroh A, Levy E, Mathews PM. PS07.11 A Parkinson's disease-causing LRRK2 mutation leads to an early disruption of brain exosome biogenesis. Journal of Extracellular Vesicles 10[S1], 165. 2021.