# 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

May – June 2021

Stuart Moss, MLS, Editor

### A LOOK BACK AT 20 YEARS OF CLINICAL RESEARCH AT NKI

After 21 years at NKI, **Connie Shope, PhD** is retiring. Beloved by her colleagues, Connie contributed to many studies in the Clinical Research and Schizophrenia Research Departments during her time here. As she prepared for her departure, she took the opportunity to reminisce about her tenure, providing a nice overview of 20+ years of clinical research at NKI.



I came to NKI in May of 2000 to work in the Clinical Research Department as psychologist. My first boss was Dr. Jan Volavka. Linda Kline was the department administrator and go-to problem solver. The staff I joined included Dr. Merry Platt, Dr. Karen Nolan, Dr. Matt Hoptman, and research nurse Santha Vadian (Daniel Antonius and Lee Duncan joined later). The Clinical Research and Evaluation Facility (CREF)\* was almost brand new and running under the direction of Dr. Les Citrome. This specialized unit was the result of a unique collaboration between Rockland Psychiatric Center (RPC), which provided clinical staffing, and NKI, which administered the unit and oversaw the research operations.

I remember vividly coming to NKI for my interview, hoping I would be able to land this dream job. It seemed the perfect way to marry my research interests with my clinical skills. Happily, the CREF clinical staff was very welcoming, and I quickly became embedded on the unit and very involved with the patients, running groups, and doing cognitive screening and clinical interviews.

The CREF was divided into two sides. The A-Side was for patients with primarily negative symptoms of schizophrenia, and in those days Dr. Dan Javitt and his team were recruiting and working with these patients in his glycine studies. The B-Side was for patients who had problems with anger management, aggression, and impulse control. We had specially trained staff to work with this

aggressive population and over the years I worked on many studies with this group and loved every minute of it.

After Dr. Volavka retired, Dr. Citrome took over the Clinical Research department. At that time, the department was doing a lot of clinical trials -- many for second-generation antipsychotics and mood stabilizers that are now in common use (Quetiapine, Ziprasidone, Aripiprazole, Lamotrigine, and others). Always interested in the innovative work of Dr. Javitt, I started to become more involved with his Schizophrenia Research team during this time as well.

It took a while to find new department leadership after Dr. Citrome left NKI, but finally Dr. Dan losifescu was recruited and took over the department. Sadly, we lost the CREF in those intervening years, but Dr. losifescu has brought a new vision to the department, and it has grown in leaps and bounds in the four short years he's been here. Although schizophrenia research continues, the new focus is more on mood and anxiety disorders. I'm a bit tired now and ready to retire, but as I do, I wish this new, talented, and energetic team all the best in their future work!

\* [For those who are not familiar with the CREF, this 2008 *Psychiatric Services* article provides a description: "Public-academic partnerships: integrating state psychiatric hospital treatment and clinical research".]

#### **GRANTS RECEIVED**



Dr. Antigona Martinez (Schizophrenia Research) received an R21 from the NIMH titled "Colliculopulvinar Contributions to Alpha Dysregulation and Cognitive Dysfunction in Schizophrenia."

#### FROM AROUND THE INSTITUTE



Please join Dr. Pomara and the Geriatric
Psychiatry Division in celebrating the Longest Day!

What is the Longest Day? The Longest Day is the day with the most light — the summer solstice. And it's the day the Alzheimer's Association calls on everyone to fight Alzheimer's disease by raising funds and awareness through an activity of their choice.

On June 17<sup>th</sup>, 2021, we will be enjoying our favorite summer activity (e.g., BBQ with our family, go for a hike, get ice cream with your grandkids) to help advance the care, support, and research efforts of the Alzheimer's Association. We ask that everyone join us in celebrating the Longest Day by doing their favorite summer activity, taking a picture, and sharing it with us, and if you can — donate to our team. We will post all the fun summer activity pictures after June 20<sup>th</sup>. We look forward to seeing what summer activities you and your family enjoy most!

If you post to social media – include hashtags: #EndAlz # THELONGESTDAY #NKIGERIPROGRAM

**Team Name:** Nathan Kline Institute GERI Program and Friends

<u>Click here</u> for the Team Link to donate.

Email your pictures to <a href="mailto:Anne.schatz@nki.rfmh.org">Anne.schatz@nki.rfmh.org</a>.





Center for Dementia Research Director **Dr. Ralph Nixon** is a regular contributor to the Alzforum research networking site. His latest commentary can be found <u>here</u>.



**Dr. Dan Iosifescu**, Director of Clinical Research, was consulted as an expert source for an article published online in *U.S. News*: "Can Herbs and Other Supplements Treat Depression?" While there is some evidence that certain supplements can help some people, Dr. Iosifescu generally advises caution and clinical supervision.

#### **PUBLICATIONS OF NOTE**



**Michael Milham** (Biomedical Imaging & Neuromodulation) coauthored this open access paper in *Scientific Reports* describing a survey developed and administered during the pandemic. A <u>Twitter thread</u> by the first author provides an overview.

Nikolaidis A, Paksarian D, Alexander L, Derosa J, Dunn J, Nielson DM, Droney I, Kang M, Douka I, Bromet E, Milham M, Stringaris A, Merikangas KR. The Coronavirus Health and Impact Survey (CRISIS) reveals reproducible correlates of pandemic-related mood states across the Atlantic. Sci Rep. 2021 Apr 14;11(1):8139. PMID: 33854103.

-0000

### nature

**Pasquale D'Acunzo** (Dementia Research) is a coauthor of this paper recently published in *Nature*.

Maiani E, Milletti G, Nazio F, Holdgaard SG, Bartkova J, Rizza S, Cianfanelli V, Lorente M, Simoneschi D, Di Marco M, D'Acunzo P, et al. AMBRA1 regulates cyclin D to guard S-phase entry and genomic integrity. Nature. 2021 Apr; 592(7856):799-803. PMID: 33854232.



0000

**Ralph Nixon** (Director, Center for Dementia Research) coauthored this Alzheimer's disease review for *Nature Reviews Disease Primers*.

Knopman DS, Amieva H, Petersen RC, Chételat G, Holtzman DM, Hyman BT, Nixon RA, Jones DT. Alzheimer disease. Nat Rev Dis Primers. 2021 May 13; 7(1):33. PMID: 33986301.



-0000

**Pearl Lie, Ralph Nixon**, and other members of the Center for Dementia Research published their latest open access paper in *Cell Reports*.

Lie PPY, Yang DS, Stavrides P, Goulbourne CN, Zheng P, Mohan PS, Cataldo AM, Nixon RA. <u>Post-Golgi carriers</u>, <u>not lysosomes</u>, <u>confer lysosomal properties to pre-degradative organelles in normal and dystrophic axons</u>. Cell Rep. 2021 Apr 27; 35(4):109034. PMID: 33910020.

-0000

### Current Biology

This commentary piece by **Donald Wilson** and **Brett East** (Emotional Brain Institute) appears in a recent issue of *Current Biology*.

Wilson DA, East BS. <u>Good scents: A short road</u> <u>from olfaction to satisfaction</u>. Curr Biol. 2021 Apr 26; 31(8):R374-R376. PMID: 33905691.

-0000



**Vinod Yaragudri** (Emotional Brain Institute) published this open access review in *Frontiers in Psychiatry*.

Mannekote Thippaiah S, Iyengar SS, Vinod KY. Exo- and Endo-cannabinoids in Depressive and Suicidal Behaviors. Front Psychiatry. 2021 Apr 23; 12:636228. PMID: 33967855.

# JOURNAL of AFFECTIVE DISORDERS

**Nunzio Pomara, Chelsea Reichert Plaska** (Geriatric Psychiatry), and **Ricardo Osorio** (Clinical Research) are coauthors of this article recently published in the *Journal of Affective Disorders*.

Pomara N, Bruno D, Plaska CR, Pillai A, Ramos-Cejudo J, Osorio R, Imbimbo BP, Heslegrave A, Zetterberg H, Blennow K. <u>Evidence of upregulation of the cholinergic anti-inflammatory pathway in late-life depression.</u> J Affect Disord. 2021 May 1; 286:275-281. PMID: 33756305.

-00000



A new review by **Raj Balapal** and **Subbanna Shivakumar** (Dementia Research) appears in the open access *International Journal of Molecular Sciences*.

Basavarajappa BS, Subbanna S. <u>Histone</u> <u>Methylation Regulation in Neurodegenerative</u> <u>Disorders</u>. Int J Mol Sci. 2021 Apr 28;22(9):4654. PMID: 33925016.

## NEUROPSYCHOPHARMACOLOGY REPORTS

-0000

Masuo Ohno (Dementia Research) published this brief report in the open access journal Neuropsychopharmacology Reports (the official publication of the Japanese Society of Neuropsychopharmacology).

Ohno M. Accelerated long-term forgetting is a BACE1 inhibitor-reversible incipient cognitive phenotype in Alzheimer's disease model mice. Neuropsychopharmacol Rep. 2021 Mar 22. PMID: 33749160.



John Orczyk, Yoshinao Kajikawa (Translational Neuroscience Labs, Center for Biomedical Imaging & Neuromodulation) and other NKI investigators published their latest research in *Frontiers in Systems Neuroscience*.

Orczyk J, Schroeder CE, Abeles IY, Gomez-Ramirez M, Butler PD, Kajikawa Y. <u>Comparison of Scalp ERP to Faces in Macaques and Humans</u>. Front Syst Neurosci. 2021 Apr 16; 15:667611. PMID: 33967709.

-0000



This paper on housing and HIV care by **Helen-Maria Lekas**, **Crystal Lewis** (Social Solutions & Services) and colleagues appears in *AIDS and Behavior*.

Lekas HM, Lewis C, Lunden S, Olender SA, Rosen-Metsch L. <u>Single Room Occupancy Residence:</u>

<u>Processes Linking Housing to Not Engaging in HIV Outpatient Care</u>. AIDS Behav. 2021 Mar 20.

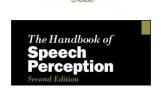
PMID: 33743114.



-0000

**Babak Tofighi** (Social Solutions & Services) is the corresponding author of this report in the *Journal of Addiction Medicine* on a telemedicine buprenorphine clinic initiative in New York City.

Tofighi B, McNeely J, Walzer D, Fansiwala K, Demner A, Chaudhury CS, Subudhi I, Schatz D, Reed T, Krawczyk N. <u>A Telemedicine Buprenorphine Clinic to Serve New York City: Initial Evaluation of the NYC Public Hospital System's Initiative to Expand Treatment Access during the COVID-19 Pandemic. J Addict Med. 2021 Feb 5. PMID: 33560696.</u>



**Diana Van Lancker-Sidtis** (Brain & Behavior Lab) coauthored two chapters in the recently published second edition of *The Handbook of Speech Perception* (Wiley-Blackwell, 2021).

Van Lancker-Sidtis D, Yang SY. Perception of Formulaic Speech: Structural and Prosodic Characteristics of Formulaic Expressions (p. 309-32).

Van Lancker-Sidtis D, Zaske R. Who We Are: Signaling Personal Identity in Speech (p. 365-97).

#### **INFO UPDATE**

Library services continue uninterrupted. As always, if you need documents, assistance with literature searching, or have reference questions, the <u>NKI</u> <u>librarian</u> is at your service.



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.)



This spring, several departments at NYU sponsored a workshop series on Race and Racism in Science. The four lectures were recorded and can now be viewed online.

- The history of race as a scientific concept
- The impact of science on everyday beliefs about race
- Racial and ethnic biases in health care from slavery to the present
- Bias in artificial intelligence and data science

0000



The PubMed citation matchers (single and batch) have been updated to PubMed's cloud environment. In case you were not aware, the <u>Single Citation Matcher</u> allows you to search PubMed by matching specific citation elements using a fill-in-the-blank form. Very convenient! For more information about this and the Batch Citation Matcher, see <u>this article</u> in the *NLM Technical Bulletin*.



A recent blog post from the National Library of Medicine highlighted various historical documents related to mental health that are held by the library. These include books and journals, images, and films, some of which can be viewed online. For details, see "NLM Collections Tour: Mental Health".

-0000



A Words of Advice piece published in *The FEBS Journal* provides some guidance and tips to help land a job after completing a PhD. If that sounds useful, check out "How to build a well-rounded CV and get hired after your PhD". It's free from the publisher.

# **Medscape**

Former OMH Chief Medical Officer Dr. Lloyd Sederer recently published an online commentary on the societal response needed to address the mental health consequences of the pandemic. "How to Improve Our Response to COVID's Mental Tolls" appears on Medscape Psychiatry.

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>, <u>PsychiatryOnline</u>, etc.).

#### **DEPARTMENT OF WONDER**

### The New York Times

The early days of research into the therapeutic use of psychedelic drugs was followed by the counterculture movement and an eventual government ban on use of the drugs. But now the cultural landscape is shifting, and there is once again funding for psychedelic research (including at NYU). This recent New York Times article — "The Psychedelic Revolution Is Coming. Psychiatry May Never Be the Same" — will get you up to speed on the topic.

#### Weill Cornell Medicine Samuel J. Wood Library

The Cornell medical library has a new online resource aimed at educating the public on drug advertising. "From Snake Oil to Social Media: Drug Advertising & Your Health" is "an asynchronous interactive webpage-based online workshop on historical and modern methods of pharmaceutical advertising, enduring issues in medication regulation and safety, and the ongoing importance of patient engagement, advertising and medication literacy."



-0000

As reported on the NIH Research Matters blog, researchers have developed a system for people with paralysis that quickly translates brain signals for handwriting into text. By recording and then decoding the unique pattern of brain activity for each letter when a paralyzed person attempts to write (i.e., imagines writing), researchers enabled participants to compose sentences communicate much more quickly and accurately than before. This new brain-computer interface system represents an advance that could someday help enable people to communicate who have lost the ability to write and speak.

#### **EVENTS AND SEMINARS**

#### **NKI All Career Trajectories (ACT) Series**

The NKI All Career Trajectories (ACT) Series is scheduled to present its next speaker on Monday, June 14<sup>th</sup> at 12pm.

The goal of this series is to provide scientists at all career levels – from undergraduates to research technicians to post-doctoral fellows – information on alternative careers in science and how these scientists made their career choices. Throughout the series we will bring in (through zoom calls) scientists in various careers such as government, industry, library sciences, data analysis, and more, who will discuss their career paths and how they made important life and career choices.

The series takes place on the following zoom channel: <a href="https://us02web.zoom.us/j/89540284886">https://us02web.zoom.us/j/89540284886</a>

-0000

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



Two NKI researchers were among the six panelists at the NYU Center for Cognitive Neurology Annual Research Day held May 26<sup>th</sup> online. **Helen Scharfman, PhD** (Dementia Research) spoke about "The overlap between Alzheimer's disease and epilepsy: insight from animal models" and **Ricardo Osorio, MD** (Clinical Research) presented on "Sleep apnea in older adults: a great challenge for the future". The scientific talks were followed by a panel discussion for young investigators.

**Pasquale D'Acunzo, PhD** (Dementia Research, Laboratory of Dr. Efrat Levy) presented at the NYU Neuroscience Institute Weekly Group Meeting on May 5<sup>th</sup>. His topic was "Mitovesicles: Newly Identified Extracellular Vesicles Altered with Aging and Disease".

-0000



-0000

Pasquale D'Acunzo, PhD and Yohan Kim, PhD, both from Efrat Levy's lab, each presented on their research at the 15th International Conference on Alzheimer's and Parkinson's Diseases and related neurological disorders (AD/PD™ 2021). You can read about their presentations in the conference report published in Extracellular Vesicles and Circulating Nucleic Acids.

0000



The Society of Biological Psychiatry 2021 Virtual Meeting included two symposia organized by NKI faculty. Joshua Kantrowitz, MD (Schizophrenia Research) chaired the symposium on "5-HT Type 3 Receptors Antagonists in Schizophrenia and Depression" and was a presenter. Dan Iosifescu, MD, MSc (Clinical Research) co-chaired the symposium on "Transcranial Near-Infrared Light for Brain Injury and Neurodegeneration". In addition, several NKI faculty contributed to posters at the meeting.



Michael Milham, MD, PhD and Charles Schroeder, PhD (Center for Biomedical Imaging & Neuromodulation) were on the organizing committee for the PRIMATE Data Exchange (PRIMEDE) Global Collaboration Workshop held in April. Drs. Milham and Schroeder are among the leaders of PRIME-DE, the goal of which is to create an open science resource for the neuroimaging community that will facilitate the mapping of the non-human primate connectome.

#### **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.

Autio JA, Zhu Q, Li X, Glasser MF, Schwiedrzik CM, Fair DA, Zimmermann J, Yacoub E, Menon RS, Van Essen DC, Hayashi T, Russ B, Vanduffel W. Minimal specifications for non-human primate MRI: Challenges in standardizing and harmonizing data collection. Neuroimage. 2021 Apr 18; 236:118082. PMID: 33882349.

Babiloni C, Arakaki X, Azami H, Bennys K, Blinowska K, et al. Measures of resting state EEG rhythms for clinical trials in Alzheimer's disease:

Recommendations of an expert panel. Alzheimers

Dement. 2021 Apr 15. PMID: 33860614.

Basavarajappa BS, Subbanna S. Histone Methylation Regulation in Neurodegenerative Disorders. Int J Mol Sci. 2021 Apr 28;22(9):4654. PMID: 33925016.

Borda JP, Friedman HL, Castaño GA, Rodríguez HA, Muñoz CF, Tofighi B. Barriers to HIV and Hepatitis C care for people who inject drugs in Colombia. AIDS Care. 2021 Feb 22:1-6. PMID: 33615915.

Borelli WV, Leal-Conceição E, Andrade MA, Esper NB, Feltes PK, Soder RB, Matushita CS, Hartmann LM, Radaelli G, Schilling LP, Moriguchi-Jeckel C, da Silva AMM, Portuguez MW, Franco AR, da Costa JC. Increased Glucose Activity in Subgenual Anterior Cingulate and Hippocampus of High Performing Older Adults, Despite Amyloid Burden. J Alzheimers Dis. 2021 Apr 28. PMID: 33935091.

Colbourn R, Hrabe J, Nicholson C, Perkins M, Goodman JH, Hrabetova S. Rapid volume pulsation of the extracellular space coincides with epileptiform activity in mice and depends on the NBCe1 transporter. J Physiol. 2021 May 3. PMID: 33942325. El-Shahawy O, Schatz D, Sherman S, Shelley D, Lee JD, Tofighi B. E-cigarette use and beliefs among adult smokers with substance use disorders. Addict Behav Rep. 2020 Dec 17; 13:100329. PMID: 33385062.

Ely BA, Liu Q, DeWitt SJ, Mehra LM, Alonso CM, Gabbay V. Data-driven parcellation and graph theory analyses to study adolescent mood and anxiety symptoms. Transl Psychiatry. 2021 May 3;11(1):266. PMID: 33941762.

Gambino G, Gambino T, Connah L, La Cava F, Evrard H, Angelovski G. RGD- Peptide Functionalization Affects the *In Vivo* Diffusion of a Responsive Trimeric MRI Contrast Agent through Interactions with Integrins. J Med Chem. 2021 May 7. PMID: 33961422.

Gau R, Noble S, Heuer K, Bottenhorn KL, Bilgin IP, et al.; Brainhack Community. Brainhack: Developing a culture of open, inclusive, community-driven neuroscience. Neuron. 2021 Apr 28. PMID: 33932337.

Ghassemlou S, Marini C, Chemi C, Ranjit YS, Tofighi B. Harmful smartphone applications promoting alcohol and illicit substance use: a review and content analysis in the United States. Transl Behav Med. 2020 Oct 12;10(5):1233-1242. PMID: 33044528

Gindina S, Botsford B, Cowansage K, LeDoux J, Klann E, Hoeffer C, Ostroff L. Upregulation of eIF4E, but not other translation initiation factors, in dendritic spines during memory formation. J Comp Neurol. 2021 Apr 17. PMID: 33864263.

Gordon KS, Chiasson MA, Hoover DR, Martins SS, Wilson PA, Lewis CF. Difference in HIV testing behavior by injection status, among users of illicit drugs. AIDS Care. 2021 Apr 15:1-8. PMID: 33856945.

Han MJ, Park CU, Kang S, Kim B, Nikolaidis A, Milham MP, Hong SJ, Kim SG, Baeg E. Mapping functional gradients of the striatal circuit using simultaneous microelectric stimulation and ultrahigh-field fMRI in non-human primates. Neuroimage. 2021 Apr 18; 236:118077. PMID: 33878384.

Hartig R, Glen D, Jung B, Logothetis NK, Paxinos G, Garza-Villarreal EA, Messinger A, Evrard HC. The Subcortical Atlas of the Rhesus Macaque (SARM) for neuroimaging. Neuroimage. 2021 Mar 29; 235:117996. PMID: 33794360.

Iravani B, Arshamian A, Lundqvist M, Kay LM, Wilson DA, Lundström JN. Odor identity can be extracted from the reciprocal connectivity between olfactory bulb and piriform cortex in humans. Neuroimage. 2021 May 2; 237:118130. PMID: 33951509.

Klink PC, Aubry JF, Ferrera VP, Fox AS, Froudist-Walsh S, Jarraya B, Konofagou EE, Krauzlis RJ, Messinger A, Mitchell AS, Ortiz-Rios M, Oya H, Roberts AC, Roe AW, Rushworth MFS, Sallet J, Schmid MC, Schroeder CE, Tasserie J, Tsao DY, Uhrig L, Vanduffel W, Wilke M, Kagan I, Petkov CI. Combining brain perturbation and neuroimaging in non-human primates. Neuroimage. 2021 Mar 29; 235:118017. PMID: 33794355.

Knopman DS, Amieva H, Petersen RC, Chételat G, Holtzman DM, Hyman BT, Nixon RA, Jones DT. Alzheimer disease. Nat Rev Dis Primers. 2021 May 13; 7(1):33. PMID: 33986301.

Lekas HM, Lewis C, Lunden S, Olender SA, Rosen-Metsch L. Single Room Occupancy Residence: Processes Linking Housing to Not Engaging in HIV Outpatient Care. AIDS Behav. 2021 Mar 20. PMID: 33743114.

Lie PPY, Yang DS, Stavrides P, Goulbourne CN, Zheng P, Mohan PS, Cataldo AM, Nixon RA. Post-Golgi carriers, not lysosomes, confer lysosomal properties to pre-degradative organelles in normal and dystrophic axons. Cell Rep. 2021 Apr 27; 35(4):109034. PMID: 33910020.

Lindenmayer JP, Rizvi S. Augmentation with Pimavanserin in Treatment Refractory Schizophrenia: Case Report. J Clin Psychopharmacol. 2021 May-Jun 01; 41(3):337-339. PMID: 33857029.

Maiani E, Milletti G, Nazio F, Holdgaard SG, Bartkova J, Rizza S, Cianfanelli V, Lorente M, Simoneschi D, Di Marco M, D'Acunzo P, et al. AMBRA1 regulates cyclin D to guard S-phase entry and genomic integrity. Nature. 2021 Apr; 592(7856):799-803. PMID: 33854232.

Mannekote Thippaiah S, Iyengar SS, Vinod KY. Exoand Endo-cannabinoids in Depressive and Suicidal Behaviors. Front Psychiatry. 2021 Apr 23; 12:636228. PMID: 33967855.

Menezes EC, Silva RS, Dos Santos IMB, Givigi RCN. CA<sup>2</sup>JU: An Alternative Communication System Developed in Brazil for Children with Disabilities. TOJET: The Turkish Online Journal of Educational Technology 2021; 20(2):23-34.

Nagre N, Nicholson G, Cong X, Pearson A, Hattler J, Kim WK et al. Activation of Cannabinoid-2 Receptor Protects Against Pseudomonas Aeruginosa Induced Acute Lung Injury and Inflammation. American Journal of Respiratory and Critical Care Medicine 203, A4363. 2021. [Abstract]

Nikolaidis A, Paksarian D, Alexander L, Derosa J, Dunn J, Nielson DM, Droney I, Kang M, Douka I, Bromet E, Milham M, Stringaris A, Merikangas KR. The Coronavirus Health and Impact Survey (CRISIS) reveals reproducible correlates of pandemicrelated mood states across the Atlantic. Sci Rep. 2021 Apr 14;11(1):8139. PMID: 33854103.

Novikova G, Kapoor M, Tcw J, Abud EM, Efthymiou AG, Chen SX, Cheng H, Fullard JF, Bendl J, Liu Y, Roussos P, Björkegren JL, Liu Y, Poon WW, Hao K, Marcora E, Goate AM. Integration of Alzheimer's disease genetics and myeloid genomics identifies disease risk regulatory elements and genes. Nat Commun. 2021 Mar 12; 12(1):1610. PMID: 33712570.

Ohno M. Accelerated long-term forgetting is a BACE1 inhibitor-reversible incipient cognitive phenotype in Alzheimer's disease model mice. Neuropsychopharmacol Rep. 2021 Mar 22. PMID: 33749160.

Orczyk J, Schroeder CE, Abeles IY, Gomez-Ramirez M, Butler PD, Kajikawa Y. Comparison of Scalp ERP to Faces in Macaques and Humans. Front Syst Neurosci. 2021 Apr 16; 15:667611. PMID: 33967709.

Park BY, Hong SJ, Valk SL, Paquola C, Benkarim O, Bethlehem RAI, Di Martino A, Milham MP, Gozzi A, Yeo BTT, Smallwood J, Bernhardt BC. Differences in subcortico-cortical interactions identified from connectome and microcircuit models in autism. Nat Commun. 2021 Apr 13; 12(1):2225. PMID: 33850128.

Piras F, Piras F, Abe Y, Agarwal SM, Anticevic A, et al. White matter microstructure and its relation to clinical features of obsessive-compulsive disorder: findings from the ENIGMA OCD Working Group. Transl Psychiatry. 2021 Mar 17; 11(1):173. PMID: 33731673.

Pittman-Polletta BR, Wang Y, Stanley DA, Schroeder CE, Whittington MA, Kopell NJ. Differential contributions of synaptic and intrinsic inhibitory currents to speech segmentation via flexible phase-locking in neural oscillators. PLoS Comput Biol. 2021 Apr 14; 17(4):e1008783. PMID: 33852573.

Pomara N, Bruno D, Plaska CR, Pillai A, Ramos-Cejudo J, Osorio R, Imbimbo BP, Heslegrave A, Zetterberg H, Blennow K. Evidence of upregulation of the cholinergic anti-inflammatory pathway in late-life depression. J Affect Disord. 2021 May 1; 286:275-281. PMID: 33756305.

Postema MC, Hoogman M, Ambrosino S, Asherson P, Banaschewski T, Bandeira CE, Baranov A, Bau CHD, Baumeister S, Baur-Streubel R, Bellgrove MA, Biederman J, Bralten J, Brandeis D, Brem S, Buitelaar JK, Busatto GF, Castellanos FX, et al. Analysis of structural brain asymmetries in attention-deficit/hyperactivity disorder in 39 datasets. J Child Psychol Psychiatry. 2021 Mar 22. PMID: 33748971.

Qi W, Blessing E, Li C, Ardekani BA, Hart KL, Marx J, Freudenreich O, Cather C, Holt D, Bello I, Diminich ED, Tang Y, Worthington M, Zeng B, Wu R, Fan X, Troxel A, Zhao J, Wang J, Goff DC. Effect of citalopram on hippocampal volume in first-episode schizophrenia: Structural MRI results from the DECIFER trial. Psychiatry Res Neuroimaging. 2021 Apr 7; 312:111286. PMID: 33857750.

Schneider F, Marcotte K, Brisebois A, Townsend SAM, Smidarle AD, Loureiro F, da Rosa Franco A, Soder RB, Nikolaev A, Marrone LCP, Hübner LC. Neuroanatomical Correlates of Macrolinguistic Aspects in Narrative Discourse in Unilateral Left and Right Hemisphere Stroke: A Voxel-Based Morphometry Study. J Speech Lang Hear Res. 2021 May 11; 64(5):1650-1665. PMID: 33844609.

Shulman M, Choo TH, Scodes J, Pavlicova M, Wai J, Haenlein P, Tofighi B, Campbell ANC, Lee JD, Rotrosen J, Nunes EV. Association between methadone or buprenorphine use during medically supervised opioid withdrawal and extended-release injectable naltrexone induction failure. J Subst Abuse Treat. 2021 May; 124:108292. PMID: 33771287.

Tahmasian M, Aleman A, Andreassen OA, Arab Z, Baillet M, et al. ENIGMA-Sleep: Challenges, opportunities, and the road map. J Sleep Res. 2021 Apr 28:e13347. PMID: 33913199.

Tofighi B, El Shahawy O, Segoshi A, Moreno KP, Badiei B, Sarker A, Krawczyk N. Assessing perceptions about medications for opioid use disorder and Naloxone on Twitter. J Addict Dis. 2021 Jan-Mar; 39(1):37-45. PMID: 32835641.

Tofighi B, McNeely J, Walzer D, Fansiwala K, Demner A, Chaudhury CS, Subudhi I, Schatz D, Reed T, Krawczyk N. A Telemedicine Buprenorphine Clinic to Serve New York City: Initial Evaluation of the NYC Public Hospital System's Initiative to Expand Treatment Access during the COVID-19 Pandemic. J Addict Med. 2021 Feb 5. PMID: 33560696.

Tondo LP, Viola TW, Fries GR, Kluwe-Schiavon B, Rothmann LM, Cupertino R, Ferreira P, Franco AR, Lane SD, Stertz L, Zhao Z, Hu R, Meyer T, Schmitz JM, Walss-Bass C, Grassi-Oliveira R. White matter deficits in cocaine use disorder: convergent evidence from in vivo diffusion tensor imaging and ex vivo proteomic analysis. Transl Psychiatry. 2021 Apr 29; 11(1):252. PMID: 33911068.

Turker HB, Riley E, Luh WM, Colcombe SJ, Swallow KM. Estimates of locus coeruleus function with functional magnetic resonance imaging are influenced by localization approaches and the use of multi-echo data. Neuroimage. 2021 Apr 24; 236:118047. PMID: 33905860.

Van Lancker-Sidtis D, Yang SY. Perception of Formulaic Speech: Structural and Prosodic Characteristics of Formulaic Expressions. In: Pardo JS, Nygaard LC, Remez RE, Pisoni DB, editors. The Handbook of Speech Perception, 2nd Edition. Wiley-Blackwell; 2021. p. 309-32.

Van Lancker-Sidtis D, Zaske R. Who We Are: Signaling Personal Identity in Speech. In: Pardo JS, Nygaard LC, Remez RE, Pisoni DB, editors. The Handbook of Speech Perception, 2nd Edition. Wiley-Blackwell; 2021. p. 365-97.

Wang J, Hart KL, Qi W, Ardekani BA, Li C, Marx J, Freudenreich O, Cather C, Holt D, Bello I, Diminich ED, Tang Y, Worthington M, Zeng B, Wu R, Fan X, Zhao J, Wang J, Goff DC. Association of Aripiprazole with Reduced Hippocampal Atrophy During Maintenance Treatment of First-Episode Schizophrenia. J Clin Psychopharmacol. 2021 May-Jun 01; 41(3):244-249. PMID: 33814546.

Wang X, Li XH, Cho JW, Russ BE, Rajamani N, Omelchenko A, Ai L, Korchmaros A, Sawiak S, Benn RA, Garcia-Saldivar P, Wang Z, Kalin NH, Schroeder CE, Craddock RC, Fox AS, Evans AC, Messinger A, Milham MP, Xu T. U-net model for brain extraction: Trained on humans for transfer to non-human primates. Neuroimage. 2021 Mar 28; 235:118001. PMID: 33789137.

Wetherby AM, Guthrie W, Hooker JL, Delehanty A, Day TN, Woods J, Pierce K, Manwaring SS, Thurm A, Ozonoff S, Petkova E, Lord C. The Early Screening for Autism and Communication Disorders: Field-testing an autism-specific screening tool for children 12 to 36 months of age. Autism. 2021 May 7. PMID: 33962531.

Wilson DA, East BS. Good scents: A short road from olfaction to satisfaction. Curr Biol. 2021 Apr 26; 31(8):R374-R376. PMID: 33905691.

Zanni G, Robinson-Drummer PA, Dougher AA, Deutsch HM, DeSalle MJ, Teplitsky D, Vemulapalli A, Sullivan RM, Eisch AJ, Barr GA. Maternal continuous oral oxycodone self-administration alters pup affective/social communication but not spatial learning or sensory-motor function. Drug Alcohol Depend. 2021 Apr 1; 221:108628. PMID: 33761428.

Zazhytska M, Kodra A, Hoagland DA, Fullard JF, Shayya H, Omer A, Firestein S, Gong Q, Canoll PD, Goldman JE, Roussos P, tenOever BR, Overdevest JB, Lomvardas S. Disruption of nuclear architecture as a cause of COVID-19 induced anosmia. bioRxiv [Preprint]. 2021 Feb 9. PMID: 33594368.

Zhang J, Troxel AB, Petkova E. Robust index of confidence weighted learning for optimal individualized treatment rule estimation. Stat 2021; 10(1):e374.

Zhang Y, Varela L, Szigeti-Buck K, Williams A, Stoiljkovic M, Šestan-Peša M, Henao-Mejia J, D'Acunzo P, Levy E, Flavell RA, Horvath TL, Kaczmarek LK. Cerebellar Kv3.3 potassium channels activate TANK-binding kinase 1 to regulate trafficking of the cell survival protein Hax-1. Nat Commun. 2021 Mar 19; 12(1):1731. PMID: 33741962.