

The NKInformer



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

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Stuart Moss, MLS, Editor

End of an Era as Long Time Statistical Researchers Move on – Part One ***Eugene Laska***

Eugene Laska began working at the Rockland Research Institute (RRI) in 1963, lured away from IBM by Nathan Kline. At IBM, Gene had served as a consultant to companies wanting to make innovative uses of computers. Nate, besides being a strong advocate for pharmacological research, felt that computers could be productively used in psychiatry. At RRI, Gene founded the Information Sciences Division (ISD) to concretize Nate's vision. Carole Siegel and Morris Meisner joined Gene on a part time basis two years later, as Gene saw the value of growing a statistical research and applied program with mathematical colleagues. The resulting "industrial triplets" had been graduate students at NYU's Courant Institute of Mathematical Sciences. They remained working partners for more than 50 years. Shortly after their arrival at RRI, Gene obtained a large grant from NIMH to develop and disseminate a computer-based information system for psychiatric patient record keeping. At the time, it was the largest grant NIMH had ever awarded. He successfully created the Multistate Information System (MSIS), and for several years it was used not only in New York but in seven other states.



Gene Laska (right) shows the new IBM 1620 to NYS Governor Nelson Rockefeller (second from left), circa 1965. Nathan Kline is in the foreground, facing away.

Over time he added innovative components to the system, such as the drug exception reporting system, a predecessor to the current widely used OMH PSYCKES drug monitoring system. Nate, perhaps prescient of the potential of data mining, encouraged ISD to examine the accumulating MSIS data and to conduct epidemiological data searches for outcome patterns related to service use.

Gene wanted to return to statistical research and consultancy activities for the Institute, so he passed the MSIS torch to Zebulon Taintor and the reigns of ISD to Jim Robinson. With the proliferation of desktop computers, MSIS (which was developed to operate on mainframe computer systems) became obsolete and the system was disbanded after 10 years. Jim shifted the focus of ISD to clinical trials data management with Gene's collaboration and support.

Gene's statistical research activities have been numerous and impactful. He has made substantial contributions to clinical trial methodology, with original work on crossover designs and analyses, measurement of onset and duration, simple methods for testing for synergy, and methods to evaluate combination treatments. In services research, he created new counting methods for annualizing one-week survey data (used today by the NYS Office of Mental Health), unduplicating counts across multiple lists, and counting elusive populations such as the homeless. The semiannual homeless street count by New York City uses his "plant-capture" method. He received five more NIMH grants supporting his statistical analysis research, working closely with Morris and Carole in many areas including cost-effectiveness analysis.

Gene was the director of the NKI World Health Organization (WHO) Collaborating Center for over 20 years, and most notably spearheaded the effort to complete the long term follow up outcome study of international cohorts of people with psychosis. The Center was one of only five WHO centers in mental health in the US.

He is a fellow of the American Statistical Association and of the American Association for the Advancement of Science, and has served on numerous NIH study sections and FDA consensus panels. Gene will continue his statistical research and consulting work at NYU and looks forward to conducting and contributing ideas to 'big data' set analyses. To relax, he intends to undertake more woodworking projects, build two more guitars, and entertain his many grandchildren.

Joseph Wanderling was an important research partner of Gene and Carole. Not only did he conduct applied statistical analyses, he worked with Gene to sharpen his ideas and to conduct simulations of their validity and feasibility. He worked with Carole on services research projects, conducting the statistical analyses and honing the statistical models they used. He is a co-author on many of Gene and Carole's papers. Joe will definitely be playing more golf, and participating in joyous activities with his grandchildren here and in Arizona.

FROM AROUND THE INSTITUTE

Outpatient Department Community Events

The **Outpatient Research Department** is hosting several upcoming programs, including a special Saturday afternoon event on Feb. 20 on the topic of "Optimizing Your Brain Potential". There will also be an 11:00 am Coffee Talk on Feb. 24 ("Brain Training Programs: Fountain of Youth or Snake Oil"), and talks on child and adolescent mental health on Feb. 10 and 22. The next NKI Brain Day will be held on Sunday, March 13, just in time for [Brain Awareness Week](#). You can learn about these events and more on the [Rockland Sample Community Events](#) page.



ISD Open House Event

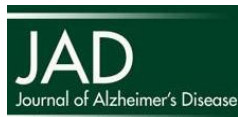
On Wednesday, February 17, the **Information Sciences Division (ISD)** will be hosting an informal Open House to present its services and software to NKI investigators. Nationally recognized for its role in study data management, including the recently publicized [RAISE](#) study, ISD has numerous offerings that can benefit the NKI investigator, from developing mobile-ready survey instruments, to managing project data, to complying with NIH data-sharing requirements. Following a brief introduction, attendees will have an opportunity to try out ISD's offerings first-hand. The Open House will be held in Conference Room B at 10 a.m. Refreshments will be served.

KUDOS

Forbes

EBI Director **Joseph LeDoux**'s book *Anxious: Using the Brain to Understand and Treat Fear and Anxiety* appears on Forbes' list of "[The Must-Read Brain Books of 2015](#)".

Dr. LeDoux also contributed a piece titled "[Run, Hide, Fight' Is Not How Our Brains Work](#)" to the *Times* Sunday Review in December.



Babak Ardekani (C-BIN Medical Physics Laboratory) has been selected to become a Senior Editor of the *Journal of Alzheimer's Disease*. Only Associate Editors who significantly contribute over the year (5 or more Acts of Service) are invited to become Senior Editors.

ISD Recognitions

ISD Director **Jim Robinson** received an award from NYULMC for 35 years of dedicated service. It is a beautiful circular Tiffany glass artifact.



Jim Robinson (right) with NYU SOM Dean Robert Grossman

In addition, two ISD employees were recently certified by rigorous exams in specialty fields:

Anina Klein, MSW, JD, CCRA has been certified by the Association of Clinical Research Professionals as a [Certified Clinical Research Associate](#). Anina is ISD's monitor going to clinical sites to assure FDA and protocol compliance, to assure the rights of human subjects are protected, and to assure the principals of Good Clinical Practice are in operation. Anina is also active in study development including forms and data dictionaries, and she is an alternate member of the NKI IRB.

Audrey Bauzó-Rosario, MA, CCDM has been certified by the Society for Clinical Data Management as a [Certified Clinical Data Manager](#). Audrey has been at NKI for 12 years and is involved in all aspects of data management, from protocol review to study database development through to study closure. She works closely with site staff, reviewing their data and issuing queries and following them to resolution. Audrey has been active in many different aspects of ICRS (Innovative Clinical Research Solutions) growth including Standard Operating Procedures development, training, and mentoring newer data managers.

COMPLIANCE CORNER



By *Challace Pahlevan, MS, CIP*
Compliance Director

Compliance Corner is a new feature of the *NKInformer* intended to highlight various compliance-related matters pertinent to the research enterprise at NKI. This month's content features human subjects research regulation and its proposed reform.

Notice: The following proposed regulations are not in effect! Researchers engaged in human subjects research must still abide by the regulations set forth in 45CFR46 and 21CFR312 or 812 as applicable.

Regulatory Reform: Broad Changes to Regulations Governing Human Subjects Research.

On September 8, 2015, the U.S. Department of Health and Human Services (DHHS), in collaboration with fifteen other federal agencies, published a Notice of Proposed Rulemaking (NPRM) in the Federal Register for review by stakeholders involved in the regulation, review, and conduct of human subjects research. This proposal comes four years after an Advance Notice was likewise published, which sought comments on how to modernize and strengthen federal policies for the protection of human subjects. Although open for comment and thus further revision, the proposed rule has the potential to drastically change the way research involving human subjects is regulated.

What are these proposed changes? DHHS has identified *eight* revisions as the "most significant." For more information on each proposed change and to learn how they will potentially affect research, click [here](#) (or link from myNKI under Institutional Review Board).

Proposed Changes:

1. Improve informed consent by increasing transparency, and by imposing stricter requirements regarding information that must be given to subjects, and the manner in which it is given to them.
2. Generally require informed consent for the use of stored biospecimens in secondary research, even if the investigator is not being given identifiable information.
3. Change the conditions and requirements for waiver or alteration of consent such that waiver of consent for research involving biospecimens (regardless of identifiability) will occur only in very rare circumstances.
4. Exclude from coverage under the [Common Rule](#) certain categories of activities that are deemed not to be research, are inherently low risk, or where protections similar to those usually provided by IRB review are separately mandated.
5. Add additional categories of exempt research to better calibrate the level of review to the level of risk involved in the research.
6. Mandate that U.S. institutions engaged in cooperative research rely on a single IRB for that portion of the research that takes place within the United States, with certain exceptions.
7. Eliminate the continuing review requirement for studies that undergo expedited review and for studies that have completed study interventions and are merely analyzing data or involve only observational follow-up in conjunction with standard clinical care.
8. Extend the scope of the policy to cover all clinical trials, regardless of funding source, conducted at a U.S. institution that receives federal funding for non-exempt human subjects research.



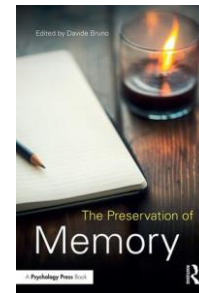
Many thanks to all of the NKI employees who filled holiday gift tags or made holiday contributions to the CREF inpatient unit this year. A good holiday was had by all! The residents of the CREF were very appreciative of their gifts, which they received on Christmas morning, along with coffee and donuts. In addition, almost all of the patients were treated to an outing at a local Chinese restaurant for a holiday luncheon the week before Christmas. The entire CREF Unit wishes all of NKI a very happy New Year!



On August 26, **Audrey Bauzó-Rosario, MA, CCDM** (ISD) and her husband Omar welcomed their second daughter. Baby Gabriela joins her older sister, Riley.

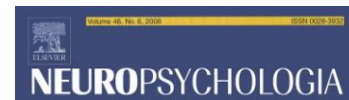


PUBLICATIONS OF NOTE



Nunzio Pomara, Chelsea Reichert, and John Sidtis (Geriatric Psychiatry) published a chapter in this new book edited by **David Bruno**, who formerly worked with Dr. Pomara at NKI.

Reichert C, Sidtis JJ, Pomara N. The Memory Education and Research Initiative: a model for community-based clinical research. In: Bruno D, editor. **The preservation of memory**. New York: Psychology Press; 2016.



Dr. Pomara – along with colleagues including **Jay Nierenberg** and **John Sidtis** – also has a paper in a recent issue of *Neuropsychologia*.

Bruno D, Grothe MJ, Nierenberg J, Sidtis JJ, Teipel SJ, Pomara N. **Output order and variability in free recall are linked to cognitive ability and hippocampal volume in elderly individuals**. *Neuropsychologia*. 2016 Jan 8; 80:126-32.



Alexander Opitz, Michael Milham, Cameron Craddock, and Stan Colcombe (C-BIN) have a new TMS paper in *Neuroimage*.

Opitz A, Fox MD, Craddock RC, Colcombe S, Milham MP. **An integrated framework for targeting functional networks via transcranial magnetic stimulation**. *Neuroimage*. 2015 Nov 19;127:86-96.



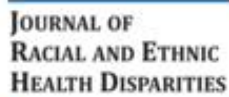
Joseph LeDoux and coauthors including **Robert Sears** and **Christopher Cain** (Emotional Brain Institute) have a review article in *Current Topics in Behavioral Neurosciences*.

Campese VD, Sears RM, Moscarello JM, Diaz-Mataix L, Cain CK, LeDoux JE. [The Neural Foundations of Reaction and Action in Aversive Motivation](#). *Curr Top Behav Neurosci*. 2015 Dec 8.



Charles Schroeder, **Daniel Javitt**, and **Pejman Sehatpour** (Schizophrenia Research) are coauthors of this paper describing the simultaneous use of fMRI and EEG measurements.

van Atteveldt N, Musacchia G, Zion-Golumbic E, Sehatpour P, Javitt DC, Schroeder C. [Complementary fMRI and EEG evidence for more efficient neural processing of rhythmic vs. unpredictably timed sounds](#). *Front Psychol*. 2015 Oct 27;6:1663.



Crystal Fuller Lewis (Social Solutions & Services) is the first author of this article published in the *Journal of Racial and Ethnic Health Disparities*.

Lewis CF, Rivera AV, Crawford ND, Gordon K, White K, Vlahov D, et al. [Individual and Neighborhood Characteristics Associated with HIV Among Black and Latino Adults Who Use Drugs and Unaware of Their HIV-Positive Status, New York City, 2000–2004](#). *Journal of Racial & Ethnic Health Disparities* 2015.



Peter Lakatos, **Monica O'Connell**, and **Annamaria Barczak** (Schizophrenia Research) contributed this Preview commentary piece to the January 6 issue of *Neuron*.

Lakatos P, O'Connell MN, Barczak A. [Pondering the Pulvinar](#). *Neuron*. 2016 Jan 6;89(1):5-7.



The latest work from the **Lakatos Lab** on neuronal oscillations appears in *Frontiers in Human Neuroscience*.

O'Connell MN, Barczak A, Ross D, McGinnis T, Schroeder CE, Lakatos P. [Multi-Scale Entrainment of Coupled Neuronal Oscillations in Primary Auditory Cortex](#). *Front Hum Neurosci*. 2015 Dec 9; 9:655.



John Smiley, **Cynthia Bleiwas**, **Eva Petkova**, et al. (Schizophrenia Research) have a new paper online in the *Journal of Chemical Neuroanatomy*.

Smiley JF, Hackett TA, Bleiwas C, Petkova E, Stankov A, Mann JJ, Rosoklija G, Dwork AJ. [Reduced GABA neuron density in auditory cerebral cortex of subjects with major depressive disorder](#). *J Chem Neuroanat*. 2015 Dec 12.

Robert Smith (Neurochemistry) and colleagues at NKI and elsewhere published the results of a trial of varenicline in schizophrenia.

Smith RC, Amiaz R, Si TM, Maayan L, Jin H, Boules S, Sershen H, Li C, Ren J, Liu Y, Youseff M, Lajtha A, Guidotti A, Weiser M, Davis JM. [Varenicline Effects on Smoking, Cognition, and Psychiatric Symptoms in Schizophrenia: A Double-Blind Randomized Trial](#). PLoS One. 2016 Jan 5;11(1):e0143490.



Donald Wilson (Emotional Brain Institute) is a coauthor of a new paper in the open access journal *Scientific Reports*. This work was covered by the Science 2.0 blog site – [“Odor Biomarker for Alzheimer’s Disease”](#).

Kimball BA, Wilson DA, Wesson DW. [Alterations of the volatile metabolome in mouse models of Alzheimer’s disease](#). Sci Rep. 2016 Jan 14; 6:19495.



Donald Wilson and **Benjamin Sadrian** (Emotional Brain Institute) published their latest work in *Frontiers in Neural Circuits*.

Sadrian B, Wilson DA. [Optogenetic Stimulation of Lateral Amygdala Input to Posterior Piriform Cortex Modulates Single-Unit and Ensemble Odor Processing](#). Front Neural Circuits. 2015 Dec 21;9:81.

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 still offers a comfortable, quiet space for reading, work, and small meetings. And we now have Wi-Fi. Just 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.

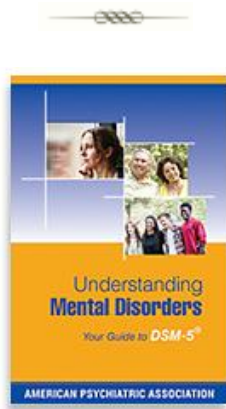
INFO UPDATE

Relative Citation Ratio: A New Way to Measure Impact

For a long time, the [Journal Impact Factor](#) has been used (and misused) as a measure of scientific impact. But there is a fundamental problem with trying to assess any specific paper using a tool that is designed for journal-level assessment. Now, a group of researchers at NIH have come up with a new *article-level* metric to better assess scientific influence. An overview of this new metric, called Relative Citation Ratio (RCR), can be found [here](#). And you can try it out for yourself with [iCite](#), an online tool that enables you to calculate the RCR for specified papers.

NIH Body Weight Planner

The [January issue](#) of *NIH News in Health* introduced a free, research-based tool called the [NIH Body Weight Planner](#). The Planner “allows users to make personalized calorie and physical activity plans to reach a goal weight within a specific time period and to maintain it afterwards”.



A new educational resource is now available through NKI's [PsychiatryOnline](#) license. [Understanding Mental Disorders: A Patient and Family Resource](#) is a collection of up-to-date, disorder-specific chapter/handouts for distribution to patients and families. Topics already available are:

- Major Depressive Disorder (MDD)
- Schizophrenia
- Bipolar Disorder
- Anorexia Nervosa
- Bulimia Nervosa
- Binge-Eating Disorder
- Alzheimer's Disease
- Posttraumatic Stress Disorder (PTSD)
- Traumatic Brain Injury (TBI)

The following topics will be added in March:

- Anxiety
- Obsessive-Compulsive
- Addiction
- Autism Spectrum Disorder
- Attention Deficit/Hyperactivity Disorder

DEPARTMENT OF WONDER

The Year That Was

The start of a new year provides an opportunity to look back at the year that just ended with a bit of perspective. Here are several links pointing out research highlights from 2015.

- The [NIH Director's blog](#) summarizes a few of the year's top scientific breakthroughs.
- *Nature* has a [website](#) devoted to notable people, events, and discoveries from the past year in science.
- *NIH Research Matters* brings together noteworthy research highlights in three categories – [Clinical Breakthroughs](#); [Promising Medical Advances](#); and [Insights from the Lab](#).



Concern about the mosquito-borne Zika virus has been making headlines lately. What has caused it to spread so rapidly? This [Harvard Health Blog post](#) suggests that planetary changes may have a lot to do with it.

NKI ON THE ROAD



At the [Annual Meeting of the American Epilepsy Society](#), held last December in Philadelphia, **Helen Scharfman** (Center for Dementia Research) was one of the coordinators of a Special Interest Group session on “Epilepsy and Aging: Clinical, Cognitive and Basic Science Aspects of Aging and Epilepsy”.

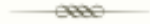
UPCOMING EVENTS AND SEMINARS

ISD Open House

Wednesday, February 17th, 10 am

Conference Room B

See “From Around the Institute” above for details.



Center for Biomedical Imaging and Neuromodulation Presents

Held on Mondays at 11 am

Matthew Hoptman, PhD

NKI Schizophrenia Research Division

Neural correlates of impulsivity in schizophrenia

Monday, February 22nd

Michael Milham, MD, PhD

Director, C-BIN

TBA

Monday, February 29th

Arnaud Falchier, PhD

NKI Research Scientist

TBA

Monday, March 7th

Alexander Opitz, PhD

Design, Acquisition, and Stimulation Laboratory

In vivo measurement of electric fields during transcranial electric stimulation

Monday, March 14th



Center for Dementia Research Seminar Series

Held on Thursdays at 10 am

Dani Brunner, PhD

Early Signal Foundation

Robust preclinical model validation and drug screening

Thursday, February 25th

Linda Van Eldik, PhD

University of Kentucky

Title TBD

Thursday, March 17th



The New York State Office of Mental Health (OMH) hosts a monthly 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 by OMH employees [on the OMH intranet](#). Anyone can view the programs [on the OMH website](#).

NKI PUBLICATIONS UPDATE

Below is a list of references that have been added to the NKI publications database since the previous update. The full database contains over 5,000 items dating back to 1995, and can be searched from the [NKI web site](#).

Brautigam H, Moreno CL, Steele JW, Bogush A, Dickstein DL, Kwok JB, Schofield PR, Thinakaran G, Mathews PM, Hof PR, Gandy S, Ehrlich ME. Physiologically generated presenilin 1 lacking exon 8 fails to rescue brain PS1^{-/-} phenotype and forms complexes with wildtype PS1 and nicastrin. *Sci Rep*. 2015 Nov 26;5:17042.

Bruno D, Grothe MJ, Nierenberg J, Sidtis JJ, Teipel SJ, Pomara N. Output order and variability in free recall are linked to cognitive ability and hippocampal volume in elderly individuals. *Neuropsychologia*. 2016 Jan 8;80:126-32.

Campese VD, Sears RM, Moscarello JM, Diaz-Mataix L, Cain CK, LeDoux JE. The Neural Foundations of Reaction and Action in Aversive Motivation. *Curr Top Behav Neurosci*. 2015 Dec 8.

Campese VD, Gonzaga R, Moscarello JM, LeDoux JE. Modulation of instrumental responding by a conditioned threat stimulus requires lateral and central amygdala. *Front Behav Neurosci*. 2015 Oct 30;9:293.

Coelho CA, Dunsmoor JE, Phelps EA. Compound stimulus extinction reduces spontaneous recovery in humans. *Learn Mem*. 2015 Nov 16;22(12):589-93.

David F, Courtiol E, Buonviso N, Fourcaud-Trocmé N. Competing Mechanisms of Gamma and Beta Oscillations in the Olfactory Bulb Based on Multimodal Inhibition of Mitral Cells Over a Respiratory Cycle(123). *eNeuro*. 2015 Dec 8;2(6).

Drew LJ, Kheirbek MA, Luna VM, Denny CA, Cloidt MA, Wu MV, Jain S, Scharfman HE, Hen R. Activation of local inhibitory circuits in the dentate gyrus by adult-born neurons. *Hippocampus*. 2015 Dec 14.

Easter A, Pollock M, Pope LG, Wisdom JP, Smith TE. Perspectives of Treatment Providers and Clients with Serious Mental Illness Regarding Effective Therapeutic Relationships. *J Behav Health Serv Res*. 2015 Dec 9.

Henderson MX, Wirak GS, Zhang YQ, Dai F, Ginsberg SD, Dolzhanskaya N, Staropoli JF, Nijssen PC, Lam TT, Roth AF, Davis NG, Dawson G, Velinov M, Chandra SS. Neuronal ceroid lipofuscinosis with DNAJC5/CSP α mutation has PPT1 pathology and exhibit aberrant protein palmitoylation. *Acta Neuropathol*. 2015 Dec 10.

Karunanayaka PR, Wilson DA, Vasavada M, Wang J, Martinez B, Tobia MJ, Kong L, Eslinger P, Yang QX. Rapidly acquired multisensory association in the olfactory cortex. *Brain Behav*. 2015 Oct 14;5(11):e00390.

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Lenz M, Galanis C, Müller-Dahlhaus F, Opitz A, Wierenga CJ, Szabó G, Ziemann U, Deller T, Funke K, Vlachos A. Repetitive magnetic stimulation induces plasticity of inhibitory synapses. *Nat Commun*. 2016 Jan 8;7:10020.

Mastronardi CA, Pillai E, Pineda DA, Martinez AF, Lopera F, Velez JI, Palacio JD, Patel H, Easteal S, Acosta MT, Castellanos FX, Muenke M, Arcos-Burgos M. Linkage and association analysis of ADHD endophenotypes in extended and multigenerational pedigrees from a genetic isolate. *Mol Psychiatry*. 2015 Nov 24.

Neymotin SA, McDougal RA, Bulanova AS, Zeki M, Lakatos P, Terman D, Hines ML, Lytton WW. Calcium regulation of HCN channels supports persistent activity in a multiscale model of neocortex. *Neuroscience*. 2015 Dec 31.

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Opitz A, Fox MD, Craddock RC, Colcombe S, Milham MP. An integrated framework for targeting functional networks via transcranial magnetic stimulation. *Neuroimage.* 2015 Nov 19;127:86-96.

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Powers BE, Velazquez R, Kelley CM, Ash JA, Strawderman MS, Alldred MJ, Ginsberg SD, Mufson EJ, Strupp BJ. Attentional function and basal forebrain cholinergic neuron morphology during aging in the Ts65Dn mouse model of Down syndrome. *Brain Struct Funct.* 2015 Dec 30.

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Riecke L, Sack AT, Schroeder CE. Endogenous Delta/Theta Sound-Brain Phase Entrainment Accelerates the Buildup of Auditory Streaming. *Curr Biol.* 2015 Dec 21;25(24):3196-201.

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Smith RC, Amiaz R, Si TM, Maayan L, Jin H, Boules S, Sershen H, Li C, Ren J, Liu Y, Youseff M, Lajtha A, Guidotti A, Weiser M, Davis JM. Varenicline Effects on Smoking, Cognition, and Psychiatric Symptoms in Schizophrenia: A Double-Blind Randomized Trial. *PLoS One.* 2016 Jan 5;11(1):e0143490.

Störmer V, Feng W, Martinez A, McDonald J, Hillyard S. Salient, Irrelevant Sounds Reflexively Induce Alpha Rhythm Desynchronization in Parallel with Slow Potential Shifts in Visual Cortex. *J Cogn Neurosci.* 2015 Dec 22:1-13.

van Atteveldt N, Musacchia G, Zion-Golumbic E, Sehatpour P, Javitt DC, Schroeder C. Complementary fMRI and EEG evidence for more efficient neural processing of rhythmic vs. unpredictably timed sounds. *Front Psychol.* 2015 Oct 27;6:1663.

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Weisholtz DS, Root JC, Butler T, Tüscher O, Epstein J, Pan H, Protopopescu X, Goldstein M, Isenberg N, Brendel G, LeDoux J, Silbersweig DA, Stern E. Beyond the amygdala: Linguistic threat modulates peri-sylvian semantic access cortices. *Brain Lang.* 2015 Dec;151:12-22.

Zhao Y, Castellanos FX. Annual Research Review: Discovery science strategies in studies of the pathophysiology of child and adolescent psychiatric disorders: promises and limitations. *J Child Psychol Psychiatry.* 2016 Jan 6.

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Kantrowitz J, Epstein M, Beggel O, Rohrig S, Lehrfeld J, Revheim N, et al. N-Methyl-D-Aspartate Receptor (NMDAR)-based Enhancement of Auditory Plasticity. [Neuropsychopharmacology 40\[S1\]](#), S369. 2015. [Abstract]

Lewis CF, Rivera AV, Crawford ND, Gordon K, White K, Vlahov D, et al. [Individual and Neighborhood Characteristics Associated with HIV Among Black and Latino Adults Who Use Drugs and Unaware of Their HIV-Positive Status, New York City, 2000–2004](#). Journal of Racial & Ethnic Health Disparities 2015.

Matuszka B, Bacskai E, Czobor P, Gerevich J. [Physical Aggression and Concurrent Alcohol and Tobacco Use Among Adolescents](#). International Journal of Mental Health and Addiction 2016.

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