



The NKI Informer



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

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Stuart Moss, MLS, Editor

FACES OF NKI

DR. JAY NIERENBERG

Our featured investigator for this issue is **Jay Nierenberg, MD, PhD**. Dr. Nierenberg is part of the Design, Acquisition, and Stimulation Laboratory within NKI's Center for Biomedical Imaging and Neuromodulation (C-BIN), as well as an Assistant Professor of Psychiatry at NYU Langone Medical Center. He graciously agreed to this email interview.



Please tell us about your background and training.

I grew up in Brooklyn, and went to Stuyvesant High School in Manhattan. At Johns Hopkins University (1981-85), I studied Behavioral Biology, which was their neuroscience major at the time. I was a recipient of a Leidy Foundation scholarship there. Throughout my undergraduate years, I worked at Hopkins Medical School in the Department of Psychiatry/Division of Behavioral Biology in the laboratory of Dr. Nancy Ator. There I was involved with research studies that evaluated the discriminative stimulus properties of drugs (both FDA-approved and novel pre-clinical compounds) in rats and baboons, and drug self-administration studies in baboons. After college, I worked at Hopkins medical school and then at NIH from 1987-89. At NIH, I worked with Dr. Robert Post in the Biological Psychiatry Branch at the NIMH on kindling studies.

I completed my MD and PhD (1989-1997) at the University of Rochester School of Medicine and Dentistry. There I received an NIMH National Research Service Award to pursue brain mapping studies in kindling epileptogenesis in my graduate work. My graduate studies applied mapping techniques using immediate early gene products to study the preferred pathways of seizure propagation in kindling epileptogenesis. The

combined work at NIH and in graduate school developed my interest in mechanisms of neural plasticity in pathological states and in general.

I interned at the University of Pennsylvania from 1997-98 and completed my residency in psychiatry at the Harvard Longwood Psychiatry Residency Training Program in 2001. I started at NKI less than two weeks after completing my residency. I had barely unpacked!

Did you always plan to pursue research career, or what put you on this path?

I had interest in research as early as high school, and did some coursework in experimental design at Stuyvesant. Initially, I had medical school in mind more so than research. My experience as a work-study student in Dr. Ator's lab cemented my interest in research, and I was quite certain at that point that research would be at least part of my career. I published my first paper out of her lab, and built the foundation for a research path prior to deciding to pursue graduate and medical degrees in 1988. My interest solidified at the NIH where I worked in basic research labs on studies that informed some of the clinical research being done in panic disorder and bipolar disorder on the clinical units overseen by Dr. Post. Dr. Post was a very generous mentor intellectually, and the meetings with him in which we discussed the potential clinical relevance of the studies that I was doing at the time had a significant impact on my nascent identity as a physician-scientist.

What brought you to NKI?

In my last year at Harvard I was awarded a Dupont-Warren (Harvard Psychiatry) Fellowship which provided salary support to work in a research lab part-time during my last year as a senior resident. I worked in the lab of Robert McCarley and Martha Shenton on my first MRI study, a volumetric analysis of parietal lobe regions in first-episode schizophrenia. I came to NKI to work with Kelvin Lim and develop diffusion tensor imaging applications in psychiatry. Unfortunately, Dr. Lim moved on to the University of Minnesota soon after I started at NKI. I inherited three of Dr. Lim's protocols and continued to pursue that course. I was awarded my first NIDA grant in 2002, a cross-

sectional DTI study called "Brain Recovery Following Abstinence from Cocaine". Results that I generated from a second protocol resulted in the first finding of a medial temporal lobe DTI abnormality in healthy elderly carriers of the apolipoprotein E epsilon 4 gene. The findings contributed to a New Investigator grant from the Alzheimer's Association.

What are your current research interests and projects?

The results of the NIDA-funded study led to my first R01 which is currently winding down. That project, aptly called "Longitudinal Study of Brain Recovery Following Abstinence from Cocaine", focuses on changes in brain circuitry and behavior that accompany recovery from cocaine dependence. My group has followed over 80 patients in residential rehabilitation treatment for periods often exceeding one year. Our aim has been to learn more about how the brain recovers from addiction, as well as to elucidate factors that differentiate treatment responders from non-responders or dropouts. The work has implications for the treatment of cocaine dependence and perhaps the treatment of addictions in general. My secondary interests involve studying MRI predictors of cognitive decline and preclinical detection of Alzheimer's disease. My hope is that this collaborative work with Dr. Pomara in the Geriatrics Division will lead to additional projects in the future. Currently, I am working with structural MRI data collected under his NIMH grant to study beta amyloid in geriatric depression and a multivariate model of pathological cognitive decline.

What do you find most/least satisfying about your work?

Patient interactions are often satisfying aspects of my work since I do not do separate clinical work outside of my work at NKI. I also find the creative aspects of my work satisfying, whether it is study design, creating visual images from MRI data, or translating scientific findings into potential components of future clinical practice. As I imagine many scientists would agree, some of the administrative requirements of our work, though necessary, can slow down progress and be

frustrating. Being trained as a clinician and a scientist is a privilege that allows my work to be informed by both. Although currently it is mainly my science that is informed by my clinical background, I believe that should I treat patients again in the future, I will be more effective because of my research career. I also feel fortunate to have a solid background in basic science, though I do primarily clinical research these days. One of my goals here at NKI is to have my work become more translational as time goes on.

Do you have any advice for early career scientists?

The pressure to produce scientific findings that are clinically relevant has become so great that my advice is to consider clinical importance and application in any scientific idea that you plan to pursue. This may require learning something new, or collaborating with (or seeking guidance from) individuals who can help develop that aspect of your work. That said, if you study topics that you love or really care about personally, you will be much less likely to regret your choices later. Work that we love is always more satisfying. Because of the increased financial burden on many young scientists due to today's economy, there is a constant challenge to balance priorities in one's work. However, finding balance in one's life is always a challenge, especially if you are a professional with a demanding work life.

What do you like to do in your free time?

Who has free time?! I like to cook and (when it's not snowing) garden. I also have a life-long love of visual arts, and I write poetry when the impulse strikes me. I live close to Manhattan in Bergen County, NJ, and always welcome an opportunity to meet a friend in the city for dinner. However, one of my favorite things to do is to take in dinner and a Broadway show on a Saturday night.

GRANTS AND FUNDING



Jose Morales-Corraliza, PhD (Center for Dementia Research) has received a 1-year sub-award for his grant entitled "Alzheimer's Disease Center Core Grant: regional brain changes in diabetic animal models reveal mechanistic links to Alzheimer's disease" from the New York University School of Medicine.



Daniel Javitt, MD, PhD (Schizophrenia and Cognitive Neurosciences) has received a 2-year supplement for his grant entitled "Early Cortical Processing in Schizophrenia" from the National Institute of Mental Health.



Rocio Perez-Gonzalez, PhD (Center for Dementia Research) has received a 1-year award for her grant entitled "A pathogenic role for APP-CTFs-enriched exosomes in the brain" from the Alzheimer's Association.

FROM AROUND THE INSTITUTE



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. 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!



Space Heaters May Have Unintended Effects

The latest issue of *OMH Energy, Operations, and Maintenance News* (yes, there is such a thing!) includes the following information about space heaters:

“You may think that adding a space heater to your office will increase the room temperature and occupant comfort, but it may actually limit the amount of heat provided to that area by the building’s heating system.

The use of a space heater can result in the thermostat obtaining a false space temperature and subsequently not activating the heating system to provide adequate space conditioning.

The space heater may provide you WARMTH, but it may actually be making [the] room/space COLDER.”

No Longer Nameless

Thousands of former patients are buried anonymously on the grounds of psychiatric hospitals across New York. And while volunteers have advocated for the identification and memorialization of those who are buried, the Office of Mental Health has maintained that patient privacy must be maintained. In a couple of recent articles, *The New York Times* covers this issue by focusing on [the story of one former patient](#), who was also a gravedigger at Willard State Psychiatric Hospital. The second article reports that [some progress has been made](#) in this dispute. There is also an [accompanying video](#).

Cultural Diversity County Profiles

The [December issue](#) of *OMH News* includes the news that NKI’s Center of Excellence in Culturally Competent Mental Health has added new [cultural diversity county profiles](#) to its online resource offerings. These profiles enable interested parties to obtain a deeper understanding of the cultural and social diversity within and among New York State counties.



OMH Medical Director Lloyd Sederer, MD, gave [this talk about mental illness and the family](#) at a TEDx event in Albany.



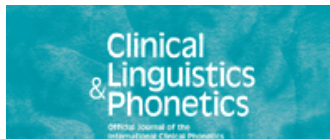
Dr. Pamela Butler recently edited a [newsletter issue](#) for the [Society for Research in Psychopathology](#). This issue was written by students who interviewed more senior investigators, and it may be instructive for other students and others who are beginning their research career.

PUBLICATIONS OF NOTE



Daniel Javitt (Schizophrenia Research) coauthored this review appearing in the January issue of *The American Journal of Psychiatry*.

Javitt DC, Freedman R. [Sensory processing dysfunction in the personal experience and neuronal machinery of schizophrenia](#). *Am J Psychiatry*. 2015 Jan 1;172(1):17-31.



Diana Van Lancker Sidtis (Brain & Behavior Research Lab) coauthored this study looking at hemispheric specialization in the processing of common and proper nouns.

Yang SY, Van Lancker Sidtis D. [Cerebral processing of proper and common nouns: Perception and production following left hemisphere damage](#). *Clin Linguist Phon*. 2014 Dec 17:1-14.



Drs. Castellanos, Craddock, and Milham are coauthors of this study of 3D spectroscopic techniques for visualizing brain MRI data.

Rojas GM, Gálvez M, Vega Potler N, Craddock RC, Margulies DS, Castellanos FX, Milham MP. [Stereoscopic three-dimensional visualization applied to multimodal brain images: clinical applications and a functional connectivity atlas](#). *Front Neurosci*. 2014 Nov 6;8:328.



Along with NYU colleagues, Deputy Director **Antonio Convit** published this paper in *JAMA Pediatrics* suggesting that cerebral white matter damage in obese adolescents may be vascular in nature.

Yau PL, Kim M, Tirsi A, Convit A. [Retinal vessel alterations and cerebral white matter microstructural damage in obese adolescents with metabolic syndrome](#). *JAMA Pediatr*. 2014 Dec 1;168(12):e142815.



These papers from the **Balupal lab** (Analytical Psychopharmacology) recently appeared online in the *Journal of Neurochemistry* and the *International Journal of Neuropsychopharmacology*. This research suggests that environmental insults (e.g., alcohol) provoke epigenetic responses that can regulate gene expression during early brain development and cause long-lasting learning and memory deficits as found in fetal alcohol spectrum disorders (FASD).

Nagre NN, Subbanna S, Shivakumar M, Psychoyos D, Basavarajappa BS. [CB1-Receptor Knockout Neonatal Mice are Protected Against Ethanol-induced Impairments of DNMT1, DNMT3A and DNA Methylation](#). *J Neurochem*. 2014 Dec 8.

Subbanna S, Nagre NN, Umapathy NS, Pace BS, Basavarajappa BS. [Ethanol Exposure Induces Neonatal Neurodegeneration by Enhancing CB1R Exon1 Histone H4K8 Acetylation and Up-regulating CB1R Function causing Neurobehavioral Abnormalities in Adult Mice](#). *Int J Neuropsychopharmacol*. 2014 Oct 31.



Noelle O'Connell, Annie Barczak, Charles Schroeder, and Peter Lakatos (Cognitive Neuroscience & Schizophrenia) published a paper on auditory processing in a recent issue of *The Journal of Neuroscience*.

O'Connell MN, Barczak A, Schroeder CE, Lakatos P. [Layer specific sharpening of frequency tuning by selective attention in primary auditory cortex](#). J Neurosci. 2014 Dec 3;34(49):16496-508.

And hot off the press, this new paper from **Dr. Scharfman's lab** (along with a colleague at Cornell Medical College) reports on studies showing sex differences in brain processes involved in learning. Cornell issued a [press release](#) about the paper.

Harte-Hargrove LC, Varga-Wesson A, Duffy AM, Milner TA, Scharfman HE. Opioid receptor-dependent sex differences in synaptic plasticity in the hippocampal mossy fiber pathway of the adult rat. J Neurosci. 2015 Jan 28;35(4):1723-38.



Scientific Data is a new open access publication from the Nature Publishing Group for descriptions of scientifically valuable datasets. They recently published a [collection on Human Brain MRI Reproducibility](#), featuring studies from the [Consortium on Reliability and Reproducibility \(CoRR\)](#), which was co-founded by C-BIN Director **Michael Milham**. Several NKI authors contributed to one of the papers appearing in this collection.

Zuo XN, Anderson JS, Bellec P, Birn RM, Biswal BB, Blautzik J et al. [An open science resource for establishing reliability and reproducibility in functional connectomics](#). Scientific Data 2014 December 9;1:140049.

A [press release](#) from the Child Mind Institute provides additional information.



Along with an NYU colleague, **Elizabeth Phelps** (Emotional Brain Institute) authored a paper in the new open access journal *Neurobiology of Stress*. Dr. Phelps is on the editorial board of this journal.

Raio CM, Phelps EA. [The influence of acute stress on the regulation of conditioned fear](#). Neurobiol Stress. 2015 Jan 1; 1:134-146.



Helen Scharfman and colleagues at the University of Guelph recently published a paper in *The Neuroscientist*.

Atwi S, McMahon D, Scharfman H, MacLusky NJ. [Androgen Modulation of Hippocampal Structure and Function](#). Neuroscientist. 2014 Nov 21.



Two NKI investigators recently published papers in *PNAS*. **Joseph LeDoux** (Emotional Brain Institute) is the senior author of one paper, and **Mary Kate McBrayer** (Dementia Research) contributed to the second.

Johansen JP, Diaz-Mataix L, Hamanaka H, Ozawa T, Ycu E, Koivumaa J, Kumar A, Hou M, Deisseroth K, Boyden ES, LeDoux JE. [Hebbian and neuromodulatory mechanisms interact to trigger associative memory formation](#). Proc Natl Acad Sci U S A. 2014 Dec 23;111(51):E5584-92.

Stalneck CA, Ulrich SM, Li Y, Ramachandran S, McBrayer MK, DeBerardinis RJ, Cerione RA, Erickson JW. [Mechanism by which a recently discovered allosteric inhibitor blocks glutamine metabolism in transformed cells](#). Proc Natl Acad Sci USA. 2014 Dec 29.

Psychiatry Research Neuroimaging

Vilma Gabbay (Child & Adolescent Psychiatry) is the senior author of this recent paper appearing in *Psychiatry Research: Neuroimaging*.

Henderson SE, Vallejo AI, Ely BA, Kang G, Krain Roy A, Pine DS, Stern ER, Gabbay V. [The neural correlates of emotional face-processing in adolescent depression: a dimensional approach focusing on anhedonia and illness severity](#). Psychiatry Res. 2014 Dec 30;224(3):234-41.

SCHIZOPHRENIA RESEARCH

The Official Journal of the Schizophrenia International Research Society

Pamela Butler and others from NKI and elsewhere published this study showing the patients with schizophrenia take longer to form a first impression than control subjects do, and they utilize different visual perceptual mechanisms to do so.

Vakhrusheva J, Zemon V, Bar M, Weiskopf NG, Tremeau F, Petkova E, Su Z, Abeles IY, Butler PD. [Forming first impressions of others in schizophrenia: Impairments in fast processing and in use of spatial frequency information](#). Schizophr Res. 2014 Dec;160(1-3):142-9.

Developmental Psychobiology

Regina Sullivan (Emotional Brain Institute) edited a special issue of *Developmental Psychobiology* on "[Diversity in Animal Models of Early Life Experience: Methods, Benefits, and Limitations](#)". Dr. Sullivan is an [Associate Editor](#) for the journal.

INFO UPDATE

psychiatryonline

Lifelong Learning in Psychiatry™

The new fifth edition of [The American Psychiatric Publishing Textbook of Substance Abuse Treatment](#) has been added to Psychiatry Online, where the full text can be browsed or searched.

New York State Library

Due to limited funding, the New York State Library has cancelled its subscription to ScienceDirect. You can read the announcement [here](#). As always, the NKI Library can assist with access to ANY content that you are unable to get elsewhere.

alzheimer's research & therapy

As of January 1, 2015, all content published in *Alzheimer's Research & Therapy* is completely open access.

Social Media For Scientists

This [Nature survey](#) looks at academics' increasing use of social media sites like ResearchGate and Academia.edu.

eNeuro

[eNeuro](#) is a new open access journal published by the Society of Neuroscience. See this [overview](#) for more about its aims and features.



NeuroPod is a monthly neuroscience podcast from Nature. [From the website] "Each month, join us as we delve into the latest research on the brain, from its molecular makings to the mysteries of the mind. We'll also be bringing you the latest news from neuroscience conferences around the globe, along with special reports on hot areas in neuroscience." All of the previous episodes, dating back to 2006, are [archived online](#).



Who Is to Blame for Exaggerated Claims?

The mass media is often blamed for presenting research findings in a misleading way. But a [recent article](#) in *The BMJ* investigates the source of these "distortions, exaggerations, or changes to the main conclusions," and concludes that "[e]xaggeration in news is strongly associated with exaggeration in press releases. Improving the accuracy of academic press releases could represent a key opportunity for reducing misleading health related news". This study was covered by James Hamblin, MD, in *The Atlantic* ("[The Point When Science Becomes Publicity](#)"). Dr. Hamblin also hosts an amusing video series called [If Our Bodies Could Talk](#).



Last October, the 26th Annual New York City Mental Health Research Symposium, hosted by the [Brain & Behavior Research Foundation](#), featured presentations by the Foundation's 2014 Outstanding Achievement [Prizewinners](#). In addition, Kay Redfield Jamison, PhD, gave the keynote address in which she described her successful, lifelong battle with bipolar disorder. [Videos](#) of all these Symposium speakers are posted online.

A Portrait of Your Family Health

As noted in the December issue of [NIH News in Health](#), the US Surgeon General has an online tool called [My Family Health Portrait](#) that can help you gather and record your family health history. The tool lets you save your information so that you can update it over time, and share it with other family members. This information can help to assess your risk for some diseases, as well as suggest actions for reducing that risk. In general, it can help your health care practitioner provide you with better care.

The NKI librarian is always available to assist with things like literature searching, citation searching (Web of Science, Scopus), and bibliographic reference management. 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.

DEPARTMENT OF WONDER



In a special issue published in December, *Science* announced its 2014 [Breakthrough of the Year](#) (the [Rosetta comet exploration mission](#)) and [nine runners up](#). There is also a short [video](#) describing the breakthroughs.



[Altmetric](#), a company that tracks and analyzes the online activity related to scholarly literature, has published a list of the [100 papers that attracted the most attention](#) online in 2014. Information about how the list was compiled can be found on their [blog](#).

Cell 40th Anniversary

Last year, to celebrate its [40th year](#) of publication, *Cell* invited forty young scientists from around the world “to talk about science, their personal philosophies, the joys and challenges of research, and their lives away from the bench”. You can read about these interesting individuals on the [40 under 40](#) page.

THE NEW YORKER

The January 26th issue of *The New Yorker* includes a fascinating article by Jill Lepore (“[The Cobweb](#)”) about the intrinsically fleeting nature of the Web, and the Wayback Machine’s endeavor to archive it.

NKI ON THE ROAD



The [53rd Annual Meeting](#) of the American College of Neuropsychopharmacology (ACNP) took place in December in Phoenix. NKI was represented by:

- **Dr. Daniel Javitt**, who chaired a panel on “Linking Information Processing Impairment to Local Circuit Dysfunction in Schizophrenia and Related Disorders”.
- On this panel, **Antigona Martinez, PhD** presented on “Time Frequency Analysis of Visual Sensory Dysfunction in Schizophrenia”.
- **Dr. Michael Milham** gave a panel presentation on “An Emerging Model for Big Data Biomarker Identification”.
- In addition, posters were presented by **Vilma Gabbay, Joshua Kantrowitz, Nunzio Pomara, and Robert Smith**.

You can find the [program book](#) and [abstracts](#) online.



Helena Hansen, MD, PhD, participated in two sessions at the [2014 Annual Meeting of the American Anthropological Association](#) held in Washington, DC, in December. She was the Discussant in a program on “Uncanny Crossovers: Secular and Protestant Hauntings in Psycho-Medical Knowledge”, and she spoke about “Biologizing Addiction: Video As Public and Professional Deliberation” in a session on “Activist Video: Producing for Impact”.

Dr. Hansen also spoke at the [inaugural meeting](#) of the [Anthropology and Mental Health Interest Group](#), which took place immediately prior to the general Association meeting. There, she contributed to the session on Global Psychiatry, for which **Kim Hopper, PhD**, was the Discussant.



Mary Jane Alexander, PhD, gave a presentation on Community Based Participatory Research (“Elements of Participation: Using Concept Mapping to Understand CBPR in a Center to Study MH Recovery”) at the Annual Meeting of the American Public Health Association last November in New Orleans. NKI co-authors of the paper are **Deborah Layman, Judy Sugarman, Christina Pratt,** and **Kristine Jones**.



RUHR-UNIVERSITÄT BOCHUM

At a recent symposium on “Representation and processing of olfactory information in the olfactory system” at the International Graduate School of Neuroscience at Ruhr University Bochum, **Donald Wilson, PhD**, gave a talk on “Cortical-cortical interactions in olfaction”.

UPCOMING EVENTS AND SEMINARS

Center for Dementia Research Neuroscience Seminars Winter/Spring 2015

Held on Thursdays at noon in conference room B

Adriana Heguy, PhD

NYU Langone Medical Center

TBD

February 19th at noon

Hosted by Dr. Stephen Ginsberg

Gail V. W. Johnson, PhD

University of Rochester

The degradation of tau by selective autophagy

February 26th at noon

Hosted by Dr. Stephen Ginsberg

Peter Lobel, PhD

Rutgers University

TBD

March 5th at noon

Hosted by Dr. Ralph A. Nixon

Ipe Ninan, PhD

NYU Langone Medical Center

Regulation of synapses in the fear circuit

March 19th at noon

Hosted by Dr. Veeranna



Center for Biomedical Imaging and Neuromodulation Scientific Lecture Series

Held in conference room B at 11 am

Nicolas Langer, PhD

Child Mind Institute

City College, Dept. of Biomedical Engineering

New Paradigms for Modular Phenotyping of Learning Disabilities: A Multi-Modal Approach to Disentangle Underlying Mechanisms of the Clinical Measure: Processing Speed

Monday, February 9th

Matthew J. Hoptman, PhD

Research Scientist, NKI

Research Associate Professor, Dept. of Psychiatry, NYU School of Medicine

Fierce Urgency: The Role of Emotional Impulsivity in Schizophrenia

Wednesday, February 18th

Junquian Xu, PhD

Icahn School of Medicine at Mount Sinai

Title TBD

Monday, February 23rd

David Lewis, PhD

Research Scientist, NKI

Title TBD

Monday, March 2nd

Alexander Alekseyenko, PhD

Associate Professor, Center for Health Informatics
and Bioinformatics

Co-Director, Best Practices Integrative Informatics
Consultation

NYU Langone Medical Center

Title TBD

Monday, March 9th

Message from OMH: "Every month, the New York State Office of Mental Health (OMH) hosts an interactive videocast covering the latest research, technology and treatment implementation in the fields of psychiatry and psychology. We invite mental health experts from around the world to give presentations and directly communicate with OMH clinicians and staff, bringing research into the daily practices of recovery and the creation of resiliency. Each of these videocasts is moderated by OMH's Dr. Lloyd Sederer or Dr. Jay Carruthers and is recorded so that we can share it with you. Although these programs are developed with psychiatrists and other clinicians in mind, many individuals outside of the mental health profession find the OMH Statewide Grand Rounds to be engaging discussions about the forefront of mental health policy, practice and innovation. OMH welcomes our viewers and we hope that these programs will be of benefit to you!"

[Click here](#) to access the archived Statewide Grand Rounds programs.

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 4,800 items dating back to 1995, and can be searched from the [NKI web site](#).

Atwi S, McMahon D, Scharfman H, MacLusky NJ. Androgen Modulation of Hippocampal Structure and Function. *Neuroscientist*. 2014 Nov 21.

Brice C, Masia Warner C, Okazaki S, Ma PW, Sanchez A, Esseling P, Lynch C. Social Anxiety and Mental Health Service Use Among Asian American High School Students. *Child Psychiatry Hum Dev*. 2014 Oct 10.

Croft HA, Pomara N, Gommoll C, Chen D, Nunez R, Mathews M. Efficacy and safety of vilazodone in major depressive disorder: a randomized, double-blind, placebo-controlled trial. *J Clin Psychiatry*. 2014 Nov;75(11):e1291-8.

Dai Z, Yan C, Li K, Wang Z, Wang J, Cao M, Lin Q, Shu N, Xia M, Bi Y, He Y. Identifying and Mapping Connectivity Patterns of Brain Network Hubs in Alzheimer's Disease. *Cereb Cortex*. 2014 Oct 19.

Deepmala, Coffey B. Challenges in psychopharmacological management of a young child with multiple comorbid disorders, history of trauma, and early-onset mood disorder: the role of lithium. *J Child Adolesc Psychopharmacol*. 2014 Nov;24(9):519-24.

Devi L, Tang J, Ohno M. Beneficial Effects of the β -Secretase Inhibitor GRL-8234 in 5XFAD Alzheimer's Transgenic Mice Lessen During Disease Progression. *Curr Alzheimer Res*. 2015;12(1):13-21.

Fu D, Turkoz I, Simonson RB, Walling DP, Schooler NR, Lindenmayer J, Canuso CM, Alphs L. Paliperidone palmitate once-monthly reduces risk of relapse of psychotic, depressive, and manic symptoms and maintains functioning in a double-blind, randomized study of schizoaffective disorder. *J Clin Psychiatry*. 2014 Dec 5.

Ginsberg SD, Che S. Methods and Compositions for Amplification and Detection of microRNAs (miRNAs) and Noncoding RNAs (ncRNAs) Using the Signature Sequence Amplification Method (SSAM). *Recent Adv DNA Gene Seq.* 2014;8(1):2-9.

Hartley D, Blumenthal T, Carrillo M, DiPaolo G, Esralew L, Gardiner K, Granholm AC, Iqbal K, Krams M, Lemere C, Lott I, Mobley W, Ness S, Nixon R, Potter H, Reeves R, Sabbagh M, Silverman W, Tycko B, Whitten M, Wisniewski T. Down syndrome and Alzheimer's disease: Common pathways, common goals. *Alzheimers Dement.* 2014 Dec 12.

Henderson SE, Vallejo AI, Ely BA, Kang G, Krain Roy A, Pine DS, Stern ER, Gabbay V. The neural correlates of emotional face-processing in adolescent depression: a dimensional approach focusing on anhedonia and illness severity. *Psychiatry Res.* 2014 Dec 30;224(3):234-41.

Heresco-Levy U, Durrant AR, Ermilov M, Javitt DC, Miya K, Mori H. Clinical and Electrophysiological Effects of D-Serine in a Schizophrenia Patient Positive for Anti-N-Methyl-D-Aspartate Receptor Antibodies. *Biol Psychiatry.* 2014 Sep 16.

Iyengar SS, LaFrancois JJ, Friedman D, Drew LJ, Denny CA, Burghardt NS, Wu MV, Hsieh J, Hen R, Scharfman HE. Suppression of Adult Neurogenesis Increases the Acute Effects of Kainic Acid. *Exp Neurol.* 2014 Dec 2;264C:135-149.

Javitt DC, Freedman R. Sensory processing dysfunction in the personal experience and neuronal machinery of schizophrenia. *Am J Psychiatry.* 2015 Jan 1;172(1):17-31.

Johansen JP, Diaz-Mataix L, Hamanaka H, Ozawa T, Ycu E, Koivumaa J, Kumar A, Hou M, Deisseroth K, Boyden ES, LeDoux JE. Hebbian and neuromodulatory mechanisms interact to trigger associative memory formation. *Proc Natl Acad Sci U S A.* 2014 Dec 23;111(51):E5584-92.

Kubota JT, Li J, Bar-David E, Banaji MR, Phelps EA. All Claims in the Original Article Hold as Stated: A Response to Arkes (2015). *Psychol Sci.* 2014 Dec 15.

Kumar JR, Basavarajappa BS, Vishwanath BS, Gowda TV. Biochemical and pharmacological characterization of three toxic phospholipase A(2)s from *Daboia russelii* snake venom. *Comp Biochem Physiol C Toxicol Pharmacol.* 2014 Dec 3;168C:28-38.

Levin R, Dor-Abarbanel AE, Edelman S, Durrant AR, Hashimoto K, Javitt DC, Heresco-Levy U. Behavioral and cognitive effects of the N-methyl-d-aspartate receptor co-agonist d-serine in healthy humans: Initial findings. *J Psychiatr Res.* 2014 Dec 24.

López LM, de Saxe Zerden L, Bourgeois P, Hansen H, Abadie R, Dombrowski K, Curtis R. HIV/AIDS in Puerto Rican People Who Inject Drugs: Policy Considerations. *Am J Public Health.* 2015 Jan; 105(1):e3.

Millard PH, McLaren JL, Coffey DB. Lurasidone treatment in a child with autism spectrum disorder with irritability and aggression. *J Child Adolesc Psychopharmacol.* 2014 Aug;24(6):354-6.

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