

The NKI Informer



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

Donald C. Goff, MD, Director
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November / December, 2016

Stuart Moss, MLS, Editor

EMMANUELLE COURTIOL

Sniffing out Clues to Attention



Please tell us a bit about your background.

I graduated from the University of Lyon (France) in 2007 with a bachelor's degree in Biology. After that, I received a master's in Neurosciences in Lyon in 2009. Then, I started a PhD program at the Lyon Neuroscience Research Center with Dr. Nathalie Buonviso. I obtained my PhD in December 2012 and I have been a postdoctoral fellow in Donald Wilson's lab at NKI for the last three and one half years.

What brought you to the USA, and how did you end up at NKI?

Some of the key questions of modern neurobiology are about how the brain perceives our environment, and which brain structures and neural circuit activity contribute to appropriately guide behavior in response to this environment. During my PhD, I investigated how olfactory perception is related to the way the environment is sampled. For my post-doc, I wanted to explore the role of higher order olfactory areas in olfactory perception, with the aim to gradually turn toward the study of more complex cognitive functions such as attention to odors.

For more than 30 years, Dr. Wilson has worked on olfaction and tried to bridge the gap between cellular activity and behavior. I was familiar with his work and the numerous tools he had developed to answer his questions – single-unit recordings in behaving animals, behavior, optogenetics, etc. Toward the end of my PhD, I contacted Dr. Wilson to discuss the possible project I wanted to work on, and I came to visit his lab at NKI in 2012. My goal for my post-doc was not only to study complex cognitive functions but also to be in an environment that would allow me to grow as an independent researcher, since post-doctoral training is a decisive period in one's career. When I visited the Wilson lab, I had the chance to meet researchers from the Emotional Brain Institute (EBI) – a multi-disciplinary group of researchers

covering a myriad of techniques and questions involving the ontology of emotions and their neural basis. Since I wanted to move toward more integrated neuroscience, studying the neural basis of complex functions, the EBI really appealed to me. Most importantly, my contacts with Dr. Wilson were extremely positive, and I felt that he would not only enable me to learn his techniques, but would also support me in developing my project and my network independently. I thus joined his lab in 2013.

When did you first become interested in science or realize you wanted to be a scientist? And then, how did you come to pursue neuroscience (and olfaction) in particular?

I have always been interested in science. I wanted to be a zoologist for several years until my first year of university when I had a class on neuronal physiology. For the first time, I discovered exactly what an action potential was and how neurons were able to “talk” to each other. This fascinated me. Later on, during practical classes, we had the chance to record the intracellular activity of giant neurons from the snail esophageal ganglia. Understanding how the neuron works, how this activity can be changed and depends on different ions, etc., was really interesting to me, and the most captivating part was hearing the activity of the neuron! Even though working on a snail model seems far from any known diseases, so much has been learned (for example the work of Hodgkin and Huxley on the squid giant axon) and is still being learned from simple organisms. A great way to approach the extremely complex machinery of the brain is to study simpler organisms or systems. These classes led me to pursue neuroscience.

Olfaction is a fascinating sense, with a high emotional content and strongly linked to culture (cheese lover or cheese hater), learning, and memory (Proust’s madeleine). While it is thought that olfaction is not an important sense in humans (some have called it an invisible sense), it plays an important role in our everyday life. It can sense danger (for example, gas is naturally odorless but mercaptan – a non-toxic chemical – is added to give it a distinctive odor); it is related to nutrition; and it is important for our social identity (notions of hygiene and of well being, relationships with

others especially between mothers and infants). And most importantly, olfactory dysfunction is an early and common symptom of many neurodegenerative diseases, including Parkinson’s and Alzheimer’s diseases. Those are the main reasons why I decided to work on the olfactory sense.

Please briefly describe your field(s) of interest, and your current research project(s).

As I mentioned earlier, a critical topic in neuroscience is to understand which brain structures are involved and how they interact with each other to guide behavior. The general goal of my project is to study whether one particular area (the thalamus) is involved in odor-guided behavior in rats, especially in attention to odors. I decided to explore the role of the thalamus because it is a key crossroad structure in the brain and is recognized as a major contributor to sensory perception, attention, sleep and arousal, memory and cognition. However, due to the specific organization of the olfactory pathway, the role of the thalamus in olfaction was woefully unexplored. To explore its role in olfaction and especially attention to odors, I use a multi-disciplinary approach using behavior, single-unit recording *in vivo*, and optogenetics in rats. As a first step, we wanted to characterize the olfactory component in the activity of the thalamus. This was a necessary step to understand and dissect whether the thalamus is implicated in attention to odors, and how the thalamus can dynamically “talk” to different areas of the brain to generate an appropriate behavior. Attention is a major cognitive function, and attention deficits are hallmark symptoms of numerous neuropsychiatric disorders. My project aims to test the structures and mechanisms underlying attention processes in a unique sensory modality, olfaction. One of the strengths of the olfactory system is its relative simplicity, and with our increasing understanding of odor processing, this provides a more tractable system for us to explore the role of thalamic nuclei in attention.

What are your longer term research goals?

I hope to eventually get a position in France. I would also like to teach, as I really enjoyed working

as a TA during my PhD. I would love to continue to work on the neural basis of attention and try to find a common model of the underlying mechanisms of attention in the different sensory modalities.

You are currently being funded by your first NIH grant. Do you have any words of wisdom for other investigators hoping to obtain funding for the first time?

I have no words of wisdom (although I may be able to answer this question in 10 or 20 years...), I just feel really lucky that I was awarded an R03 from the NIDCD. NIH grants are extremely competitive, and the project or the new investigator can be amazing, but sometimes it is just not enough. However, I can tell you what I felt was important for my application. The first point is to perfectly know the literature to identify interesting, largely unexplored questions, and go to meetings to define the caveats in this knowledge. Second, clearly define the Institute and the study section you want to submit your application to, in order to make sure that your project fits with the objectives of the study section. Also, get the advice of more senior PIs. I was able to write my grant because I was surrounded by supportive people – Dr. Wilson and the members of his lab who support me every day, the personnel in the animal facility who are always willing to help me with my animals, post-docs in other labs, and the people in the grants office who helped me to finalize my application. But overall, I think the most critical point is to have a lot of preliminary data that not only demonstrates that you are able to perform the techniques you describe in your proposal, but most importantly supports your hypothesis. And the last part you need is luck!

What do you like to do when you are not working?

I love to spend time with my husband and friends (we play a lot of board games like Catan). And I am also practicing Krav Maga to keep me energized and calm. Science can be frustrating so it is good to have an outlet!

GRANTS RECEIVED



National Institute on Deafness and Other Communication Disorders (NIDCD)

Dr. Yoshinao Kajikawa has received a five year R01 grant entitled “Neurophysiology, behavioral role and organization of the auditory parabelt” from the NIDCD.

FUNDING NEWS



National Institute of Mental Health

This fall, the NIMH released updates to its Strategic Research Priorities, which serve as guidance to NIMH grantees, potential grant applicants, and staff for the design and implementation of future research. Click [here](#) for the announcement, and [here](#) to see the NIMH Strategic Plan.



National Institutes of Health
Turning Discovery Into Health

Also recently, the NIH [announced](#) the latest round of grants to support the BRAIN Initiative (Brain Research through Advancing Innovative Neurotechnologies). Go to the [homepage](#) for more about the BRAIN Initiative and related funding.



The Brain & Behavior Research Foundation recently hosted its 28th Annual International Mental Health Research Symposium, featuring presentations by the 2016 Foundation Outstanding Achievement Prizewinners and by two NARSAD Young Investigator Grantees. Videos of these Symposium presentations can now be viewed [online here](#).

FROM AROUND THE INSTITUTE

Outpatient Research Department News

Contributed by Russell Tobe, MD
ORD Medical Director

In October, NKI's Volunteer Recruitment Pool (VRP) enrolled its 2,000th research participant. The VRP was developed over 10 years ago as a core, shared, and centralized institutional resource in the tracking and equitable distribution of research familiar and diagnostically characterized research participants to institutional research investigations. The VRP has contributed to the conduct of dozens of research protocols over the years, facilitating rapid start-up and implementation of pilot and funded work. Though shepherded by the Outpatient Research Department (in particular **Melissa Breland**, **Alexis Lieval**, and **Laura Panek**) with the support of the Director's Office and the Information Sciences Division, the success of the VRP is largely a result of being a collaborative institutional program. In addition to my tremendous appreciation of and congratulations to staff directly involved in the VRP, I also thank all of the wonderful staff and collaborators who have not only benefited from the VRP, but who have and continue to contribute enrollments and effort in diagnostic characterizations.

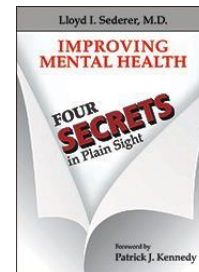


The NKI-Rockland Sample also recently passed a milestone, with the enrollment of its 1,500th research participant. This project has over 100 established research sites accessing de-identified data through established data usage agreements, and there are now over 120 scientific publications utilizing data collected in the NKI-Rockland Sample.



Office of
Mental Health

NYS OMH recently held its 2016 Statewide Virtual Town Hall. Slides from Commissioner Ann Marie Sullivan, MD's presentation are now available on the OMH website: [Statewide Town Hall: A Vision for the NYS Public Mental Health System](#).



The latest book by OMH Medical Director Lloyd Sederer, MD, is now available. [Improving Mental Health: Four Secrets in Plain Sight](#) is published by American Psychiatric Association Publishing, and has a foreword by Patrick Kennedy.

Dr. Sederer discussed the book with Matthew Shapiro of NAMI-NYS on the program Mental Health Now. You can view their conversation [here](#).

PUBLICATIONS OF NOTE



Helena Hansen (Social Solutions & Services) coauthored this editorial appearing in the December issue of the *American Journal of Public Health*.

Hansen H, Netherland J. [Is the Prescription Opioid Epidemic a White Problem?](#) *Am J Public Health*. 2016 Dec; 106(12):2127-2129.

Psychiatric Services

Dr. Hansen is also a coauthor of this article on the treatment of opioid use disorders.

Polydorou S, Ross S, Coleman P, Duncan L, Roxas N, Thomas A, Mendoza S, Hansen H. [Integrating Buprenorphine Into an Opioid Treatment Program: Tailoring Care for Patients With Opioid Use Disorders](#). *Psychiatr Serv*. 2016 Oct 17.

Biological Psychiatry

A Journal of Psychiatric Neuroscience and Therapeutics

Members of the **Center for Biomedical Imaging and Neuromodulation** are among the authors of this open access article in *Biological Psychiatry*.

Van Dam NT, O'Connor D, Marcelle ET, Ho EJ, Cameron Craddock R, Tobe RH, Gabbay V, Hudziak JJ, Xavier Castellanos F, Leventhal BL, Milham MP. [Data-Driven Phenotypic Categorization for Neurobiological Analyses: Beyond DSM-5 Labels](#). *Biol Psychiatry*. 2016 Jul 19.



EUROPEAN JOURNAL OF
**PSYCHO-
TRAUMATOLOGY**
THE OFFICIAL JOURNAL OF THE EUROPEAN SOCIETY FOR TRAUMATIC STRESS STUDIES

Regina Sullivan and **Maya Opendak** (Emotional Brain Institute) contributed this open access paper appearing in a [special issue](#) titled “Back to Basics: Integrating Clinical and Scientific Knowledge to Advance the Field of Trauma—Highlights of the ISTSS-2015”

Opendak M, Sullivan RM. [Unique neurobiology during the sensitive period for attachment produces distinctive infant trauma processing](#). *Eur J Psychotraumatol*. 2016 Nov 8;7:31276.

(GIGA)ⁿ SCIENCE

Benjamin Puccio and **Cameron Craddock** (C-BIN) are among the authors of this paper appearing in the open access online journal *GigaScience*.

Puccio B, Pooley JP, Pellman JS, Taverna EC, Craddock RC. [The preprocessed connectomes project repository of manually corrected skull-stripped T1-weighted anatomical MRI data](#). *Gigascience*. 2016 Oct 25;5(1):45.

JAMA Pediatrics

Eva Petkova (Child & Adolescent Psychiatry) and colleagues at NYU Langone Medical Center published this article in *JAMA Pediatrics*.

Brotman LM, Dawson-McClure S, Kamboukos D, Huang KY, Calzada EJ, Goldfeld K, Petkova E. [Effects of ParentCorps in Prekindergarten on Child Mental Health and Academic Performance: Follow-up of a Randomized Clinical Trial Through 8 Years of Age](#). *JAMA Pediatr*. 2016 Oct 3.

Journal of the American Academy of CHILD & ADOLESCENT PSYCHIATRY

Xavier Castellanos (Child & Adolescent Psychiatry) and colleagues published this paper in the November issue of *JAACAP*. Their paper was [selected for commentary](#) in *NEJM Journal Watch Psychiatry*.

García Murillo L, Ramos-Olazagasti MA, Mannuzza S, Castellanos FX, Klein RG. [Childhood Attention-Deficit/Hyperactivity Disorder and Homelessness: A 33-Year Follow-Up Study](#). *J Am Acad Child Adolesc Psychiatry*. 2016 Nov;55(11):931-936.

Babak Ardekani (C-BIN) and NKI colleagues have a new paper in the *Journal of Alzheimer's Disease*. Dr. Ardekani notes that "This work used longitudinal structural MRI and neuropsychiatric assessments in a Random Forest classifier to predict conversion of patients' diagnoses from Mild Cognitive Impairment to Alzheimer's disease with over 82% accuracy. Interestingly, the prediction accuracy in women (89%) was significantly greater than that of men. This approach is useful for both early treatment of patients at imminent risk of AD as well as for sample enrichment in clinical trials."

Ardekani BA, Bermudez E, Mubeen AM, Bachman AH; Alzheimer's Disease Neuroimaging Initiative. [Prediction of Incipient Alzheimer's Disease Dementia in Patients with Mild Cognitive Impairment](#). *J Alzheimers Dis*. 2016 Nov 1; 55(1): 269-281.



Neuron

Michael Milham, Director of the Center for Biomedical Imaging and Neuromodulation, is a member of the consortium that published this NeuroView piece recently in *Neuron*.

Neuro Cloud Consortium. [To the Cloud! A Grassroots Proposal to Accelerate Brain Science Discovery](#). *Neuron*. 2016 Nov 2; 92(3): 622-627.



Neurobiology of Learning and Memory

Regina Sullivan (Emotional Brain Institute) coauthored this invited review.

Debiec J, Sullivan RM. [The Neurobiology of Safety and Threat Learning in Infancy](#). *Neurobiol Learn Mem*. 2016 Nov 4.

Molecular Psychiatry

These articles from the **Levy Lab** (Center for Dementia Research) and **Joseph LeDoux** et al. (Emotional Brain Institute) appear online in *Molecular Psychiatry*.

Kaur G, Pawlik M, Gandy SE, Ehrlich ME, Smiley JF, Levy E. [Lysosomal dysfunction in the brain of a mouse model with intraneuronal accumulation of carboxyl terminal fragments of the amyloid precursor protein](#). *Mol Psychiatry*. 2016 Oct 25.

LeDoux JE, Moscarello J, Sears R, Campese V. [The birth, death and resurrection of avoidance: a reconceptualization of a troubled paradigm](#). *Mol Psychiatry*. 2016 Oct 18.



PERCEPTION

Emmanuelle Courtiol and **Donald Wilson** (Emotional Brain Institute) wrote this paper that will be included in a special issue of *Perception* on the topic of chemosensory perception.

Courtiol E, Wilson DA. [The Olfactory Mosaic: Bringing an Olfactory Network Together for Odor Perception](#). *Perception*. 2016 Sep 28.



NeuroImage

NKI researchers are primarily responsible for this paper describing an openly shared neuroimaging data repository.

McDonald AR, Muraskin J, Dam NT, Froehlich C, Puccio B, Pellman J, Bauer CC, Akeyson A, Breland MM, et al. [The Real-time fMRI Neurofeedback Based Stratification of Default Network Regulation Neuroimaging Data Repository](#). *Neuroimage*. 2016 Nov 8.

Neuropsychopharmacology

At the Intersection of Brain, Behavior, and Therapeutics

Robert Sears and **Joseph LeDoux** (Emotional Brain Institute) are the senior authors of this *Neuropsychopharmacology* paper.

Schiff HC, Johansen JP, Hou M, Bush DE, Smith EK, Klein JE, LeDoux JE, Sears RM. [β-Adrenergic Receptors Regulate the Acquisition and Consolidation Phases of Aversive Memory Formation through Distinct, Temporally-Regulated Signaling Pathways](#). *Neuropsychopharmacology*. 2016 Oct 20.



Jean-Pierre Lindenmayer (Manhattan Psychiatric Center) coauthored this open access paper appearing in a special theme issue on “Advances in Medication Adherence”.

MacEwan JP, Forma FM, Shafrin J, Hatch A, Lakdawalla DN, Lindenmayer JP. [Patterns of Adherence to Oral Atypical Antipsychotics Among Patients Diagnosed with Schizophrenia](#). *J Manag Care Spec Pharm*. 2016 Nov; 22(11): 1349-1361.

Psychiatry Research

Fabien Trémeau, **Daniel Javitt**, and **Donald Goff** coauthored this recent article on loneliness in schizophrenia.

Trémeau F, Antonius D, Malaspina D, Goff DC, Javitt DC. [Loneliness in schizophrenia and its possible correlates. An exploratory study](#). *Psychiatry Res*. 2016 Sep 26;246:211-217.

INFO UPDATE



The rapid changes that have swept the information landscape in recent years have affected the ways in which science is communicated and publicized, creating new challenges as well as opportunities. **Fast Track Impact** is a company that was created to help researchers increase the impact of their work in the current environment. In addition to the company’s consulting services, their website offers some free resources that you might find useful, including [a podcast](#) and [a blog](#). [The Research Impact Handbook](#), by one of the company’s founders, may also be of interest.



The third edition of [What Your Patients Need to Know about Psychiatric Medications](#) was recently added to the Psychiatry Online, a rich collection of online resources available at NKI. Psychiatry Online includes the [DSM Library](#), a variety of other [textbooks](#), the [journals](#) published by the American Psychiatric Association, and more. A recent [improvement](#) to the *DSM-5* display allows you to view the current text alongside the historical text if you wish.



Joshua Gordon, MD, PhD, the new Director of NIMH, published his [first Director’s Message](#) in November, describing his outlook as he begins his new job. You can follow new messages as they are posted, [here](#).

FACING ADDICTION IN AMERICA

In November, the Surgeon General released [*Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*](#), a landmark report on a widespread health crisis. There are chapters dedicated to neurobiology, prevention, treatment, recovery, health systems integration, and recommendations for the future. For an overview, read the [Executive Summary](#) and [Key Findings](#).



[Healthy Minds with Dr. Jeffrey Borenstein](#) is a public television series that focuses on common psychiatric conditions, and aims to educate and reduce stigma. The series is produced by the Brain & Behavior Research Foundation. Topics for the program's fourth season include suicide prevention, bipolar disorder, schizophrenia, depression and motherhood, and the mental health issues faced by veterans. The series website includes the broadcast schedule, as well as bonus footage following each episode.



[MEDLINE](#), the bibliographic database from the U.S. National Library of Medicine containing over 23 million article references in biomedicine and related fields, celebrated its 45th anniversary in October. From 22 users and 70,000 searches in 1971 to 601 million PubMed visits and 2.8 billion searches in 2016, the progress has been extraordinary. For more fun facts and an infographic, see [this notice](#) in the *NLM Technical Bulletin*.

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

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

You can [link to the NKI Library's website](#) from myNKI. The Library site includes quick links to the NYU Health Sciences Library and to the New York State Library, as well as links to NKI's own library resources ([journal finder](#), [online catalog](#), [PsychiatryOnline](#), etc.). Remote access is available using NKI's VPN.

DEPARTMENT OF WONDER



Hidden beneath Bryant Park in midtown Manhattan is a library facility that may come as a surprise. To learn about this sophisticated bunker and "book train", check out [this article](#) in *The New York Times* (includes video).

The New York Times

Also in the *Times* is [this article](#) reviewing a range of recent exhibits and books on the history of psychiatric asylums. One topic the article touches on is New Jersey's [Greystone Hospital](#), which is the subject of a [new book](#). The original historic Greystone building was demolished in 2015, as you can see in this [remarkable video](#).

NKI ON THE ROAD



At the [2016 Society for Neuroscience annual meeting](#), held in San Francisco in November, NKI was represented by a number of participants.

Deputy Director **Antonio Convit** presented in a Minisymposium on “Association of Alzheimer's Disease and Other Cognitive Impairments with Metabolic Syndrome”.

From the Emotional Brain Institute, **Christopher Cain** chaired a Symposium on “Moving from Pavlovian ‘Fear’ Conditioning to Active Avoidance”, and **Regina Sullivan** chaired a Nanosymposium on “Enduring Consequences of Early Stress”. In addition, talks were given by **Maya Opendak**, **Elizabeth Phelps**, and **Chris Cain**; and posters were presented from **Yaniv Cohen**, **Monica Lewin**, **Adrienne Santiago**, **Catia Teixeira**, and **Donald Wilson**.

From the Center for Dementia Research, posters were presented by **Melissa Alldred**, **Stephen Ginsberg**, **José Morales-Corraliza**, and **Kathy Peng**. Kathy received two independent travel grants to attend the conference.

And from the Lakatos lab (Schizophrenia Research), **Annie Barczak** and **Tammy McGinnis** presented posters.

If you want more details, the conference sessions, presentations, and authors can be [searched online](#).



The [annual meeting of the American College of Neuropsychopharmacology](#) (ACNP) was held in December in Hollywood, Florida. Poster presenters from NKI included **Joshua Kantrowitz**, **Jean-Pierre Lindenmayer**, **Antigona Martinez**, **Nunzio Pomara**, and **Robert Smith**. For more details, you can search the conference program [here](#).



Joseph LeDoux, Director of the Emotional Brain Institute, was one of the organizers of a one day [LabLinks](#) conference on “[Emotion and the Brain](#)” sponsored by Cell Press. The event was held on October 13 at New York University, and included presentations by Dr. LeDoux, **Liz Phelps**, and **Regina Sullivan**. A report on the event appears [here](#).

UPCOMING EVENTS AND SEMINARS

NKI GRAND ROUNDS

Lloyd Sederer, MD

Chief Medical Officer, NYS OMH
Medical Editor for Mental Health, Huffington Post

Improving Mental Health: 4 Secrets in Plain Sight

Tuesday, January 10th, 10 am

Joseph LeDoux, PhD

Director, Emotional Brain Institute, NKI
Henry and Lucy Moses Professor of Science;
Professor of Neural Science and Psychology
NYU Center for Neural Science

Have We Misunderstood Fear?

Tuesday, January 17th, 10 am

IRB TRAINING SESSIONS

NKI Auditorium
Topics and times as follows:

New Submissions

January 5, 2017 at 11 AM

Modifications to Approved Protocols

December 20, 2016 at 11 AM

January 9, 2017 at 10 AM

Renewal/Continuing Review of Research

December 20, 2016 at 2 PM

January 9, 2017 at 12:30 PM

Event Reporting: Notes to the IRB, Adverse Events, Protocol Deviations, etc.

December 28, 2016 at 10 AM

January 16, 2017 at 10 AM

Regulatory Binders

December 28, 2016 at 12 PM

January 16, 2017 at 2 PM

Closure

January 3, 2017 at 10:30 AM

January 18, 2017 at 11 AM

Should I Submit to the IRB? Determination of Research

January 3, 2017 at 1:30 PM

January 18, 2017 at 1:30 PM

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 by OMH employees [on the OMH intranet](#). Anyone can view the programs [on the OMH website](#).

Center for Dementia Research Seminar Series

Held on Thursdays at 10 am

Lorna Role, PhD

Distinguished Professor and Chair
Department of Neurobiology and Behavior
Co-Director of the Neuroscience Institute
Stony Brook University

Title TBA

January 12th

Scott Small, MD

Boris and Rose Katz Professor of Neurology
Director, Alzheimer's Disease Research Center
Columbia University

Title TBA

January 19th

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 5,300 items dating back to 1995, and can be searched from the [NKI web site](#).

Ardekani BA, Bermudez E, Mubeen AM, Bachman AH; Alzheimer's Disease Neuroimaging Initiative. Prediction of Incipient Alzheimer's Disease Dementia in Patients with Mild Cognitive Impairment. *J Alzheimers Dis.* 2016 Nov 1; 55(1): 269-281.

Baslow MH, Cain CK, Sears R, Wilson DA, Bachman A, Gerum S, Guilfoyle DN. Stimulation-induced transient changes in neuronal activity, blood flow and N-acetylaspartate content in rat prefrontal cortex: a chemogenetic fMRS-BOLD study. *NMR Biomed.* 2016 Oct 3.

Bordi M, Berg MJ, Mohan PS, Peterhoff CM, Alldred MJ, Che S, Ginsberg SD, Nixon RA. Autophagy flux in CA1 neurons of Alzheimer hippocampus: Increased induction overburdens failing lysosomes to propel neuritic dystrophy. *Autophagy*. 2016 Nov 4: 1-17.

Boulanger Bertolus J, Mouly AM, Sullivan RM. Ecologically relevant neurobehavioral assessment of the development of threat learning. *Learn Mem*. 2016 Sep 15;23(10):556-66.

Brotman LM, Dawson-McClure S, Kamboukos D, Huang KY, Calzada EJ, Goldfeld K, Petkova E. Effects of ParentCorps in Prekindergarten on Child Mental Health and Academic Performance: Follow-up of a Randomized Clinical Trial Through 8 Years of Age. *JAMA Pediatr*. 2016 Oct 3.

Brueggen K, Kasper E, Dyrba M, Bruno D, Pomara N, Ewers M, Duering M, Bürger K, Teipel SJ. The Primacy Effect in Amnesic Mild Cognitive Impairment: Associations with Hippocampal Functional Connectivity. *Front Aging Neurosci*. 2016 Oct 21;8:244.

Clelland CL, Drouet V, Rilett KC, Smeed JA, Nadrich RH, Rajparia A, Read LL, Clelland JD. Evidence that COMT genotype and proline interact on negative-symptom outcomes in schizophrenia and bipolar disorder. *Transl Psychiatry*. 2016 Sep 13;6(9):e891.

Cloitre M, Petkova E, Su Z, Weiss B. Patient characteristics as a moderator of post-traumatic stress disorder treatment outcome: combining symptom burden and strengths. *BJPsych Open*. 2016 Mar 2;2(2):101-106.

Courtial E, Wilson DA. The Olfactory Mosaic: Bringing an Olfactory Network Together for Odor Perception. *Perception*. 2016 Sep 28.

Debiec J, Sullivan RM. The Neurobiology of Safety and Threat Learning in Infancy. *Neurobiol Learn Mem*. 2016 Nov 4.

Diminich ED, Goff DC. Is Pupillary Response a Biomarker for Effort and Defeatist Attitudes in Patients With Schizophrenia? *Biol Psychiatry*. 2016 Oct 15;80(8):574-6.

Eich TS, MacKay-Brandt A, Stern Y, Gopher D. Age-Based Differences in Task Switching Are Moderated by Executive Control Demands. *J Gerontol B Psychol Sci Soc Sci*. 2016 Sep 15.

FeldmanHall O, Glimcher P, Baker AL, Phelps EA. Emotion and decision-making under uncertainty: Physiological arousal predicts increased gambling during ambiguity but not risk. *J Exp Psychol Gen*. 2016 Oct;145(10):1255-1262.

Flannery DJ, Todres J, Bradshaw CP, Amar AF, Graham S, Hatzenbuehler M, Masiello M, Moreno M, Sullivan R, et al. Bullying Prevention: a Summary of the Report of the National Academies of Sciences, Engineering, and Medicine : Committee on the Biological and Psychosocial Effects of Peer Victimization: Lessons for Bullying Prevention. *Prev Sci*. 2016 Nov;17(8):1044-1053.

Freed RD, Coffey BJ, Mao X, Weiduschat N, Kang G, Shungu DC, Gabbay V. Decreased Anterior Cingulate Cortex γ -Aminobutyric Acid in Youth With Tourette's Disorder. *Pediatr Neurol*. 2016 Sep 12.

García Murillo L, Ramos-Olazagasti MA, Mannuzza S, Castellanos FX, Klein RG. Childhood Attention-Deficit/Hyperactivity Disorder and Homelessness: A 33-Year Follow-Up Study. *J Am Acad Child Adolesc Psychiatry*. 2016 Nov;55(11):931-936.

Golan T, Davidesco I, Meshulam M, Groppe DM, Mégevand P, Yeagle EM, Goldfinger MS, Harel M, Melloni L, Schroeder CE, Deouell LY, Mehta AD, Malach R. Human intracranial recordings link suppressed transients rather than 'filling-in' to perceptual continuity across blinks. *Elife*. 2016 Sep 29;5. pii: e17243.

Hansen H, Netherland J. Is the Prescription Opioid Epidemic a White Problem? *Am J Public Health*. 2016 Dec; 106(12):2127-2129.

Javitt DC. Bitopertin in schizophrenia: glass half full? *Lancet Psychiatry*. 2016 Nov 2.

Joseph AM, Manseau MW, Lalane M, Rajparia A, Lewis CF. Characteristics associated with synthetic cannabinoid use among patients treated in a public psychiatric emergency setting. *Am J Drug Alcohol Abuse*. 2016 Oct 31:1-6.

Kantrowitz JT, Medalia A, Keefe RS, Harvey PD, Bruder G, Barch DM, Choo T, Lee S, Lieberman JA. Dr Kantrowitz and Colleagues Reply. *J Clin Psychiatry*. 2016 Oct;77(10):e1353.

Karunanayaka PR, Wilson DA, Tobia MJ, Martinez BE, Meadowcroft MD, Eslinger PJ, Yang QX. Default mode network deactivation during odor-visual association. *Hum Brain Mapp*. 2016 Oct 27.

Kaur G, Pawlik M, Gandy SE, Ehrlich ME, Smiley JF, Levy E. Lysosomal dysfunction in the brain of a mouse model with intraneuronal accumulation of carboxyl terminal fragments of the amyloid precursor protein. *Mol Psychiatry*. 2016 Oct 25.

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