



# The NKI Informer



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

Donald C. Goff, MD, Director  
Antonio Convit, MD, Deputy Director  
Thomas O'Hara, MBA, Deputy Director, Institute Administration

May / June, 2015

Stuart Moss, MLS, Editor

## THE HIDDEN ISD

### DATA MANAGEMENT SOLUTIONS AT NKI

The Information Sciences Division (ISD) has played a key role within the Nathan Kline Institute since the Institute's founding. As far back as the 1960's, ISD pioneered the use of computer technology in psychiatric care and research. In recent years, under the leadership of Jim Robinson, ISD has continued to merge technology and mental health research with its Acquire electronic data capture system and its teams of data managers, study monitors, and developers.

While many staff members know ISD only as the "Computer Center" support group, the division has one of the most active research programs in the Institute, providing data management services and software for numerous clinical trials and projects, from small investigator-initiated studies to prominent national clinical trials such as [RAISE](#) (Recovery After an Initial Schizophrenia Episode).

In an increasingly regulatory climate, it's no longer enough to say you've collected data. Sponsors want to be assured that the data is secure,

verifiable, unaltered, "clean," and can be authenticated through an audit trail. ISD's data management staff and the Acquire system ensure these conditions.

How does ISD data management work? A single data manager is assigned to a research project from beginning to end. The data manager reviews the protocol, develops a data management plan, builds all study forms in consultation with the research staff, ensures adherence to protocol, monitors data continually throughout the study, assists with Data and Safety Monitoring Board submissions, and provides clean data to the research team upon study completion.

The primary tool of the data manager at ISD is Acquire EDC, a web-based electronic data capture (EDC) system designed and built by ISD's own developers. Data is entered by research staff, and reviewed and queried by data managers. Both groups have real-time access to study data, reports, and such tools as Subject Management, which allows site staff to view the current status of an individual subject or all subjects in a single view.

**The new state time and attendance system (ATARS) is now in effect. See page 4 for details.**

(continued)

The software runs on all common web browsers, including those on tablets, Macs, and PCs, and is compliant with regulations set forth by HIPAA, FDA, and FISMA, the federal computer security act, which is an exhaustive and costly compliance now being required in many federal contracts and grants.

Acquire EDC has been used with investigators at NKI, NYU, Yale, Harvard, UCLA, and Duke. So what can it provide the NKI researcher? First and foremost, a safe and regulated place for your data. All study data is stored in a SQL Server database, which is backed up every 15 minutes. Secondly, Acquire EDC is a flexible system that easily meets the needs of most clinical projects. Advanced features include support for multiple levels of blinding, self-reported forms such as patient diaries, and an integrated randomization tool.

For projects without the budget for full data management, ISD offers several data management options to assist with study design and startup,

including grant development consultation at no charge. ISD can also assist with regulatory requirements and HIPAA compliance, allowing investigators to benefit from ISD's extensive experience with such federal sponsors as NIMH, HHS, CMS, and NIDA.

Also available are Self-Acquire, an affordable solution that allows investigators to build their own Acquire EDC system and forms without using ISD's data management or development staff; and Acquire ACASI (audio computer-assisted self-interview), which is used for capturing sensitive self-reported data from subjects.

ISD welcomes the opportunity to respond to any questions, clarify any of our services, and to assist in any way to make the NKI researcher's project successful. For further information please contact Jim Robinson (x6506), Constance Klein (x6636), or Bill Alexander (x6508).

Form Name	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<small>*Actual visit date is in grey; scheduled visit date in red</small>	06/30/03	06/30/04	08/08/11	06/30/11						
Visit (VIS)										
Alzheimers Disease Ass - Cog Subscale (ADAS)										
Auditory Verbal Learning Test Version (AVLT)										
Block Design (BD)										
Boston Naming Version 1 (BN1)										
Clinical Dementia Rating (CDR)										
Demographics 1 (DEM1)										
Demographics 2 (DEM2)										
Digit Symbol (DS)										
Finger Tapping (FT)										

## GRANTS AND FUNDING



**Emmanuelle Courtiol, PhD** (Emotional Brain Institute) has received a three year award (R03) for her project entitled “Olfactory thalamus and odor perception” from the National Institute on Deafness and Other Communication Disorders. As Don Wilson notes, this grant comes just two years after Dr. Courtiol received her PhD.



**Michael Milham, MD, PhD** (Center for Biomedical Imaging & Neuromodulation) has received a two year sub-award for his grant entitled “Enhancing the Autism Brain Imaging Data Exchange to Define the Autism Connectome” from New York University School of Medicine.

## ALZHEIMER'S DISEASE CENTER CENTER FOR COGNITIVE NEUROLOGY

**Áine Duffy, PhD** (Center for Dementia Research) is one of three recipients selected to receive a pilot study award from the NYU Alzheimer's Disease Center (ADC) for the 2015-16 grant year. Dr. Duffy's research interest is the p75 receptor, a novel target for oxidative stress in Alzheimer's disease. The purpose of the ADC pilot award is to provide funding to promising junior investigators and bring new investigators into the field to foster innovative research. Proposals were received from many departments within NYU School of Medicine and also from external institutions.

## FROM AROUND THE INSTITUTE

### STARTING A NEW CHAPTER



After 42 years of dedicated and integral service, mostly as the IRB Coordinator, **Erna Ostrom** is saying goodbye to NKI. On May 21<sup>st</sup>, many colleagues and friends gathered for a luncheon at The 76 House in Tappan to mark the occasion. Erna is looking forward to being able to devote more time to her hobbies and crafts, as well as to “new projects on the horizon”. In her own words:

*I grew up at NKI, have enjoyed working here, the people have been wonderful and I have made many friends, including meeting and marrying my wonderful husband, but it is time to run off and experience a new life.*

We wish her a long and satisfying retirement!



A new State time and attendance system went into effect at NKI on May 28<sup>th</sup>. NYS employees will use a daily sign in/sign out (SISO) sheet that will replace your former time sheets. The SISO will be used to record exceptions to your usual daily schedule.

It is important to use the SISO *every day* for accurate timekeeping. At the end of a pay period, the recorded times will be used to generate timesheets similar to the old triplicate ones. These are to be reviewed, signed, and submitted to your supervisor as before.

So remember:

- Sign in and sign out *every day*
- Continue using the usual time off requests for planned time off
- In case of sickness, emergency, etc., alert your supervisor as well as your department administrator
- The old triplicate timesheet is now electronic and will automatically calculate your accruals/uses

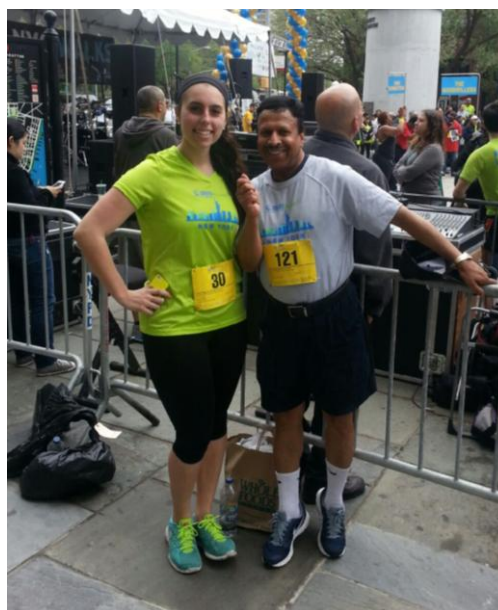


**Stephen Ginsberg, PhD** (Dementia Research) participated in an interview about Down syndrome and DS models for a new program called *The Best Medicine* on Columbia University public radio (WKCR). "The Wisdom of Down Syndrome" was originally broadcast on May 26<sup>th</sup>, and is now available online at [thebestmedicineradio.com](http://thebestmedicineradio.com).



NAMIWalks NYC, a benefit for the National Alliance on Mental Illness of New York City, was held on May 9<sup>th</sup> at the South Street Seaport. The Walk is one of the city's largest events to support mental health and fight the stigma of mental illness. Members of Dr. J.P. Lindenmayer's Manhattan Psychiatric Center (MPC) psychopharmacology research team were proud to join this event and support education programs for families and individuals living with mental illness. MPC researchers staffed two booths, and Dr. Mohan Parak and Samantha Fregenti (pictured) completed the 5K run. Also in attendance were Veronica Ozog, Abraham Goldring, Dr. BJ Parker, Dr. Amod Thanju, and Dr. Raghid Charara.

*Contributed by Theresa Abad, MSN, RN*



Samantha Fregenti and Dr. Mohan Parak

## GROWING FAMILIES

Not one, not two, but THREE babies joined the extended NKI family in the last few months. Congratulations to the new parents and (great) grandparents!

On January 10<sup>th</sup>, **Nicole Gogel** (Center for Dementia Research) gave birth to her daughter, Julia Teresa Gogel. Nicole says that “We couldn’t have wished for a better baby. She makes us laugh every day.”



Julia Gogel

Also on May 4<sup>th</sup>, **Scott Gerum** (Center for Brain Imaging and Neuromodulation) and his wife Aleda welcomed their son Marc William. Marc weighed in at 6 lbs., 12 oz. (i.e., 3061.75 grams).



Olivia Lucas

Olivia K. Lucas, great granddaughter of **Victor Dyakin** (Center for Brain Imaging and Neuromodulation), was born on May 4<sup>th</sup> at Phelps Memorial Hospital.



Marc Gerum

## PUBLICATIONS OF NOTE

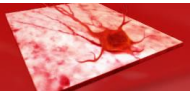


**Helen Scharfman** (Center for Dementia Research) contributed this Perspectives piece to the March 20 issue of *Science*. She was then [interviewed](#) on the subject by *The Pharmaceutical Journal*.

Scharfman HE. Neuroscience. Metabolic control of epilepsy. *Science*. 2015 Mar 20; 347(6228):1312-3.



### Molecular Psychiatry



This recent paper from the lab of **Ralph Nixon** in the Center for Dementia Research culminates nearly twelve years of work on neurofilaments.

Yuan A, Sershen H, Veeranna, Basavarajappa BS, Kumar A, Hashim A, Berg M, Lee JH, Sato Y, Rao MV, Mohan PS, Dyakin V, Julien JP, Lee VM, Nixon RA. Neurofilament subunits are integral components of synapses and modulate neurotransmission and behavior in vivo. *Mol Psychiatry*. 2015 Apr 14.



### Biophysical Journal

**Jan Hrabec** (Medical Physics Laboratory) and colleagues at SUNY Downstate Medical Center published a paper in a recent issue of *Biophysical Journal*. This paper was selected as "New and Notable" by the editors and is accompanied by a commentary piece ("Anomalous Diffusion Inspires Anatomical Insights").

Xiao F, Hrabec J, Hrabetova S. Anomalous extracellular diffusion in rat cerebellum. *Biophys J*. 2015 May 5;108(9):2384-95.

## THE LANCET Psychiatry

The latest publication from **Daniel Javitt** and colleagues in NKI's Schizophrenia Research Center appears in the May issue of *The Lancet Psychiatry*. A commentary piece ("[Bending the curve on psychosis outcomes](#)") appears in the same issue.

Joshua T Kantrowitz, Scott W Woods, Eva Petkova, Barbara Cornblatt, Cheryl M Corcoran, Huaihou Chen, Gail Silipo, Daniel C Javitt. [D-serine for the treatment of negative symptoms in individuals at clinical high risk of schizophrenia: a pilot, double-blind, placebo-controlled, randomised parallel group mechanistic proof-of-concept trial.](#)



Two new papers from the Recovery After an Initial Schizophrenia Episode Early Treatment Program (RAISE-ETP) study have been published. **Jim Robinson** (Information Sciences) is a coauthor.

### The American Journal of Psychiatry

Robinson DG, Schooler NR, John M, Correll CU, Marcy P, Addington J, Brunette MF, Estroff SE, Mueser KT, Penn D, Robinson J, Rosenheck RA, Severe J, Goldstein A, Azrin S, Heinessen R, Kane JM. Prescription practices in the treatment of first-episode schizophrenia spectrum disorders: data from the national RAISE-ETP study. *Am J Psychiatry*. 2015 Mar 1;172(3):237-48.

### THE JOURNAL OF CLINICAL PSYCHIATRY

Kane JM, Schooler NR, Marcy P, Correll CU, Brunette MF, Mueser KT, Rosenheck RA, Addington J, Estroff SE, Robinson J, Penn DL, Robinson DG. The RAISE Early Treatment Program for first-episode psychosis: background, rationale, and study design. *J Clin Psychiatry*. 2015 Mar;76(3):240-6.



Deputy Director **Antonio Convit** and NYU colleagues have a new paper online in *Appetite* online.

Ross N, Yau PL, Convit A. Obesity, fitness, and brain integrity in adolescence. *Appetite*. 2015 Apr 2.



A new paper from **Regina Sullivan's** lab (Emotional Brain Institute) appears in *Frontiers in Behavioral Neuroscience*.

Sullivan RM, Wilson DA, Ravel N, Mouly AM. Olfactory memory networks: from emotional learning to social behaviors. *Front Behav Neurosci*. 2015 Feb 17;9:36.



**Vilma Gabbay** (Child & Adolescent Psychiatry), along with colleagues at Mount Sinai and NYU, published this report on the significance of anhedonia in adolescent major depression. The publisher issued a [press release](#) about this study.

Gabbay V, Johnson AR, Alonso CM, Evans LK, Babb JS, Klein RG. Anhedonia, but not Irritability, Is Associated with Illness Severity Outcomes in Adolescent Major Depression. *J Child Adolesc Psychopharmacol*. 2015 Apr;25(3):194-200.

## CNS SPECTRUMS

**Matthew Hoptman** (Schizophrenia Research) authored this paper on impulsivity in *CNS Spectrums*.

Hoptman MJ. Impulsivity and aggression in schizophrenia: a neural circuitry perspective with implications for treatment. *CNS Spectr*. 2015 Apr 22:1-7.



The latest publication by **Latha Devi** and **Masuo Ohno** (Dementia Research) appears in the open access journal *Molecular Brain*.

Devi L, Ohno M. A combination Alzheimer's therapy targeting BACE1 and neprilysin in 5XFAD transgenic mice. *Mol Brain*. 2015 Mar 25;8(1):19.

## The Journal of Neuroscience

Papers by NCI investigators appear in three recent issues of *The Journal of Neuroscience*.

Kajikawa Y, Frey S, Ross D, Falchier A, Hackett TA, Schroeder CE. Auditory properties in the parabelt regions of the superior temporal gyrus in the awake macaque monkey: an initial survey. *J Neurosci*. 2015 Mar 11;35(10):4140-50.

Ramirez F, Moscarello JM, LeDoux JE, Sears RM. Active avoidance requires a serial basal amygdala to nucleus accumbens shell circuit. *J Neurosci*. 2015 Feb 25;35(8):3470-7.

Gray MJ, Frey HP, Wilson TJ, Foxe JJ. Oscillatory Recruitment of Bilateral Visual Cortex during Spatial Attention to Competing Rhythmic Inputs. *J Neurosci*. 2015 Apr 8;35(14):5489-503.



**Cameron Craddock, Rosalia Tungaraza, and Michael Milham** (C-BIN) published this paper in the open access journal *GigaScience*.

Craddock RC, Tungaraza RL, Milham MP. Connectomics and new approaches for analyzing human brain functional connectivity. *Gigascience*. 2015 Mar 25;4:13.



**Bonnie Kerker** (Child & Adolescent Psychiatry) is the lead author of this paper in the April issue of *Psychiatric Services*.

Kerker BD, Chor KH, Hoagwood KE, Radigan M, Perkins MB, Setias J, Wang R, Olin SS, Horwitz SM. Detection and Treatment of Mental Health Issues by Pediatric PCPs in New York State: An Evaluation of Project TEACH. *Psychiatr Serv*. 2015 Apr 1;66(4):430-3.

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.

## INFO UPDATE



The National Center for Biotechnology Information conducts periodic webinars on resources and tools that you may find useful. These sessions are then archived for future viewing, and you can browse the archived and upcoming webinars [here](#). Recent programs have been on [PubMed Commons](#) and on [BioProject](#).

You can stay informed of NCBI's offerings by [subscribing to their listserv](#) or to [their YouTube channel](#).



*Shrinks: The Untold Story of Psychiatry* is a new book by Dr. Jeffrey Lieberman, chairman of the psychiatry department at Columbia and director of the NYS Psychiatric Institute. Of course, Dr. Nathan Kline is featured in this historical account of psychiatry, in a section on "The Pioneers of Psychopharmacology". A copy will be available to borrow from the NKI Library.



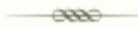
New APA textbook editions are now live on PsychiatryOnline. *The American Psychiatric Publishing Textbook of Geriatric Psychiatry* is in its 5<sup>th</sup> edition, and the *Manual of Clinical Psychopharmacology* is in its 8<sup>th</sup>.

The 4<sup>th</sup> edition of *Helping Parents and Teachers Understand Medications for Behavioral and Emotional Problems* is also new. It is a useful resource for educating parents and teachers about psychotropic drugs prescribed for children and adolescents. An information sheet is provided for each medication.





The Schizophrenia Research Forum has introduced a new audio component with [Schizophrenia Forum Radio](#). These are podcasts that “include a mix of recent news and interviews with leading researchers from the different disciplines that study schizophrenia and related disorders and basic science”. Two episodes are available so far.



### New Journals Debut

Several new psychiatric journals have been introduced in 2015. Two are open access companions to the Alzheimer’s Association’s *Alzheimer’s & Dementia*, called [Diagnosis, Assessment & Disease Monitoring](#) (DADM) and [Translational Research & Clinical Interventions](#), respectively. **Nunzio Pomara, MD** and colleagues have [an article in the first issue](#) of DADM, and a [second one in press](#). More about these new AD journals can be found [on Alzforum](#).

The schizophrenia publishing field is also expanding, with [npj Schizophrenia](#) just launched by Nature Publishing and the Schizophrenia International Research Society. This follows closely behind [Schizophrenia Research: Cognition](#), which started last year. Read more about these new open access titles [on Schizophrenia Research Forum](#).

Finally, a new companion to *Biological Psychiatry* is also on the horizon. The first issue of [Biological Psychiatry: Cognitive Neuroscience and Neuroimaging](#) will be published beginning in January, 2016.



[Toolbox](#) is *Nature’s* hub for scientific software, apps, and online tools. An entry from 2014 suggests [“How to tame the flood of literature”](#) by using recommendation services.



The [Digital Public Library of America](#) (DPLA) “brings together the riches of America’s libraries, archives, and museums, and makes them freely available to the world. It strives to contain the full breadth of human expression, from the written word, to works of art and culture, to records of America’s heritage, to the efforts and data of science.” And now, through collaboration among the [Southeastern NY Library Resources Council](#) (SENYLRC), [Hudson River Valley Heritage](#) (HRVH), and [Empire State Digital Network](#) (ESDN), numerous digital collections from New York institutions are now available in the DPLA. These New York records (nearly 90,000 of them) join more than 10 million items already available through DPLA.



[MedlinePlus](#) and [MedlinePlus en español](#) – the National Library of Medicine’s websites for patients and their families and friends – were recently updated with a new responsive design that automatically adjusts the layout to fit your screen, whether it is on a phone, tablet, or desktop. See the [announcement page](#) for more details.



May is National Mental Health Awareness Month, and several organizations marked the occasion with efforts to inform and advocate. NAMI’s website offers [mental health facts](#) and [ways to participate](#). The [Stepping Up Initiative](#) – a national effort to reduce the number of people with mental illnesses in jails – created a series called [“31 Days, 31 Stories,”](#) profiling a different person for each day of the month. And the Brain & Behavior Research Foundation ran an awareness campaign called [Stop Stigma with Science](#).

In a [recent post](#) on his blog, NIMH Director Thomas Insel discussed the Research Domain Criteria (RDoC) initiative and how it aligns with the new push for precision medicine. And since “RDoC is a working model to be debated, discussed, and edited,” NIMH has established an [online forum](#) for RDoC-related discussion and commentary.

## DEPARTMENT OF WONDER

### Unsolved Problems

Ralph Adolphs (California Institute of Technology) considers the current state of neuroscience research in [“The unsolved problems of neuroscience”](#), which appears in the April issue of *Trends in Cognitive Sciences*.

---

### A Balanced View?

The publication of [Understanding Psychosis and Schizophrenia](#) by the British Psychological Society (2014) was met with a range of responses – exemplified by anthropologist Tanya Luhrmann’s *New York Times* op-ed piece titled [“Redefining Mental Illness”](#) on one hand, and psychiatrist Jeffrey Lieberman’s [response](#) on the other. To catch up on this debate, and perhaps to find a middle ground, you could do worse than Joseph Pierre, MD’s blog on the subject for *Psychology Today*. His piece is called [“Psychosis Sucks! Antipsychiatry and the romanticization of mental illness”](#).

---

### The Beginning of the End

Oliver Sacks, the beloved neurologist and author of [many popular books](#), learned earlier this year that he has terminal cancer. He reflects on his mortality in this [New York Times op-ed](#).

## NKI ON THE ROAD



The 15<sup>th</sup> [International Congress on Schizophrenia Research](#) (ICOSR) was held in Colorado Springs from March 28 – April 1, with several NKI investigators in attendance.

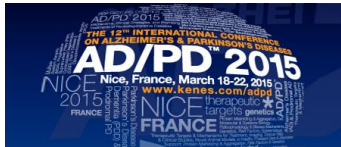
**Pamela Butler, PhD** presented with Steven M. Silverstein (Rutgers) in an RDoC symposium. Their talk was titled “The RDoC domain of perception: how it informs heterogeneity and fundamental symptoms of schizophrenia and other disorders”.

**Donald Goff, MD** contributed to a poster on “Second and third relapses in a relapse prevention trial of long-acting injectable versus oral antipsychotics: a comparative analysis of successive relapses over 30 months”.

**Menachem Krakowski, MD, PhD** presented a poster on “Violence in patients with schizophrenia: predisposing factors and symptoms”.

**Jean-Pierre Lindenmayer, MD** presented in a workshop on “Social Cognition – From New Targets to New Treatments and Measurements”, which was chaired by **Anzalee Khan, PhD**. Dr. Lindenmayer also contributed two posters – “Pretreatment predictors of targeted outcomes in Cognitive Remediation Therapy” and “Comparing the efficacy of two types of computerized cognitive remediation therapy in schizophrenia: COGPACK vs. Brain Fitness”.

**Pejman Sehatpour, PhD** spoke at a workshop session on “Brain Stimulation for Schizophrenia”. He presented findings using Transcranial Direct Current Stimulation (tDCS) in schizophrenia – how tDCS can modulate cortical networks, and its potential as an investigational and therapeutic tool.



NKI was also represented at the [12th International Conference on Alzheimer's and Parkinson's Diseases](#), held in Nice, France from March 18 – 22.

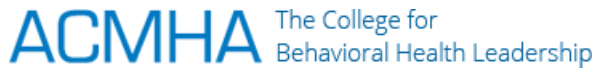
**Efrat Levy, PhD** gave an oral presentation in a symposium on “Seeding, spreading, and prion-like mechanisms”. Her talk was titled “Neuroprotective regulation of exosome secretion by cystatin C”.

In a symposium on Metabolism, **Jose Morales-Corraliza, PhD** presented on “Decreased hippocampal neprilysin in a type 1 diabetes primate model leads to an increase in abeta levels”.

**Rocio Perez-Gonzalez, PhD** presented a poster on “Amyloid-beta-associated brain-derived exosomes promote amyloid seeding in a mouse model of amyloidosis”.

**Dr. Siegel** also presented at two seminars sponsored by Scottish Universities Insight Institute, at the University of Strathclyde (Glasgow) on April 9<sup>th</sup> and at Heriot-Watt University (Edinburgh) on April 10<sup>th</sup>. The program was titled “[Exploring access to mental health care services for linguistically and culturally diverse patients](#)”. In a session on “Global issues and challenges,” Dr. Siegel spoke about “[Cultural competency in behavioral healthcare: NYS/USA perspective](#),” and in a session on “Research application: examples of good practice,” she presented on “[Cultural activation: its value and how to accomplish it](#)”. Countries represented in addition to the US were the UK, Sweden, South Africa, Australia, and China.

*Contributed by Jennifer Hernandez, MPA*



**Carole Siegel, PhD** (Director of the NKI Center of Excellence in Culturally Competent Mental Health) and **Lenora Reid-Rose, MBA** (Co-Director of the Center) gave a presentation at the [ACMHA 2015 Summit](#), which took place from March 24 – 26 in St. Louis. The annual summit was titled “Healthy Behavior: Literacy and Activation the Gateway to the Future of Health,” and they presented on “[Cultural Activation: Expanding the Concept of Health Literacy and Consumer Activism](#),” which highlighted the concept of cultural activation and the consumer Cultural Activation Prompts (CAPs) tool. Cultural activation promotes consumers’ participation in the therapeutic process by providing caregivers/direct care personnel with the consumer’s personal cultural lens on who they are and what matters to them when receiving care. CAPs is intended for use by consumers to help them present salient features of their culture that might influence the care process.



Carole Siegel, Lenora Reid-Rose, and Sandra Mitchell (peer specialist), with Onaje Muid (Clinical Associate Director, Reality House)

*Contributed by Jennifer Hernandez, MPA*

## UPCOMING EVENTS AND SEMINARS

### NKI PRESENTS

#### Emil Coccaro, MD

Ellen C. Manning Professor and Chair  
Dept. of Psychiatry & Behavioral Neuroscience  
University of Chicago

*Biology and Treatment of Impulsive Aggression*

Monday, June 15<sup>th</sup>

10:00 am, Conference Room B

Hosted by Donald Goff, MD



### Center for Biomedical Imaging and Neuromodulation Scientific Lecture Series

*Held in conference room B at 11 am*

#### Tony Ro, PhD

City College of New York

*Neural Mechanisms for Unconscious  
and Conscious Vision*

Monday, June 8<sup>th</sup>

#### Victoria Leavitt, PhD

Columbia University

*Magnetic Resonance Spectroscopy Thermometry  
for Non-Invasive Measurements of Brain  
Temperature*

Monday, June 22<sup>nd</sup>

#### Dominik Biezonski, PhD

Columbia University

*MRI Analysis of the Long-Term Effects of  
Stimulant Treatment in an Animal Model of  
Stimulant Exposure*

Monday, June 29<sup>th</sup>

## Statewide Satellite Grand Rounds



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](#).

Acri M, Olin SS, Burton G, Herman RJ, Hoagwood KE. Innovations in the Identification and Referral of Mothers at Risk for Depression: Development of a Peer-to-Peer Model. *J Child Fam Stud*. 2014 Jul 1; 23(5):837-843.

Alaerts K, Nayar K, Kelly C, Raithel J, Milham MP, Di Martino A. Age-related changes in intrinsic function of the superior temporal sulcus in autism spectrum disorders. *Soc Cogn Affect Neurosci*. 2015 Mar 25.

Amiaz R, Kent I, Rubinstein K, Sela BA, Javitt D, Weiser M. Safety, tolerability and pharmacokinetics of open label sarcosine added on to anti-psychotic treatment in schizophrenia - preliminary study. *Isr J Psychiatry Relat Sci*. 2015; 52(1):12-5.

Bradley KA, Case JA, Khan O, Ricart T, Hanna A, Alonso CM, Gabbay V. The role of the kynurenine pathway in suicidality in adolescent major depressive disorder. *Psychiatry Res.* 2015 Apr 1.

Carmona S, Hoekzema E, Castellanos FX, García-García D, Lage-Castellanos A, Van Dijk KR, Navas-Sánchez FJ, Martínez K, Desco M, Sepulcre J. Sensation-to-cognition cortical streams in attention-deficit/hyperactivity disorder. *Hum Brain Mapp.* 2015 Mar 28.

Carrión RE, Cornblatt BA, McLaughlin D, Chang J, Auther AM, Olsen RH, Javitt DC. Contributions of early cortical processing and reading ability to functional status in individuals at clinical high risk for psychosis. *Schizophr Res.* 2015 May; 164(1-3):1-7.

Cho KO, Lybrand ZR, Ito N, Brulet R, Tafacory F, Zhang L, Good L, Ure K, Kernie SG, Birnbaum SG, Scharfman HE, Eisch AJ, Hsieh J. Aberrant hippocampal neurogenesis contributes to epilepsy and associated cognitive decline. *Nat Commun.* 2015 Mar 26;6:6606.

Craddock RC, Tungaraza RL, Milham MP. Connectomics and new approaches for analyzing human brain functional connectivity. *Gigascience.* 2015 Mar 25;4:13.

D'Amour J, Magagna-Poveda A, Moretto J, Friedman D, LaFrancois JJ, Pearce P, Fenton AA, MacLusky NJ, Scharfman HE. Interictal spike frequency varies with ovarian cycle stage in a rat model of epilepsy. *Exp Neurol.* 2015 Apr 10; 269:102-119.

Devi L, Ohno M. A combination Alzheimer's therapy targeting BACE1 and neprilysin in 5XFAD transgenic mice. *Mol Brain.* 2015 Mar 25;8(1):19.

Fu DJ, Turkoz I, Simonson RB, Walling DP, Schooler NR, Lindenmayer JP, Canuso CM, Alphas 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.* 2015 Mar;76(3):253-62.

Gabbay V, Johnson AR, Alonso CM, Evans LK, Babb JS, Klein RG. Anhedonia, but not Irritability, Is Associated with Illness Severity Outcomes in Adolescent Major Depression. *J Child Adolesc Psychopharmacol.* 2015 Apr;25(3):194-200.

García Murillo L, Cortese S, Anderson D, Di Martino A, Castellanos FX. Locomotor activity measures in the diagnosis of attention deficit hyperactivity disorder: Meta-analyses and new findings. *J Neurosci Methods.* 2015 Mar 11.

Gillan CM, Otto AR, Phelps EA, Daw ND. Model-based learning protects against forming habits. *Cogn Affect Behav Neurosci.* 2015 Mar 24.

Gray MJ, Frey HP, Wilson TJ, Foxe JJ. Oscillatory Recruitment of Bilateral Visual Cortex during Spatial Attention to Competing Rhythmic Inputs. *J Neurosci.* 2015 Apr 8;35(14):5489-503.

Heneghan A, Stein RE, Hurlburt MS, Zhang J, Rolls-Reutz J, Kerker BD, Landsverk J, Horwitz SM. Health-risk behaviors in teens investigated by U.S. Child welfare agencies. *J Adolesc Health.* 2015 May;56(5):508-14.

Hirst W, Phelps EA, Meksin R, Vaidya CJ, Johnson MK, Mitchell KJ, Buckner RL, Budson AE, Gabrieli JD, Lustig C, Mather M, Ochsner KN, Schacter D, Simons JS, Lyle KB, Cuc AF, Olsson A. A Ten-Year Follow-Up of a Study of Memory for the Attack of September 11, 2001: Flashbulb Memories and Memories for Flashbulb Events. *J Exp Psychol Gen.* 2015 Mar 9.

Hoptman MJ. Impulsivity and aggression in schizophrenia: a neural circuitry perspective with implications for treatment. *CNS Spectr.* 2015 Apr 22:1-7.

Jarskog LF, Lowy MT, Grove RA, Keefe RS, Horrigan JP, Ball MP, Breier A, Buchanan RW, Carter CS, Csernansky JG, Goff DC, Green MF, Kantrowitz JT, et al. A Phase II study of a histamine H3 receptor antagonist GSK239512 for cognitive impairment in stable schizophrenia subjects on antipsychotic therapy. *Schizophr Res.* 2015 May; 164(1-3):136-42.

Javitt DC. Neurophysiological models for new treatment development in schizophrenia: early sensory approaches. *Ann N Y Acad Sci.* 2015 Feb 26.

Kajikawa Y, Frey S, Ross D, Falchier A, Hackett TA, Schroeder CE. Auditory properties in the parabelt regions of the superior temporal gyrus in the awake macaque monkey: an initial survey. *J Neurosci.* 2015 Mar 11;35(10):4140-50.

Kane JM, Schooler NR, Marcy P, Correll CU, Brunette MF, Mueser KT, Rosenheck RA, Addington J, Estroff SE, Robinson J, Penn DL, Robinson DG. The RAISE Early Treatment Program for first-episode psychosis: background, rationale, and study design. *J Clin Psychiatry.* 2015 Mar;76(3):240-6.

Kerker BD, Chor KH, Hoagwood KE, Radigan M, Perkins MB, Setias J, Wang R, Olin SS, Horwitz SM. Detection and Treatment of Mental Health Issues by Pediatric PCPs in New York State: An Evaluation of Project TEACH. *Psychiatr Serv.* 2015 Apr 1; 66(4):430-3.

Morillon B, Schroeder CE. Neuronal oscillations as a mechanistic substrate of auditory temporal prediction. *Ann N Y Acad Sci.* 2015 Mar;1337:26-31.

Mufson EJ, Mahady L, Waters D, Counts SE, Perez SE, DeKosky ST, Ginsberg SD, Ikonomic MD, Scheff SW, Binder LI. Hippocampal plasticity during the progression of Alzheimer's disease. *Neuroscience.* 2015 Mar 12.

Möller HJ, Czobor P. Pharmacological treatment of negative symptoms in schizophrenia. *Eur Arch Psychiatry Clin Neurosci.* 2015 Apr 21.

Noy N, Bickel S, Zion-Golombic E, Harel M, Golan T, Davidesco I, Schevon CA, McKhann GM, Goodman RR, Schroeder CE, Mehta AD, Malach R. Ignition's glow: Ultra-fast spread of global cortical activity accompanying local "ignitions" in visual cortex during conscious visual perception. *Conscious Cogn.* 2015 Mar 27.

Perez SE, He B, Nadeem M, Wu J, Ginsberg SD, Ikonomic MD, Mufson EJ. Hippocampal endosomal, lysosomal, and autophagic dysregulation in mild cognitive impairment:

correlation with  $\alpha\beta$  and tau pathology. *J Neuropathol Exp Neurol.* 2015 Apr;74(4):345-58.

Podvalny E, Noy N, Harel M, Bickel S, Chechik G, Schroeder CE, Mehta AD, Tsodyks M, Malach R. A unifying principle underlying the extracellular field potential spectral responses in the human cortex. *J Neurophysiol.* 2015 Apr 8;jn.00943.2014.

Prendergast DM, Ardekani B, Ikuta T, John M, Peters B, DeRosse P, Wellington R, Malhotra AK, Szeszko PR. Age and sex effects on corpus callosum morphology across the lifespan. *Hum Brain Mapp.* 2015 Apr 2.

Ramirez F, Moscarello JM, LeDoux JE, Sears RM. Active avoidance requires a serial basal amygdala to nucleus accumbens shell circuit. *J Neurosci.* 2015 Feb 25;35(8):3470-7.

Rice T, Coffey B. Pharmacotherapeutic Challenges in Treatment of a Child with "The Triad" of Obsessive Compulsive Disorder, Attention-Deficit /Hyperactivity Disorder and Tourette's Disorder. *J Child Adolesc Psychopharmacol.* 2015 Mar; 25(2):176-9.

Robinson DG, Schooler NR, John M, Correll CU, Marcy P, Addington J, Brunette MF, Estroff SE, Mueser KT, Penn D, Robinson J, Rosenheck RA, Severe J, Goldstein A, Azrin S, Heinssen R, Kane JM. Prescription practices in the treatment of first-episode schizophrenia spectrum disorders: data from the national RAISE-ETP study. *Am J Psychiatry.* 2015 Mar 1;172(3):237-48.

Ross N, Yau PL, Convit A. Obesity, fitness, and brain integrity in adolescence. *Appetite.* 2015 Apr 2.

Scharfman HE. Neuroscience. Metabolic control of epilepsy. *Science.* 2015 Mar 20;347(6228):1312-3.

Shah LD, Coffey BJ. Callous-unemotional traits in a child with attention-deficit/hyperactivity disorder and oppositional defiant disorder: managing medication and expectations. *J Child Adolesc Psychopharmacol.* 2015 Apr;25(3):272-5.

Subbanna S, Psychoyos D, Shan X, Basavarajappa BS. Postnatal ethanol exposure alters levels of 2-arachidonylglycerol-metabolizing enzymes and pharmacological inhibition of monoacylglycerol (MAGL) does not cause neurodegeneration in neonatal mice. *J Neurochem*. 2015 Apr 10.

Sullivan RM, Wilson DA, Ravel N, Mouly AM. Olfactory memory networks: from emotional learning to social behaviors. *Front Behav Neurosci*. 2015 Feb 17;9:36.

Tang Y, Li Y, Zhuo K, Wang Y, Liao L, Song Z, Li H, Fan X, Goff DC, Wang J, Xu Y, Liu D. Neural correlates of the preserved inhibition of return in schizophrenia. *PLoS One*. 2015 Apr 13; 10(4):e0119521.

Vaez-Azizi LM, Ruby E, Dracxler R, Rothman K, Perrin M, Walsh-Messinger J, Antonius D, Goetz RR, Goetz DM, Keefe DL, Malaspina D. Telomere length variability is related to symptoms and cognition in schizophrenia. *Schizophr Res*. 2015 May;164(1-3):268-9.

Valk SL, Di Martino A, Milham MP, Bernhardt BC. Multicenter mapping of structural network alterations in autism. *Hum Brain Mapp*. 2015 Feb 25.

Yuan A, Sershen H, Veeranna, Basavarajappa BS, Kumar A, Hashim A, Berg M, Lee JH, Sato Y, Rao MV, Mohan PS, Dyakin V, Julien JP, Lee VM, Nixon RA. Neurofilament subunits are integral components of synapses and modulate neurotransmission and behavior in vivo. *Mol Psychiatry*. 2015 Apr 14.

Schroeder CE, Herrero JL, Haegens S. Neuronal dynamics and the mechanistic bases. In: Nobre AC, Kastner S, editors. *The Oxford handbook of attention*. New York: Oxford University Press; 2014. p. 472-508.

Freudenreich O, Goff DC, Henderson DC. Antipsychotic drugs. In: Stern TA, Fava M, Wilens TE, Rosenbaum JF, editors. *Massachusetts General Hospital Comprehensive Clinical Psychiatry*. Elsevier Health Sciences; 2015. p. 475-88.

Bruno D, Grothe M, Nierenberg J, Teipel S, Pomara N. Hippocampal size predicts delayed primacy performance in cognitively intact elderly participants. *Alzheimer's and Dementia* 10[4 Suppl.], P364-P365. 2014. [Abstract]

Pomara N, Reichert C, Nierenberg J, Halliday MR, Sagare AP, Frangione B et al. Increased CSF matrix metalloproteinase-9 (mmp-9) and reduced white matter integrity in healthy elderly. *Alzheimer's and Dementia* 10[4 Suppl.], P515. 2014. [Abstract]

Tanner AS, Eryilmaz H, Nitenson AZ, Ho NF, Manoach DS, Goff DC et al. Effects of supplemental folic acid and vitamin b12 on brain activation during working memory and related functional connectivity in schizophrenia. *Biological Psychiatry* 77[9 Suppl. 1], 202S-203S. 2015. [Abstract]

Sullivan RM. Maternal control of the infant brain and transitions between attachment and fear. *Biological Psychiatry* 77[9 Suppl. 1], 293S. 2015. [Abstract]

Yousefzadeh-Fard Y, Pantazatos SP, Miller JM, Oquendo MA, Cooper TB, Cisneros S et al. Omega-3 fatty acid treatment effect on regional brain responses to a stroop task in major depression. *Biological Psychiatry* 77[9 Suppl. 1], 112S. 2015. [Abstract]

Hoptman MJ, Alexopoulos GS, Lucas B, Stein AT, Patel N, Seirup JK et al. Default mode network global connectivity predicts improvement in rumination in elderly depressed patients treated with escitalopram. *Biological Psychiatry* 77[9 Suppl. 1], 381S. 2015. [Abstract]

Kantrowitz JT, Epstein M, Beggel O, Rohrig S, Lehrfeld JM, Revheim N et al. N-methyl-d-aspartate receptor (NMDAR)-based enhancement of auditory plasticity. *Biological Psychiatry* 77[9 Suppl. 1], 183S. 2015. [Abstract]

Bedwell JS, Butler PD, Chan CC, Trachik BJ. Transdiagnostic psychiatric symptoms related to visual evoked potential abnormalities. *Biological Psychiatry* 77[9 Suppl. 1], 379S. 2015. [Abstract]

Groppe D, Megevand P, Fallil Z, Hwang S, Hira J, Abisogun A et al. Inter-hemispheric asymmetries in resting-state fMRI activity for identifying seizure onset and irritative zones. *Epilepsy Currents* 15[S1], 299-300. 2015. [Abstract]

Iyengar SS, La Francois JJ, Scharfman HE. Use of ethosuximide to improve outcome in the kainic acid model of temporal lobe epilepsy. *Epilepsy Currents* 15[S1], 400. 2015. [Abstract]

La Francois J, Bermudez-Hernandez K, Scharfman HE. Spike-wave discharges before and after the induction of epilepsy in rats. *Epilepsy Currents* 15[S1], 405. 2015. [Abstract]

Levy D, Coleman M, Godfrey L, Sebat J, Ongur D, Kaufman MJ et al. Successful targeted treatment of a medically actionable mutation in psychotic disorders. *Schizophrenia Bulletin* 41[Suppl. 1], S207. 2015. [Abstract]

Krakowski MI, Czobor P. Violence in patients with schizophrenia: predisposing factors and symptoms.

*Schizophrenia Bulletin* 41[Suppl. 1], S111. 2015. [Abstract]

Butler PD, Silverstein SM. The RDoC domain of perception: how it informs heterogeneity and fundamental symptoms of schizophrenia and other disorders. *Schizophrenia Bulletin* 41[Suppl. 1], S70. 2015. [Abstract]

Buckley PF, Schooler NR, Goff DC, Kopelowicz A, Lauriello J, Manschreck T et al. Second and third relapses in a relapse prevention trial of long-acting injectable versus oral antipsychotics: a comparative analysis of successive relapses over 30 months. *Schizophrenia Bulletin* 41[Suppl. 1], S305. 2015. [Abstract]

Bedwell JS, Butler PD, Chan CC, Trachik BJ. Transdiagnostic psychiatric symptoms related to visual evoked potential abnormalities. *Schizophrenia Bulletin* 41[Suppl. 1], S12. 2015. [Abstract]