



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

> March / April, 2015 Stuart Moss, MLS, Editor

LEAH G. POPE

CONTINUING THE ANTHROPOLOGICAL TRADITION AT NKI

Leah Pope received her PhD in anthropology from Columbia University and joined the Statistics & Services Research group at NKI full time in 2013. She was kind enough to share a bit about her background and research interests for *The Informer*.



Leah Pope with her young son Campbell

What path led you to the research field that you are in? How did you end up at NKI?

I studied anthropology as an undergraduate and knew that I wanted to pursue my PhD in the field. But I ended up in mental health services research a bit serendipitously. Having worked at the New York City Department of Education right out of college, I initially planned to do research in the field of anthropology and education, and was particularly interested in school discipline and how we think about behavior in young people and the consequences for children who "misbehave." My focus shifted to mental health more specifically through interaction with a number of professors and research opportunities I was linked to during graduate school. I was lucky enough during this time to connect with **Kim Hopper**, who joined my dissertation committee. In 2010, I started working with him part time on the field school run through NKI's Center to Study Recovery in Social Contexts. A few years later, with my dissertation complete and with work at NKI recently funded for Parachute NYC, I was able to reconnect with Kim and join the staff of the Statistics and Services **Research Division.**

Your recent publication "<u>To Forgive and Discredit:</u> <u>Bipolar Identities and Medicated Selves among</u> <u>Female Youth in Residential Treatment</u>" stems from your dissertation project, and describes your ethnographic fieldwork with female youth at a residential treatment center. What motivated you to pursue this project? What did you learn from it? Do think it has practical implications?

I have long been interested in how our society conceptualizes delinguent vouth and the institutional arrangements of care and reform that we have created in response. Residential treatment for young people raises many interesting questions about the conceptualization of and response to bad behavior in young people, the relevance and impact of categorizing youth, the reconstitution of home among a peer group, and the shape and depth of commitment to notions about personal responsibility.

In the course of pursuing my research at a residential treatment for youth in foster care or the juvenile justice system, I learned quite a bit about the larger diagnostic and pharmaceutical trends that have shaped the lives of young people in the 21st century – particularly the overwhelming expansion during the last several decades in the scope of behavior now pathologized in young people. But I also learned from young females themselves about how they experience clinical interventions and what they make of the fact that they have been diagnosed with mental illnesses and often medicated in response. Diagnosing young people clearly has very real consequences for their emerging sense of self. On a practical level, I think that more attention to this fact for youth under psychiatric care is needed, especially if we are interested in ensuring that people engage in needed care over time.

What are you working on currently? Are there other projects you hope to pursue? Other goals for the future?

Right now I am part of the team at NKI working on a process and outcome evaluation of Parachute NYC, a citywide approach, funded by the Federal Centers for Medicare and Medicaid Services, to providing a "soft landing" for people experiencing a psychiatric crisis. Parachute NYC's continuum of

services includes four specially trained mobile crisis teams, four crisis respite centers staffed by peer specialists, and a "warm line" operated by peer specialists. Together, these services aim to shift the locus of care from hospitals to community settings, and the focus from crisis intervention to longerterm, community-integrated treatment. For the past two years, our team has undertaken a process evaluation of the project that uses an ethnographically-based track-and-report-back protocol to flag implementation issues as they arise and keep the City abreast of programmatic progress and difficulties. This work involves observing all Parachute teams in the field (including shadowing mobile crisis and crisis respite teams and attending team supervisions), as well as conducting key informant interviews and focus groups and attending all staff training sessions. We have also been doing an outcome evaluation to measure health, care quality, and utilization for people enrolled in Parachute over time.

Looking ahead, I am very interested in continuing to do research with young people in psychiatric crisis and to return my focus to the intersection of juvenile/criminal justice and mental health. There is a lot of momentum in New York for reform in this arena, with efforts to raise the age of criminal responsibility (New York is one of only two states in the country where 16 year olds are still adjudicated as adults!) and a lot of work in the City being done to enhance early access to treatment and expand access to alternative pathways for this population.

How do you like to spend your time when you're not working?

I spend most of my free time with my very energetic 11 month old, Campbell, who is almost ready to walk and keeps me and my husband on our toes. When I have a moment to breathe, I love to spin and do Pilates. I am also an avid crossword puzzle fan.

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FROM AROUND THE INSTITUTE PUBLICATIONS OF NOTE



The NYS Office of Mental Health <u>newsletter for</u> <u>February, 2015</u> includes an article from NKI's <u>Center of Excellence in Culturally Competent</u> <u>Mental Health</u> (NKICECC) on its "Case study of the adaptation of Cognitive Behavioral Therapy (CBT) for Korean Americans". The NKICECC "hope[s] to replicate similar successes in community-based programs serving diverse cultural populations." The article was written by Jennifer C. Hernandez, MPA, Administrative Director for the Center.

THE NEW YORKER

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The New Yorker psychology and science blog by Maria Konnikova recently featured the work of <u>Elizabeth Phelps</u> (Emotional Brain Institute) on the impact of emotion on memory – "<u>You Have No</u> <u>Idea What Happened</u>". Findings from the Phelps lab were recently **published in** *Nature*.

The Atlantic

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A recent article published in *The Atlantic* online considers the complex experiences we call emotions ("<u>Hard Feelings: Science's Struggle to</u> <u>Define Emotions</u>"). Joseph LeDoux, Director of the <u>Emotional Brain Institute</u>, is quoted.



New results from the lab of **Elizabeth Phelps** (Emotional Brain Institute) appear <u>online in</u> <u>Nature</u>. This work, on the effects of emotion on memories, was also featured in <u>The New York</u> <u>Times</u> and on **PsychCentral**.

Dunsmoor JE, Murty VP, Davachi L, Phelps EA. Emotional learning selectively and retroactively strengthens memories for related events. Nature. 2015 Jan 21.



Eva Petkova (Child & Adolescent Psychiatry) coauthored this study comparing interpersonal psychotherapy with exposure therapy for posttraumatic stress disorder.

Markowitz JC, Petkova E, Neria Y, Van Meter PE, Zhao Y, Hembree E, Lovell K, Biyanova T, Marshall RD. Is Exposure Necessary? A Randomized Clinical Trial of Interpersonal Psychotherapy for PTSD. Am J Psychiatry. 2015 Feb 13.



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Charles Schroeder and **Yoshinao Kajikawa** (Translational Cognitive Neuroscience) are coauthors of this review appearing in a special issue on "**Brain rhythms and dynamic** coordination".

Morillon B, Hackett TA, Kajikawa Y, Schroeder CE. Predictive motor control of sensory dynamics in auditory active sensing. Curr Opin Neurobiol. 2015 Jan 13;31C:230-238.



NKI Director **Donald Goff** contributed this review of the status of glutamatergic agents for the treatment of schizophrenia.

Goff DC. Drug development in schizophrenia: are glutamatergic targets still worth aiming at? Curr Opin Psychiatry. 2015 Feb 23.



Chao-Gan Yan (C-BIN) and colleagues describe a new preprint service for neuroimaging and neuroscience research in *F1000Research*.

Yan C, Li Q, Gao L. PRN: a preprint service for catalyzing R-fMRI and neuroscience related studies. F1000Research 2014;3:313.



NKI investigators Alex Opitz (C-BIN), Xavier Castellanos, and Philip Reiss (both Child & Adolescent Psychiatry) published recently in *Neuroimage*.

Opitz A, Paulus W, Will S, Antunes A, Thielscher A. Determinants of the electric field during transcranial direct current stimulation. Neuroimage. 2015 Apr 1;109:140-50.

Chen H, Kelly C, Xavier Castellanos F, He Y, Zuo XN, Reiss PT. Quantile rank maps: A new tool for understanding individual brain development. Neuroimage. 2015 Jan 10.

frontiers in NEUROSCIENCE

The authors of this paper are affiliated with NKI and with the <u>Center for the Developing Brain</u> at the Child Mind Institute.

Yang Z, Craddock RC, Milham MP. Impact of hematocrit on measurements of the intrinsic brain. Front Neurosci. 2015 Jan 20;8:452.



This paper by **Babak Ardekani** and C-BIN colleagues reports on changes in the corpus callosum over a one year period, and its potential use as an imaging biomarker.

Elahi S, Bachman AH, Lee SH, Sidtis JJ, Ardekani BA. Corpus Callosum Atrophy Rate in Mild Cognitive Impairment and Prodromal Alzheimer's Disease. J Alzheimers Dis. 2015 Jan 29.



Stephen Ginsberg (Center for Dementia Research) and colleagues authored this study of the effects of calorie restriction in mice. This research received <u>media attention</u> when it was presented at the Society for Neuroscience meeting last year.

Schafer MJ, Alldred MJ, Lee SH, Calhoun ME, Petkova E, Mathews PM, Ginsberg SD. Reduction of β -amyloid and γ -secretase by calorie restriction in female Tg2576 mice. Neurobiol Aging. 2014 Dec 4.

The Journal of **Physiology**

Yaniv Cohen and **Donald Wilson** (Emotional Brain Institute), along with a colleague from Cornell, describe transient cortical asymmetry during olfactory learning in *The Journal of Physiology*.

Cohen Y, Putrino D, Wilson DA. Dynamic cortical lateralization during olfactory discrimination learning. J Physiol. 2015 Jan 21.



Nunzio Pomara and **Jay Nierenberg** collaborated with researchers from around the world on this work appearing in *Neuropsychologia*.

Bruno D, Grothe MJ, Nierenberg J, Zetterberg H, Blennow K, Teipel SJ, Pomara N. A study on the specificity of the association between hippocampal volume and delayed primacy performance in cognitively intact elderly individuals. Neuropsychologia. 2015 Jan 19;69C:1-8.



This paper by **Millie Rincón-Cortés** and **Regina Sullivan** (Emotional Brain Institute), along with others, was featured in the <u>NEJM Journal Watch</u> <u>Psychiatry</u>.

Rincón-Cortés M, Barr GA, Mouly AM, Shionoya K, Nuñez BS, Sullivan RM. Enduring good memories of infant trauma: Rescue of adult neurobehavioral deficits via amygdala serotonin and corticosterone interaction. Proc Natl Acad Sci U S A. 2015 Jan 20; 112(3):881-6.

INFO UPDATE



Public Access Policy

The National Center for Biotechnology Information recently presented a webinar on "NCBI and the NIH Public Access Policy: PubMed Central Submissions, My NCBI, My Bibliography and SciENcv". Due to high demand, the webinar will be re-broadcast on April 21st. Click <u>here</u> to register. In addition, a recording of the original webinar can be viewed <u>on</u> <u>NCBI's YouTube channel</u>, and the slides and other materials from this webinar are linked to the Archived Webinars tab of the NCBI <u>Webinars page</u>.

Extensive information about the public access policy can be found on the <u>NIH website</u>, and questions about the policy and related matters can always be addressed to the <u>NKI librarian</u>.

Further Public Access Developments

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The Department of Health and Human Services (HHS) recently announced plans to expand access to the results of federally funded research. In addition to the NIH, agencies including the FDA, CDC, and AHRQ have developed public access plans which will require making peer-reviewed articles as well as digital data publicly accessible. For more details, and links to the plans, **see this HHS blog**.



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In the latest <u>NIMH Director's Blog</u>, Thomas Insel discusses the allocation of the agency's grantfunding dollars. In particular, he acknowledges the need for increased transparency about how funding decisions are made. And in an effort to answer some of the most commonly asked questions about the NIMH research portfolio, Dr. Insel has posted a white paper called "<u>The</u> <u>Anatomy of NIMH Funding</u>".

Get Up! Get Moving!

It's not breaking news that too much sitting, on the couch and/or at the office, is not good for one's health. But <u>a recent study</u> adds to the weight of evidence linking prolonged sitting with various adverse health outcomes. "Combing through 47 prior studies, Canadian researchers found that prolonged daily sitting was linked to significantly higher odds of heart disease, diabetes, cancer and dying." What's more, "even if study participants exercised regularly, the accumulated evidence still showed worse health outcomes for those who sat for long periods." See this <u>HealthDay news report</u> for additional information and for tips on how to reduce your sedentary time. Fitbit, anyone?

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

The New York Times

Earlier this year, *The New York Times Magazine* published a profile of Sebastian Seung, currently a professor at Princeton's Neuroscience Institute. Seung's lab uses computational neuroscience methods to understand brain structure and connectivity. One notable approach is the use of an online game, EyeWire, to crowdsource brain mapping. Seung's 2012 book, *Connectome: How the Brain's Wiring Makes Us Who We Are*, is available to borrow from the NKI Library.



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As reported in *The Washington Post's* Wonkblog ("It's official: Americans should drink more coffee"), coffee drinkers now have a seal of approval from the US Dietary Guidelines Advisory Committee, whose latest scientific report notes that moderate daily coffee consumption is not only safe, but may in fact confer some health benefits. I knew it all along.

Chart Topping Trivia

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This **fun website** will play back the top hit song from any given day. Just enter your birth date to find out what the number one song was on that day.

NKI ON THE ROAD



INSTITUTE OF MEDICINE OF THE NATIONAL ACADEMIES

Deputy Director Antonio Convit participated in a workshop at the Institute of Medicine on February 26-27. The topic was "Examining a Developmental Approach to Childhood Obesity: The Fetal and Early Childhood Years". Presentations from the meeting, including Dr. Convit's on "Toxic Stress and Its Role in Childhood Obesity", can be viewed online.

THE LANCET Neurology AUTOIMMUNE DISORDERS CONFERENCE

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Daniel Javitt (Schizophrenia Research) is scheduled to give a presentation on "NMDA receptors in psychiatric disorders" at <u>The Lancet Neurology</u> <u>Autoimmune Disorders Conference</u> in Barcelona on March 26-27.

UPCOMING EVENTS AND SEMINARS

Center for Dementia Research Neuroscience Seminars Winter/Spring 2015

Held on Thursdays at noon in conference room B

Gary Gibson, PhD

Weill Cornell University

Title TBD

April 2nd at noon

Hosted by Dr. Ralph Nixon

David Borchelt, PhD

University of Florida *Title TBD* May 21st at noon Hosted by Dr. Paul Mathews

Eric Morrow, PhD, MD

Brown University *Title TBD* May 28th at noon Hosted by Dr. Ralph Nixon

Center for Biomedical Imaging and Neuromodulation Scientific Lecture Series

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Held in conference room B at 11 am

Prantik Kundu, PhD

Icahn School of Medicine at Mount Sinai

Dissecting fMRI: Unexpected Brain Activity and Insidious Artifacts Exposed by Multi-Echo EPI

Monday, March 30th

SangHan Lee, PhD

Computational Neuroimaging Lab, C-BIN, NKI

Title TBD Monday, April 6th

Anders Eklund, PhD

Linköping University, Sweden

High Performance Computing in Neuroimaging – Paving the way for better Statistical Methods

Monday, April 20th

Melissa A. Cyders, PhD

Indiana University Purdue University - Indianapolis

Emerging Neuroscience of Emotion-Based Impulsivity

Wednesday, May 20th

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 4,900 items dating back to 1995, and can be searched from the <u>NKI web site</u>.

Acri M, Frank S, Olin SS, Burton G, Ball JL, Weaver J, Hoagwood KE. Examining the Feasibility and Acceptability of a Screening and Outreach Model Developed for a Peer Workforce. J Child Fam Stud. 2015 Feb;24(2):341-350.

Addington J, Heinssen RK, Robinson DG, Schooler NR, Marcy P, Brunette MF, Correll CU, Estroff S, Mueser KT, Penn D, Robinson JA, Rosenheck RA, Azrin ST, Goldstein AB, Severe J, Kane JM. Duration of Untreated Psychosis in Community Treatment Settings in the United States. Psychiatr Serv. 2015 Jan 15.

Balsamo M, Innamorati M, Van Dam NT, Carlucci L, Saggino A. Measuring anxiety in the elderly: psychometric properties of the state trait inventory of cognitive and somatic anxiety (STICSA) in an elderly Italian sample. Int Psychogeriatr. 2015 Jan 16. Blackmon K, Pardoe HR, Barr WB, Ardekani BA, Doyle WK, Devinsky O, Kuzniecky R, Thesen T. The corpus callosum and recovery of working memory after epilepsy surgery. Epilepsia. 2015 Feb 16.

Bruno D, Grothe MJ, Nierenberg J, Zetterberg H, Blennow K, Teipel SJ, Pomara N. A study on the specificity of the association between hippocampal volume and delayed primacy performance in cognitively intact elderly individuals. Neuropsychologia. 2015 Jan 19;69C:1-8.

Chen H, Kelly C, Xavier Castellanos F, He Y, Zuo XN, Reiss PT. Quantile rank maps: A new tool for understanding individual brain development. Neuroimage. 2015 Jan 10.

Cohen SM, Tsien RW, Goff DC, Halassa MM. The impact of NMDA receptor hypofunction on GABAergic neurons in the pathophysiology of schizophrenia. Schizophr Res. 2015 Jan 9.

Cohen Y, Putrino D, Wilson DA. Dynamic cortical lateralization during olfactory discrimination learning. J Physiol. 2015 Jan 21.

de Souza Armini R, Bernabé CS, Rosa CA, Siller CA, Schimitel FG, Tufik S, Klein DF, Schenberg LC. In a rat model of panic, corticotropin responses to dorsal periaqueductal gray stimulation depend on physical exertion. Psychoneuroendocrinology. 2015 Mar;53:136-47.

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Elahi S, Bachman AH, Lee SH, Sidtis JJ, Ardekani BA. Corpus Callosum Atrophy Rate in Mild Cognitive Impairment and Prodromal Alzheimer's Disease. J Alzheimers Dis. 2015 Jan 29. Goff DC. Drug development in schizophrenia: are glutamatergic targets still worth aiming at? Curr Opin Psychiatry. 2015 Feb 23.

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

Lee JD, McDonald R, Grossman E, McNeely J, Laska E, Rotrosen J, Gourevitch MN. Opioid treatment at release from jail using extended-release naltrexone: a pilot proof-of-concept randomized effectiveness trial. Addiction. 2015 Feb 23.

Lempert KM, Glimcher PW, Phelps EA. Emotional Arousal and Discount Rate in Intertemporal Choice Are Reference Dependent. J Exp Psychol Gen. 2015 Jan 19.

Ma Y, Koyama MS, Milham MP, Castellanos FX, Quinn BT, Pardoe H, Wang X, Kuzniecky R, Devinsky O, Thesen T, Blackmon K. Cortical thickness abnormalities associated with dyslexia, independent of remediation status. Neuroimage Clin. 2014 Nov 18;7:177-86.

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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.

Thanos PK, Robison LS, Steier J, Hwang YF, Cooper T, Swanson JM, Komatsu DE, Hadjiargyrou M, Volkow ND. A pharmacokinetic model of oral methylphenidate in the rat and effects on behavior. Pharmacol Biochem Behav. 2015 Jan 29.

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Non-PubMed References:

Hallin AE, Van Lancker-Sidtis D. A closer look at formulaic language: prosodic characteristics of Swedish proverbs. Applied Linguistics 2015.

Javitt DC. Substance abuse: phencyclidine use disorders. In: Tasman A, Kay J, Lieberman JA, First MB, Riba MB, editors. Psychiatry. Wiley Blackwell; 2015. p. 1470-9.

Ostrowski-Hilton M, Stewart C, Colognori D, Block-Lerner J, Brandwein D, Masia Warner C. Parental experiential avoidance in the context of CBT for adolescent social anxiety. ABCT Child and School 2014;(Spring):2-3. Roffman J, Lamberti JS, Achtyes E, Macklin EA, Galendez GC, Raeke LH et al. Effects of folic acid and vitamin B12 supplementation on negative symptoms and related MRI indices. Schizophrenia Research 153, S80. 2014. [Abstract]

Yan C, Li Q, Gao L. PRN: a preprint service for catalyzing R-fMRI and neuroscience related studies. F1000Research 2014;3:313.

Yang SY, Ahn JS, Van Lancker-Sidtis D. The perceptual and acoustic characteristics of Korean idiomatic and literal sentences. Speech, Language and Hearing 2015.