AGGRESSION IN SCHIZOPHRENIA: A QUESTION OF URGENCY

Matthew Hoptman, PhD (Schizophrenia Research), just published a chapter in a new book on Violence in Psychiatry. Below, he shares a summary of this work.

Violence in people with schizophrenia is often a reason for psychiatric hospital admissions, and leads to difficulties in treatment, prolonged hospitalization, increased treatment costs, and physical and emotional harm to both the perpetrator and victim. It also greatly promotes stigmatization of patients. There are many causes of this violence; most commonly noted are paranoid delusions, impulsive reactions to perceived slights, and/or desire for personal gain.

Work by Karen Nolan and colleagues at NKI showed that these causes often coexist in the same individual and even the same incident. Nevertheless, impulsivity appears to account for a great deal of aggression, particularly in inpatient settings.

Urgency is defined as impulsive behavior in the context of strong emotion. It is elevated in several psychiatric disorders. We have found that it is selectively elevated in schizophrenia in comparison to other aspects of impulsivity, such as sensation seeking, lack of planning, and lack of perseverance. We also found that elevated urgency is correlated with reduced thickness of ventral prefrontal regions, and with reduced functional connectivity between ventral prefrontal and both limbic and executive regions, many of which have been implicated in aggression. It seems, therefore, that urgency may be the aspect of impulsivity that can lead to impulsive aggression.

Currently, urgency is measured using a questionnaire, but I am currently developing a paradigm measure of urgency. This measure could then be used to assess cognitive, pharmacological, and/or neuromodulatory interventions which target the circuitry supporting urgency. Ultimately, the aim of these interventions would be to reduce urgency, and, thereby, violence in patients who show impulsive aggression.
FROM AROUND THE INSTITUTE

NKI Clinical Lab in the Spotlight

In recognition of Medical Laboratory Professionals Week, which was the last week in April, the Medical Technologists and Technicians employed in the OMH Clinical Laboratory at NKI were featured in the April issue of OMH’s Mental Notes. Click here to learn about this unique department and see photos of the staff.

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

A report titled Preventing Bullying Through Science, Policy, and Practice was recently released by the National Academies Press. Regina Sullivan (Emotional Brain Institute) was on the Committee on the Biological and Psychosocial Effects of Peer Victimization: Lessons for Bullying Prevention, which was largely responsible for this report.

CREF Gardening Club and the NKI Beautification Project

Many thanks to everyone who contributed to the CREF – NKI beautification project! With the help of many contributions from NKI employees and administration, members of the CREF Gardening Club were able to bring new life to the two large planters that flank the main entrance to NKI. The gardening volunteers added new soil, carefully planted 30 small begonias in each large urn, and then watered well. One gardener explained, “Anything can grow if it is taken care of.”

But the work is not done for these passionate gardeners. Gardening season is in full swing on the CREF. The soil has been tilled and fertilized, and planting is now underway. We welcome any garden donations. Want to thin out those hostas? Or maybe a patch of iris or black-eyed susans needs to be trimmed back? Or maybe you could donate some ground cover, like ivy or myrtle? Bring your unwanted plants to us, and the CREF Garden Club will give them a new home. Any and all plants welcome! Call Connie Shope (398-6562) or Lee Duncan (398-6559), or stop by our offices (S 208-209).

Contributed by Connie Shope

Drs. Ralph Nixon, Ju-Hyun Lee, and Devin Wolfe (Center for Dementia Research) recently received a patent for “Methods for screening to identify therapeutic agents for Alzheimer’s disease and use thereof.”

In other news from the CDR’s Nixon Lab, their article titled “Evidence that the rab5 effector APPL1 mediates APP-[beta] CTF-induced dysfunction of endosomes in Down syndrome and Alzheimer’s disease” was featured on the front cover of the May issue of Molecular Psychiatry.
Dr. Lajtha Receives State Honor

For his work fostering Hungarian relations with the United States, Abel Lajtha (Neurochemistry) was recently presented with the Order of Merit of Hungary, Officer’s Cross. The award ceremony was held on May 6 in Budapest, and the medal was presented by the Hungarian Foreign Minister, Péter Szijjártó. A news report of the event appears here.

Hollywood Comes to Rockland?

New land use proposals for parcels of the former RPC campus, now owned by Orangetown, have been presented to the Town. One of these, as reported in The Journal News, would turn part of the campus into a large movie studio complex. Another would introduce a very large indoor sports facility alongside the Lake Tappan reservoir. This proposal is described in the Rockland County Times. Several previous development proposals for the property have gone by the wayside, so time will tell whether either of these projects moves forward.

HIPAA Authorization for Research

In order to use and disclose Protected Health Information (PHI) for research, you must obtain authorization or a waiver of authorization. The Nathan Kline Institute IRB has the authority to approve both the use of PHI in research and to approve a waiver or an alteration of Privacy Rule Authorization requirements.

This authorization is separate from and in addition to informed consent:

- A Privacy Rule Authorization is an individual’s signed permission to allow a covered entity to use or disclose the individual’s PHI for the purpose(s) and to the recipient(s) stated in the Authorization.
- In contrast, an informed consent document is an individual’s agreement to participate in the research study and includes a description of the study, anticipated risks and/or benefits, and how the confidentiality of records will be protected, among other things.

A waiver of authorization can only be approved if 1) the use or disclosure of PHI involves no more than minimal risk to the privacy of individuals, 2) the research could not practicably be conducted without the waiver or alteration, and 3) the research could not practicably be conducted without access to and use of the PHI.

If your protocol involves human subjects, and you will collect/use/disclose PHI, you must download and complete an authorization form or a waiver of authorization form (both available in the “Forms and Templates” section of IRBNet) and attach it to your protocol for review and approval. This authorization form or request for waiver of authorization will be given specialized review to ensure that it includes core elements pursuant to the Privacy Rule.

If you have questions, please contact Challace Pahlevan-Ibrekic at (845) 398-5527 or cpahlevan-ibrekic@nki.rfmh.org.
Dan Javitt (Schizophrenia Research) wrote this editorial appearing in the April issue of the American Journal of Psychiatry.


Dr. Javitt is also an author, with Israeli colleagues, of this study involving TMS.


The Society of Biological Psychiatry introduced a new spin-off journal this year – Biological Psychiatry: Cognitive Neuroscience and Neuroimaging. Xavier Castellanos (Child & Adolescent Psychiatry) coauthored a paper in the third issue, which is a special issue on Brain Connectivity in Psychopathology.


Masuo Ohno (Center for Dementia Research) published this review on therapies targeting BACE1 in Brain Research Bulletin.


Liz Phelps (Emotional Brain Institute) is the senior author of this paper suggesting that emotional arousal at the time of memory formation is what modulates the subjective sense of recollection. Russell Tobe (Outpatient Research) is a coauthor.


Raj Balapal and Shivakumar Subbanna (Analytical Psychopharmacology) authored a review in the open access journal Brain Sciences.

Basavarajappa BS, Subbanna S. Epigenetic Mechanisms in Developmental Alcohol-Induced Neurobehavioral Deficits. Brain Sciences 2016;6(2).
NKI Director Donald Goff is the first author of this open access review.


Jose Morales-Corraliza and Paul Mathews (Center for Dementia Research), along with a number of NKI coauthors, recently published their latest paper in the Journal of Neuroscience. This work, reporting links to Alzheimer’s disease caused by diabetes, was reported in Alzforum.


Deputy Director Antonio Convit is the senior author of this study which suggests that improved cardiorespiratory fitness could result in improved brain health.


Carrie Masia Warner (Child & Adolescent Psychiatry) is the first author of this controlled study in which school counselors were trained to treat social anxiety. Philip Reiss and Eva Petkova are among the coauthors.


A Symposium issue on structural competency is forthcoming in the Journal of Bioethical Inquiry. Helena Hansen (Social Solutions & Services) is co-editor and contributed to several articles.


INFO UPDATE

Poster Improvement Tips

“Academic conference posters are often ugly, with tiny text, confusing layouts, and dubious color schemes. Better Posters is about making posters informative and beautiful.” The site is amusing, too.

Zen Faulkes, the author of Better Posters, also has a free e-book of Presentation Tips.

NIH Manuscript Submission System

A new, 10 minute video tutorial on “Navigating the NIH Manuscript Submission Process” is available on the NCBI YouTube channel. The video provides detailed help with submitting, reviewing, and approving your manuscript in the NIH Manuscript Submission (NIHMS) system. The NIHMS system supports manuscript depositing into PubMed Central (PMC) as required by the public access policies of NIH and other participating funding agencies. The NCBI YouTube channel includes tutorials on a variety of NCBI and My NCBI topics.

Beware of Predators ...

With the rise of open access publishing, including author-pay models, there are now some unscrupulous publishers who are eager to mislead authors into giving them money. Be on the lookout for these fraudulent players. This recent blog post can help: “‘Dear Esteemed Author:’ Spotting a Predatory Publisher in 10 Easy Steps”.

... Not to Mention Pirates

Speaking of open access, another relatively recent development is the advent of pirate websites like Sci-Hub, which (illegally) host millions of academic papers. A recent article in Science – “Who’s downloading pirated papers? Everyone” – describes the situation.

The National Library of Medicine (NLМ) has a new Learning Resources Database, making it easy to find educational resources for NLM products and services, all in one place. These materials include videos, tutorials, and handouts on products such as PubMed, ClinicalTrials.gov, and many more.

Also from the NLM, Genetics Home Reference, the website for consumer-friendly information about the effects of genetic variation on human health, has been redesigned based on user feedback. The new site offers improved navigation and usability.

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

The library still offers a comfortable, quiet space for reading, work, and small meetings. And we now have Wi-Fi. Just ask the library staff for the password.

You can link to the NKI Library’s website from myNKI. The Library site includes quick links to the NYU Health Sciences Library and to the New York State Library, as well as links to NKI’s own library resources (journal finder, online catalog, PsychiatryOnline, etc.). Remote access is available using NKI’s VPN.
APA Publishing's patient and family resource *Understanding Mental Disorders* is now complete, with the addition of chapters on these topics:

- Gambling Disorder
- Substance Use Disorder
- Agoraphobia
- Generalized Anxiety Disorder
- Panic Disorder
- Social Anxiety Disorder

**DEPARTMENT OF WONDER**

**THE NEW YORKER**

Several recent articles in *The New Yorker* may be of interest to NKI readers.

- Dana Goodyear describes competition and scandal in the field of stem cell research (“*The Stress Test*”).

- In “*Madness*”, Eyal Press writes about the abuse of mentally ill inmates in Florida prisons.

- And previewing the publication of his new book, two essays by Siddhartha Mukherjee consider genetics through the lens of his own family history (“*Runs in the Family*” and “*Same but Different*”).

**Your Brain on LSD**

A neuroimaging study published in *PNAS* describes changes in the brain under the effects of LSD. The authors note that “These results have implications for the neurobiology of consciousness and for potential applications of LSD in psychological research.” This story was covered by various news outlets, including *Medical Xpress* and *U.S. News & World Report.*

**NKI ON THE ROAD**

NKI attendees at the 2016 APA Annual Meeting in Atlanta included Donald Goff, Menahem Krakowski, and Jean-Pierre Lindenmayer.

- Dr. Krakowski gave a talk on “Personality Deficits, Impairments in Cognition, and Emotion Recognition: Interconnections and Relationship to Violence in Schizophrenia.”

- Dr. Lindenmayer chaired a workshop titled “Clinical Issues in Schizophrenia with Comorbid Disorders: Update” and exhibited three research posters.

- In a symposium on Marijuana, Dr. Goff presented on “Therapeutic Potential of Cannabinoids.”

**Schizophrenia International Research Society**

Dr. Krakowski and Dr. Lindenmayer also attended the 5th Biennial *Schizophrenia International Research Society Conference* held in Florence, as did Robert Smith, MD. Dr. Krakowski presented on “Event-related potentials changes associated with violence in violent patients with schizophrenia,” and Drs. Lindenmayer and Smith exhibited posters.

**ISTSS**

Regina Sullivan (Emotional Brain Institute) gave a keynote address at last year’s annual meeting of the *International Society for Traumatic Stress Studies* (ISTSS) in New Orleans. The title of her talk was “Neurobiology of Early life Trauma and Attachment.”
**UPCOMING EVENTS AND SEMINARS**

**Center for Biomedical Imaging and Neuromodulation Presents**

**Esther Blessing, MD, PhD**  
Postdoctoral Fellow  
Department of Psychiatry, NYUSOM  
*Brain Temperature as a Neuromodulator*  
Monday, June 13th, 11 am

**Theodore Satterthwaite, MD**  
Assistant Professor of Psychiatry  
University of Pennsylvania  
*Mapping abnormalities of brain development associated with psychopathology using multimodal neuroimaging: data from the Philadelphia Neurodevelopmental Cohort*  
Monday, June 20th, 11 am

**Statewide Grand Rounds**

**Improving Cognitive Health to Promote Recovery**

Presenter: **Alice Medalia, PhD**  
Clinical Dir., NYS OMH Cognitive Health Services  
Professor of Medical Psychology  
Columbia University Medical Center  
Panelist: **Matthew D. Erlich, MD**  
Director, NYS OMH Consult Service  
Assistant Professor of Clinical Psychiatry, Columbia University College of Physicians & Surgeons / NYSPI  
Moderator: **Lloyd I. Sederer, MD**  
Medical Director, NYS Office of Mental Health  
Adjunct Prof., Columbia School of Public Health  
Wednesday, June 15  
1:00 – 2:30 pm  
Director’s Conference Room

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 5,200 items dating back to 1995, and can be searched from the NKI web site.


