SUMMER SCHOLARS AT NKI

Contributed by Kristin Dietz Trautman, LCSW and Anna MacKay-Brandt, PhD

The sixth NKI Summer Scholars Program concluded the first week of August, although several of the participants will be continuing as interns during the next academic year. This summer, we hosted a large group of advanced undergraduates who worked on diverse projects both on-site and remotely. At weekly seminars, NKI investigators presented aspects of their research and discussed their personal academic and career paths. Several Scholars received stipends through their colleges for summer living expenses. Several Scholars received stipends through their colleges for summer living expenses.

Anna Kim, one of this year’s Summer Scholars, is a student at Middlebury College where she is pursuing an interest in philosophy of science and ethics in psychology. Since she plans to become a therapist or social worker, she wanted to work with people in her internship and chose to focus on the recruitment of participants for the NKI Rockland Sample study. As part of her internship, Anna wrote about her experience and reflected on social justice, equity, accessibility, and trust in the context of psychiatric research. Here is some of what she wrote.

The majority of my summer experience revolved around recruiting individuals for the Rockland Sample by calling, screening, and consenting interested individuals. Not surprisingly, the calls themselves could be tedious, and I was often greeted with voice messages or hung up on. But, when I got to chat with participants and go through the process of informed consent with those who decided to participate, I felt a profound gratitude for the scientific process and a sense of pride that I was able to partake in the goals of bettering peoples’ psychiatric health. (cont. p.2)

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The 2022 Summer Scholars

- Sarah Abdelaziz  Fordham University
- Connie Cai  Harvard University
- Grace Chapis  Hamilton College
- Clare Culver  Fordham University
- Huixin Deng  Lafayette College
- Alyssa DiFalco  Saint John’s University
- Mia Dominick  Brown University
- Kai Xuan Gan  UCLA
- Ella Garnett  Bowdoin College
- Anna Kim  Middlebury College
- Nora Liu  UCLA
- Emily Mets  Binghamton University
- Maxwell Riseman  University of Rochester
- Andrea Suazo Rivas  Grinnell College
- Jade Turbides  City College of New York
- Ava Waters  Vassar College
Most of us consume information about various psychological studies and these are often boiled down to a one or two sentence summary of a study that took years to complete. Taking part in the process not only allowed me to understand the process about which I constantly read, but also (and more importantly) better understand the humanity and personhood at the core of psychiatric research. Talking with individuals worried about their aging and IQ individually is much different than reading broad statistics about aging and brain health. Working as part of a bigger goal at an individual level provides me with a sense of humility and gratitude for the driven individuals who dedicate their careers to the betterment of our minds.

This experience has furthered my skill set in working with people in a mental health/psychological setting. I also am grateful that I was able to gain mentorship and meaningful connections with co-workers within NKI. I thoroughly enjoyed the weekly intern seminars that cover the topics of NKI researchers in an interdisciplinary manner. Such seminars gave me plenty of guidance through the power of lived experiences while I am considering possible career trajectories.

NKI’s summer internship program has developed into a robust educational experience that is clearly of great value to the participants. The students will return to their undergraduate studies with a greater understanding of the research process and of careers in related fields.

KUDOS

Jean-Pierre Lindenmayer, MD (Director of Research at the Manhattan Psychiatric Center Psychopharmacology Research Unit) has received the Dr. Lewis Opler Memorial Award from NAMI-NYS. This award recognizes the impact Dr. Lindenmayer has made with his decades of work in research and support for those affected by mental health conditions. The award will be presented at the NAMI-NYS 2022 Education Conference in November.

Dr. Ralph Nixon, Director of NKI’s Center for Dementia Research, has spent the last three decades working to uncover the fundamental cellular basis of Alzheimer’s disease. This work by Dr. Nixon and his laboratory has been recognized with the awarding of the Oskar Fischer Prize, an international competition to expand society’s understanding of the causes of Alzheimer’s. Dr. Nixon is one of four gold prize recipients.

Vinod Yaragudri, PhD (Emotional Brain Institute) and his coauthors have been selected as 2022 recipients of the Distinguished Scholar Award by the Society for Birth Defects Research and Prevention. This award recognizes senior authors for the importance, impact, and relevance of their published works in the field of birth defects research. The ground-breaking research of Dr. Yaragudri and his colleagues on the endo-cannabinoid system in embryo neurodevelopment demonstrated early embryonic expression of the ligand/receptor signaling pathway critical for development and toxicology in two vertebrate models, the chicken and the mouse. This study has gained in importance due to the increasing use/availability of cannabis-derived products and subsequent exposures that occur in utero in humans.

Dr. Carla Nasca (Dementia Research) has been elected to Associate Member status in the American College of Neuropsychopharmacology (ACNP).
Haige Zheng (OMH Clinical Laboratory) has developed and validated a new method on the LCMS/MS instrument to test MDA and MDMA to ensure that concentrations of these new components used in patient specimen tests are accurate. By validating amphetamine and methamphetamine on the same instrument, he has reduced their turn around time from 20 min to 5 minutes per specimen. Haige’s assay method has received conditional approval from the NYS Department of Health.

**GRANTS RECEIVED**

Drs. Emily Stern and Mohammed Milad (Clinical Research) received a Breakthrough Award from the International Obsessive-Compulsive Disorder Foundation for their project titled “Neural mechanisms of active avoidance in obsessive-compulsive disorder.”

Dr. Sam Neymotin (Biomedical Imaging & Neuromodulation) received a seedling grant from the U.S. Army Research Laboratory for the project titled “Training integrated hippocampal, prefrontal, and motor cortex circuits to navigate virtual agents in simulated environments.”

**PUBLICATIONS OF NOTE**

LEARNING & MEMORY

This open access paper coauthored by Christopher Cain (Emotional Brain Institute) is featured on the cover of the August issue of Learning & Memory.


JAMA Psychiatry

Clinical Evaluation Center Director Russell Tobe is a coauthor of this autism clinical trial report published in the August issue of JAMA Psychiatry.


JAMA

Director of Clinical Research Dan Iosifescu wrote an editorial for JAMA commenting on a new clinical trial report.

**THE LANCET Psychiatry**

**Ayana Jordan** (Social Solutions & Services) is the first author of this review appearing in *The Lancet Psychiatry*.


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**Mohammed Milad** (Clinical Research) is the corresponding author of this open access paper in *PNAS*.


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**Social Science & Medicine**

**Kerstin Pahl, Sharifa Williams, Crystal Lewis, and Marilena Lekas** are coauthors of this paper in *Social Science & Medicine*.


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**PNAS**

**Mohammed Milad** (Clinical Research) is the corresponding author of this open access paper in *PNAS*.


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**Academic Psychiatry**

**Crystal Lewis** and **Marilena Lekas** (Social Solutions & Services) coauthored this open access commentary piece in *Academic Psychiatry*.


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**scientific data**

This open access article by **Russell Tobe** (Clinical Evaluation Center), **Michael Milham** (Center for Biomedical Imaging & Neuromodulation), and numerous NKI colleagues appears in *Scientific Data*. The article describes the Longitudinal Discovery of Brain Development Trajectories substudy of the NKI-Rockland Sample.


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**Trends in Cognitive Sciences**

**Lila Davachi** (Biomedical Imaging & Neuromodulation) is the senior author of this review published in *Trends in Cognitive Sciences*.


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**Academic Psychiatry**

**Crystal Lewis** and **Marilena Lekas** (Social Solutions & Services) coauthored this open access commentary piece in *Academic Psychiatry*.

Henry Evrard (Translational Neuroscience Laboratories) contributed this chapter to a new book on insular epilepsies.


Ricardo Osorio (Clinical Research) is a coauthor of these two articles recently published in the *American Journal of Respiratory and Critical Care Medicine*.


Chelsea Reichert Plaska (Geriatric Psychiatry) is the first author of this open access paper in *Brain Connectivity*. The article reports some of Dr. Reichert Plaska’s dissertation research.


This review by Umit Tural and Dan Iosifescu (Clinical Research) appears in the *International Journal of Eating Disorders*.


Robert Smith (Neurochemistry) is a corresponding author of this paper recently published in *Brain Imaging and Behavior*.

Shivakumar Subbanna and Basavaraj Balapal (Dementia Research) published their latest work in the open access journal *Brain Sciences*. This research suggests that binge-like prenatal alcohol exposure during the sensitive stages of pregnancy in mice causes impairments in synaptic plasticity-associated proteins and bidirectional synaptic plasticity (LTP and LTD), leading to persistent FASD-like neurobehavioral abnormalities in mice. The article appears in a planned special issue on “New Advances in Neurobiology and Behavioral Disturbance in Alcohol Use Disorder (AUD) including Fetal Alcohol Spectrum Disorder (FASD)”, edited by Dr. Balapal.


**INFO UPDATE**

“On the internet,” as the old cartoon goes, “nobody knows you’re a dog”. And since most anybody can post most anything online, it’s important for the browser to beware. That’s especially true when it comes to health information, where misinformation can have serious consequences. To help you avoid the “dogs” and find information you can trust, here is a useful web page from the NIH Office of Dietary Supplements offering guidance on “How To Evaluate Health Information on the Internet”.

Last month, the National Suicide & Crisis Prevention Lifeline transitioned to 988 – an easy-to-remember three-digit number. When you call or text 988, you will be connected to the National Suicide Prevention Lifeline network, made up of around 200 crisis call centers and national backup centers. That means anyone, anywhere in the country, can contact 988 during a mental health crisis and be connected with a trained crisis counselor who can listen, provide support, deescalate the situation and connect you to additional resources that might help. The Lifeline can respond to any type of mental health crisis or emotional distress. It is free, confidential, and open to a person in crisis or someone calling on behalf of another. For more information, see [this SAMHSA web page](https://www.sasmhs.gov/).
The NKI Community Building Committee

Sweet September BBQ 2022

Tuesday Sept. 13th (1-3pm)

Rain date: Sept. 14th

Location – Outside of the atrium entrance

The NKI Community Building Committee (CBC) is organizing a BBQ for the NKI Community where all personnel, researchers and staff are invited to join. It has been some time since we could plan and have such a get together, so we look forward to a nice time spent with friends and colleagues. Vegetarian food options will be available as well.

Center for Biomedical Imaging and Neuromodulation Science Series

Held on Mondays at 11 am via Zoom
(Meeting ID: 214 282 6575)

Michael Lipton, MD, PhD
Montefiore Medical Center
Albert Einstein College of Medicine
September 19

Thomas Funck, PhD
Institute of Neuroscience and Medicine
Research Centre Jülich, Germany
September 26

NAMI Rockland’s Annual 5K Run/Walk for Wellness

Sunday, September 18th
at Rockland Lake State Park

Click here to register or create a team.

If you know Rena Finkelstein and would like to join her team or donate, click here.

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 on the OMH website.
**NKI ON THE ROAD**

**Behavioral Health Grand Rounds**

**Emily Stern** (Clinical Research) gave the NYU Behavioral Health Grand Rounds on July 20. Dr. Stern’s presentation topic was “Measuring and Modulating Sensory Phenomena in Obsessive-Compulsive Disorder”.

**Christos Lisgaras** (Center for Dementia Research) made many contributions to the recent European Epilepsy Congress in Geneva. He gave a basic science presentation on “Hippocampal area CA2 as a novel therapeutic target in epilepsy” and presented in a forum on “From cell to biomarker – renaissance of EEG?”, which he also co-chaired. He also co-chaired a conference session on Clinical Neurophysiology and was a facilitator for a Neurophysiology networking session.

In addition, Dr. Lisgaras gave two video interviews on data that were presented at the conference. These interviews can be viewed on VJ Dementia (First description of a novel EEG biomarker in animal models of Alzheimer’s disease) and on VJ Neurology (Hippocampal area CA2 as a novel therapeutic target in epilepsy).

**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 6,800 items dating back to 1995 and can be searched from the myNKI website.


Keller A, Pines A, Hoffmann MS, Bertolero MA, Milham MP, Salum G et al. Parsing the Effects of Threat and Deprivation Adverse Childhood Experiences (ACES) on Multiple Domains of Cognitive Functioning in Two Large-Scale Datasets of Youth. Biological Psychiatry 2022; 91(9 Suppl.):S76.

McKenna F, Sui YV, Bertisch H, Goff DC, Lazar M. Perfusion and Diffusion Abnormalities in the Hippocampal Subfields in Psychotic Spectrum Disorders Associate with Memory Deficits. *Biological Psychiatry* 2022;91(9 Suppl.):S308.