The Memory Education and Research Initiative (MERI) Program Celebrates 17 Years of Service and 2020 Funding

What is the MERI program?
The MERI program was started by Dr. Nunzio Pomara (Geriatric Psychiatry) in 2003 with the help of Dr. John Sidtis (Brain and Behavior Lab) and Dr. Lisa Willoughby, a former post-doctoral researcher in the Geriatrics Division. A primary goal of the MERI program was to identify and provide early diagnosis for Alzheimer’s disease (AD). The program has blossomed over the last 17 years and now follows more than 1,200 individuals from Rockland County.

Front: Anne Schatz, Katie Brundage, Chelsea Reichert Plaska
Rear: Antero Sarreal, Nunzio Pomara, Vita Pomara, Randy Hernando
and the surrounding areas. Community members who take part in the MERI receive an extensive three to four-hour evaluation which includes neuropsychological assessment, a clinical evaluation, and a psychiatric evaluation by Dr. Pomara. Each participant receives a report of their performance on the neuropsychological assessment as well as recommendations. The thorough workup allows the identification of conditions such as chronic stress, insomnia, and depression which can be associated with memory complaints or loss. When these disorders are identified, this information is conveyed to the primary physician so that successful treatment may result in a normalization of cognitive function. Individuals who exhibit impaired memory or cognitive skills are connected with the resources at the local Alzheimer’s Association and offered access to the latest clinical trials.

**Why is the MERI program unique?**

The MERI program is the only service of its kind in Rockland County. According to the Rockland County Directory of Services, there are just two places that residents can contact to get a free memory screening: 1) the MERI program at NKI or 2) the Alzheimer’s Association of Rockland County. While the Rockland Alzheimer’s Association is an invaluable community resource, it is not equipped to provide the extensive evaluation that the MERI program offers. Rockland residents would have to travel to New York City (e.g., Mt. Sinai or Einstein School of Medicine) to obtain equivalent, free memory evaluations.

**What are the current goals of the MERI program?**

- To establish baseline cognitive performance for healthy individuals with no memory complaints but with a family history of AD or other dementias;
- To educate participants about healthy brain aging;
- To alert community health professionals about ongoing clinical studies for the treatment of memory disorders;
- To bring advances in basic research of AD and related disorders to clinical research studies;
- To serve as an educational resource regarding memory disorders for the patients and clinicians of Rockland County;
- To make biological and clinical data available to other NKI researchers, to facilitate scientific collaboration.

**Who can the MERI help?**

- Cognitively normal people with subjective (benign) memory complaints;
- Elderly people with memory concerns (e.g., mild cognitive impairment, AD, dementia);
- Children of people with AD;
- People with AD;
- People with behavioral symptoms associated with AD (e.g., agitation);
- People with known risk factors (genetic make-up identified from sources like 23 and Me);

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**A Note of Thanks from Dr. Pomara**

I would like to take this opportunity to thank Stuart Linder (NKI administration) for his help securing this funding. Additionally, I would like to thank County Executive Ed Day, former County Legislator John Murphy, and the County Commissioner of Health Michael Leitzes for their support and confidence in the MERI program.

A special thanks to my collaborators: Drs. John Sidtis, Raymundo Hernando, Antero Sarreal, Ms. Chelsea Reichert Plaska, Vita Pomara, Katie Brundage, and Anne Schatz. Their professionalism, dedication, and kindness to the MERI’s participants and caregivers has made this program special to the Rockland community.

We truly have an invaluable community resource here at NKI and we hope that the MERI program continues to grow and prosper. I invite my colleagues at NKI to share this program information with their family and friends or any members of the community who may benefit from this resource.
• People with undiagnosed or misdiagnosed late-life major depression or anxiety and memory complaints.

What's new with the MERI program?

Dr. Pomara and his staff just received exciting news that the Rockland County Department of Mental Health is going to provide funding for the MERI program for 2020. This funding opportunity will enable the unique services that the MERI program offers to reach more individuals in the community who have subjective memory and cognition concerns. The target population for the MERI program is Rockland County residents aged 50 and above. The program is open to individuals younger than 50 as well, especially those with a family history of AD or related disorders. The risk of AD is greatest in individuals who are 65 and older, but brain-related changes associated with AD may begin as early as the 30’s. This generous grant will allow the MERI program to open to all individuals with memory-related concerns and especially those with a family history of dementia.

How can you access this invaluable community resource?

If you or someone you know could benefit from our free services, please contact Anne Schatz at (845) 398-6594 for more information or to schedule an appointment.

KUDOS

Dr. Eunju Im from the Nixon Lab was selected to receive a Fellowship award from the Korean American Society in Biotech and Pharmaceuticals Fall Symposium, (KASBP). Dr. Im was invited to present at the KASBP Symposium held in Boston on November 1-2.

The Highly Cited Researchers list from the Web of Science Group recognizes the world's most influential researchers of the past decade, demonstrated by the production of multiple highly-cited papers that rank in the top 1% by citations for field and year. This year, four outstanding NKI investigators appear on the list:

- F. Xavier Castellanos (Clinical Research)
- Daniel C. Javitt (Schizophrenia Research)
- Joseph E. LeDoux (Emotional Brain Institute)
- Michael P. Milham (Center for Biomedical Imaging and Neuromodulation)

Congratulations to these researchers for their exceptional performance!

Helen Scharfman (Dementia Research) has received the annual Basic Science Research Award from the American Epilepsy Society (AES), in recognition of her distinguished research career which holds promise for the improved understanding and treatment of epilepsy. The award was presented at the 2019 AES Annual Meeting in Baltimore, where Dr. Scharfman spoke on "Contributing to Basic Research About Epilepsy". Dr. Scharfman’s laboratory focuses on mechanisms that regulate excitability and plasticity in the brain. She has published over 150 articles and edited or co-edited five books. In addition, Dr. Scharfman has been an active contributor to the AES, the Epilepsy Foundation, and the International League Against Epilepsy. She has also served on the editorial boards of several journals including Journal of Neuroscience and Science Translational Medicine, and has been a contributing editor for Epilepsy Currents.
Joseph LeDoux, Director of the Emotional Brain Institute, has published a new book titled *The Deep History of Ourselves: The Four-Billion-Year Story of How We Got Conscious Brains* (Viking, 2019). You can learn more about it by reading Dr. LeDoux’s *Psychology Today* blog, by listening to his interview with Joe Rogan, or by watching his appearance at the Rubin Museum. *The Deep History of Ourselves* has been longlisted for the PEN/E.O. Wilson Literary Science Writing Award.

Dr. Nathan S. Kline was one of the most prominent psychiatrists of his day, and his legacy carries on through NKI, the research facility he founded. Now, Dr. Kline has been recognized as one of “The Five Most Influential Psychiatric Thinkers of All Time” by a Psychology Today blogger – alongside Emil Kraepelin, Sigmund Freud, Eugen Bleuler, and Aaron Beck! No doubt Dr. Kline would be pleased.

Dr. David Alcantara-Gonzalez, a postdoctoral fellow in the Scharfman Lab (Dementia Research) was named a 2019 American Epilepsy Society Fellow, enabling him to attend the AES annual meeting and receive special mentorship, networking, and professional development opportunities. At the conference, Dr. Alcantara-Gonzalez will also present in an Investigators Workshop on “Seizures in Seniors: How Do We Identify New and Innovative Therapies for this Growing Patient Demographic?”

This photo of Harlan appeared eight years ago in the *Informer*. His was the very first “Face of NKI”.

After 35 years of service, Harlan Stearns, Jr. retired as NKI’s Chief Safety and Security Officer. Harlan’s father (Harlan, Sr.) was an original Institute employee from 1952 and his mother also worked here. (His brother and daughter also worked at NKI in the animal care facility.) Harlan came to NKI in 1984 and was appointed Chief in 1986.

Harlan comments, “I have been lucky to have had both my father and my son work for me as officers. Not too many people can say that. One of my proudest accomplishments was pioneering the use of the expandable baton here at NKI. Now every safety and security officer in the State carries these batons. In retirement, I will be working part time security at the Haverstraw Elementary school and continuing to run my landscaping business. I plan on finally getting to do a lot of fishing. I also will continue to coach soccer as I have for many years.” With Harlan’s retirement, his son Shawn has assumed the role of Chief.
Alexandre Bourgeois has joined Dr. Ralph Nixon’s laboratory as a postdoctoral fellow. Dr. Bourgeois completed his undergraduate studies in Sciences de la Vie et de la Santé in the University Nice Sophia Antipolis with a Masters degree in Physiopathology, Pharmacology and Neurobiology in 2014. He worked as a Research Scientist on Dr. Frédéric Checler’s team at the Institut de Pharmacologie Moléculaire et Cellulaire in France, where he studied the Aβ-independent implication of the C99 fragment (or β-CTF) in the emergence of Alzheimer’s disease phenotypes in different mouse models. He completed this project as a PhD student in the same lab under the supervision of Dr. Raphaëlle Pardossi-Piquard in 2019.

Alexis Lieval and Sarah Solomon (Outpatient Research) participated in the Greater Hudson Valley Autism Speaks Walk in September. In addition to walking, they provided information about the services available at NKI.

Yoga, Dance, and Exercise in the NKI Library

Yin Yoga
Tuesdays at 4:30 pm – Led by Lindsay Laughlin. A simple 30-minute guided yoga/meditation. Bring a mat.

Dance
Wednesdays from 12-12:30 pm – Led by Qawi Telesford. Casino dance to Timba music. Sneakers preferred.

Cardio
Mondays and Thursdays from 4:30-5 pm – Led by Catarina Cunha. Full body cardio/strength training. Bring a mat and water.

Additional workouts can be undertaken using the Smart TV at your leisure. Grab a friend and go!

The food drive organized by NKI’s Community Building Committee collected well over 200 donated items, including canned fish/chicken/beans, soup, baby formula, milk, canned veggies, pasta and sauce, peanut butter, and more. These donations were given to the Hudson Valley Food Bank, which distributes to food banks and soup kitchens throughout the region.
Members of the *Sullivan Lab* (Emotional Brain Institute) published this paper in *PNAS*.


*Carrie Masia Warner* (Social Solutions & Services) is a coauthor of this paper appearing in the latest issue of *Journal of Cognitive Psychotherapy*.


Members of the *Schizophrenia Research* group coauthored this open access article appearing in *Scientific Reports*.


*Michael Milham* (Biomedical Imaging & Neuromodulation) and colleagues including *Xavier Castellanos* published new research on the prevalence of ADHD in *JAMA Network Open*. This research was reported by *Healio Psychiatry*, with comments by Dr. Milham.


The latest paper by *Diana Van Lancker Sidtis, John Sidtis*, and *Yoonji Kim* (Geriatric Psychiatry) was published recently in the open access journal *PLOS One*.


Members of the *Center for Biomedical Imaging & Neuromodulation* coauthored this paper in *Cerebral Cortex*.

Kerstin Pahl and colleagues in the Social Solutions & Services department have a new paper online in the *Journal of Consulting and Clinical Psychology*.


Jan Hrabe (Biomedical Imaging & Neuromodulation) coauthored this new paper published in *Biophysical Journal*.


Crystal Lewis (Social Solutions & Services) is a coauthor of this article in the open access *Harm Reduction Journal*.


Peter Lakatos (Biomedical Imaging & Neuromodulation) and colleagues published this open access review in *Current Biology*. The authors review the evidence for neuronal entrainment by environmental, self-produced, and neuromodulatory rhythms, which leads them to propose a new, unifying account of the role of neuronal entrainment in the selection and structuring of information.


Samuel Neymotin (Biomedical Imaging & Neuromodulation) is a coauthor of this paper published in *Alzheimer’s & Dementia*. Dr. Neymotin’s contribution involved computational modeling to understand calcium dynamics/homeostasis and calcium alterations related to Alzheimer’s disease. The paper combines rodent electrophysiology and calcium imaging with computational modeling to offer predictions on mechanisms of AD.

INFO UPDATE

The new PubMed is open for business and available for searching [here](https://pubmed.ncbi.nlm.nih.gov/). This interface will become the default in spring 2020. In the meantime, a banner at the top of the legacy PubMed site points to the new PubMed and both sites are running concurrently. The new site has a modified search experience and a responsive design to work with various screen sizes. Additional information can be found [in the NLM Technical Bulletin](https://www.nlm.nih.gov/pubs/cm/technical_bull/2020/feb/feb2020.pdf). For any questions about the new PubMed, please consult with the NKI librarian.

Google

A senior scientist for Google Search offers some helpful tips to improve your search efficiency in "6 Steps to Being a Smart Searcher".

DEPARTMENT OF WONDER

Do You Mind?

Mindfulness may be the buzzword of the past decade and has been suggested as a solution to many of the world’s problems. But can mindfulness help you at work? Apparently Google thinks so, and the company offers a variety of mindfulness programs for its employees. [Here are some tips](https://www.cnbc.com/2016/09/20/google-offers-mindfulness-to-employees.html) you can incorporate into your normal routine.

Theories of Consciousness Go Head-To-Head

The [Templeton World Charity Foundation](https://www.templeton.org/) has launched a project that aims to make progress on the science of consciousness by pitting the leading theories against each other using experiments. You can [read more about this endeavor](https://www.science.org/doi/10.1126/science.aaz7132) in *Science*.
Quantum Supremacy

A research team at Google recently announced a breakthrough in quantum computing, meaning that they used a quantum computer to solve a problem that would take a classical computer an impractically long time. The research was published in Nature, where you can also find some commentary. Google’s Keyword blog also announced the milestone and offered some context.

Return on Investment

To celebrate Thanksgiving, the NIH Director’s Blog featured five medical technology advances that were made possible by publicly funded research. A short video provides nice visuals.

If those technologies are not amazing enough, a recent paper in Lancet Neurology describes a project in which a brain-machine interface enabled a tetraplegic man to grasp and walk again. Science Translational Medicine provides a summary in “A real-life cyborg brain”.

Did you know that Nathan Kline and Manfred Clynes (a Rockland colleague at the time) are credited with coining the word “cyborg”? An article they published in 1960 is typically cited as the first usage. The perspective of Clynes, 50 years later, was captured in a 2010 article in The Atlantic. For more about the multi-talented Clynes, see this wiki entry. A photo of Kline and Clynes can be found here.

NKI ON THE ROAD

Ralph Nixon, Director of the Center for Dementia Research, recently co-chaired an invitation-only workshop on “Alzheimer’s, Related Disorders and Autophagy” organized by the German Center for Research and Innovation New York.

Dr. Abraham Goldring (Manhattan Psychiatric Center) conducted a workshop on “New Approaches to Addressing Negative Symptoms in Schizophrenia” at the NAMI New York State Annual Education Conference held in Albany in October.

The 2019 Society for Neuroscience meeting held in Chicago was attended by many NKI researchers. NKI presenters included:

- Brian Russ (C-BIN) was co-chair and presenter for a Minisymposium on “Naturalistic Paradigms in Awake Monkeys: Bridging fMRI and Extra-Cellular Activities”
- Pamela Butler (Clinical Research) presented in a professional development workshop on “The Art of Building a Career”
- Melissa Alldred and Megan Gautier, and Stephen Ginsberg (CDR) all presented posters in the session on “Alzheimer’s Disease: Omics Approaches”
• **Yohan Kim** (CDR) presented a poster in the session on “APP Metabolites in Alzheimer’s Disease”

• **Pasquale D’Acunzo** (CDR) presented a poster in the session on “Aging: Molecular Mechanisms I”

• **David Alcantara-Gonzalez** (CDR) presented a poster in the session on “Synaptic Dysfunction in Alzheimer's Disease: In Vivo Models II”

• **Noelle O’Connell** (C-BIN) presented a poster in the session on “Auditory Processing: Perception, Cognition, and Action”

• **Sam Neymotin** (C-BIN) presented a poster in the session on “Temporal and Spectral Auditory Processing”

• **Idan Tal** and **Annie Barczak** (C-BIN) both presented posters in the session on “Human Auditory Processing II”

• **Charles Schroeder** (C-BIN) presented a poster in the session on “Cellular Mechanisms of Oscillations”

• **John Orczyk** (C-BIN) presented a poster in the session on “Multi-Sensory Integration”

For more details and to search the entire conference program, see the [online meeting planner](#).

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**Center for Dementia Research Seminar Series**

*Held on Thursdays at 10 am*

**Thomas Foster, PhD**  
University of Florida

*The Senescent Synapse: from the Membrane to the Nucleus*  
January 23rd, 2020

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](#).

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**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 6,200 items dating back to 1995, and can be searched from the [myNKI website](#).


Alzheimer’s Association International Conference 2019


