Alexandre R. Franco, PhD, joined the Center for Biomedical Imaging and Neuromodulation (C-BIN) department in March as the new director of the Computational Neuroimaging Laboratories (CNL).

With a strong signal processing background, he brings extensive knowledge of neuroinformatics and MRI image processing and analysis methods to support several research initiatives at NKI. Through functional and structural neuroimaging, he aims to create novel techniques to understand how brain patterns are altered by mental illnesses. His research is also focused on developing new real-time fMRI methods. In addition, Dr. Franco has experience assisting clinical researchers with computational and statistical methods.

Prior to joining NKI, Dr. Franco was an Associate Professor at Pontifícia Universidade Católica do Rio Grande do Sul since 2011, in Brazil, his native country. Dr. Franco was a pioneer in neuroimaging in southern Brazil, where he built a neuroinformatics laboratory. His lab was responsible for processing and analyzing the images of all MRI studies at the Brain Institute of Rio Grande do Sul. This generated a wide network of collaboration, which led Dr. Franco to study a variety of neurological and psychiatric illnesses, including multiple sclerosis, epilepsy, Parkinson’s disease, Alzheimer’s disease, dyslexia, microcephaly (caused by Zika virus), and ADHD, as well as conditions such as use of crack cocaine, excessive use of social media, biological effects on children in violent communities, and adolescent obesity.

Dr. Franco was also a pioneer in teaching researchers in Brazil how to conduct neuroimaging studies. He has led an annual hands-on fMRI course in Brazil, which is taught in partnership with the Nathan Kline Institute.
**John Orczyk, PhD**, recently joined the laboratory of Yoshinao Kajikawa as a postdoctoral Visiting Scientist. Here he describes his background and research interests.

My passion for science extends from my early formative years. In my junior year of high school, I started to work in a cancer research laboratory at Purdue University under the mentorship of Dr. D. James Morré. While an undergraduate, I discovered that neuroscience blended my love of the humanities, as they relate to the study of the human experience, with a rigorous examination of the scientific underpinnings of our perceptual experience. My graduate work at Indiana University in the laboratory of Preston E. Garraghty explored plasticity in the rat barrel cortex in response to infra-orbital nerve (ION) transection as a model used to distinguish and characterize use-dependent and homeostatic driven changes in gene expression. While plasticity models show how sensory experiences alter neuronal properties over days and weeks, they do not explain the moment-to-moment stream of consciousness we experience as a congruent perceptual experience. Thus, I am shifting the timescale of my observations from hours and days to milliseconds and shifting methodology from RNA sequencing to electrophysiology.

A central aspect of our perceptual experience is the ability to both focus on salient features and ignore extraneous ones. Neuronal oscillations have been suggested as a mechanism through which selective attention operates by integrating multi-modal sensory information in such a way that salient information from different modalities are reinforced. This neuronal oscillation hypothesis has already been successfully tested in primary and some secondary auditory areas (core and belt). My most immediate objective is to extend our observations to the para-belt region of the auditory system. Long-term, I hope to combine electrophysiology with pharmacology to improve our understanding, diagnosis, and treatment of mental disorders.

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**New Systems Administrator**

**Albert Rozalski** joins NKI as a Senior Systems Administrator to take on the fast-paced challenges of IT with over two decades of experience in information sciences. He graduated from Synergistics Computer Learning Center in 1996 with a degree in Computer Systems Administration and obtained numerous Microsoft Windows operating system certifications throughout his years as an IT professional. His experience includes desktop support, cybersecurity, software upgrade and implementation, management of various Windows/Linux servers, as well as monitoring network performance and analyzing and isolating issues. His passion for computers has led him to a long and exciting career. “My first computer was a ‘Commodore 64’ in 1987 and it gave me the opportunity to witness what can be accomplished with technology in every aspect of life.”
For the first time, *The Informer* needs a full page to announce the latest funding awards. Congratulations to all the grant recipients!

**GRANTS RECEIVED**

Dr. John Orczyk (C-BIN) received a Ruth L. Kirschstein National Research Service fellowship award for the grant titled “Neural Mechanism underlying audio visual vocalization processing in the macaque.”

Dr. Daniel Javitt (Schizophrenia Research) received a new 5-year segment on his grant titled “Early Cortical Processing in Schizophrenia.”

Dr. Maya Opendak (Emotional Brain Institute) received a NARSAD award from the Brain & Behavior Research Foundation for a grant titled “A Circuit-Based Analysis of Infant Trauma and Repair.”

Dr. Matthew Hoptman (Clinical Research) received an award from the American Foundation for Suicide Prevention for the project titled “Neural Correlates of Emotion Regulation in Psychosis with Suicidal Ideation and Behavior.”

Dr. Ralph Nixon (Dementia Research) received an R01 for the grant titled “Endosome Dysfunction in Alzheimer’s Disease.” This grant is a collaboration with NYU.

Dr. Michael Milham (C-BIN) received a Neuroimaging Core on Dr. Charles Schroeder’s Conte P50, “Neurobiology and Dynamics of Active Sensing.” This is collaboration with Columbia University.

Dr. James Clelland (Clinical Research) received an R21 award for the project titled “Negative Symptoms in Clinical High Risk and First Episode Psychiatric Illness: Investigation of a New Candidate for Targeted Treatment.” This a collaboration with Dr. Catherine Clelland at Columbia University.

Dr. Helen Scharfman (Dementia Research) received an R01 grant for the project titled “The role of CA2 in epilepsy and social comorbidity.” This is a collaboration with Dr. Steven Siegelbaum at Columbia University.
**KUDOS**

Veronica Ozog, MA, formerly a Study Coordinator at the Manhattan Psychiatric Center Research Unit, received a scholarship from the Melanie Foundation. Veronica is currently a PhD candidate in Clinical Psychology at the Derner Institute of Advanced Psychological Studies at Adelphi University.

**NAMi**

Nigel Bark, MD, who is currently Chair of the NKI Institutional Review Board, was one of the award recipients at NAMI Rockland’s Annual Awards Celebration on October 3rd in Stony Point. In attendance were Liz Falco, Miki Kohn, Alexis Lieval, Tom O’Hara, Henry Sershen, Aileen Snider, and Russ Tobe.

**PUBLICATIONS OF NOTE**

Ralph Nixon, Director of the Center for Dementia Research, coauthored this paper appearing in the September issue of Nature Reviews Drug Discovery.


Emily Stern (Clinical Research) is the first author of this paper appearing online in Neuropsychopharmacology.


Also published in Neuropsychopharmacology is a new paper from the lab of Raj Balappal and colleagues (Analytical Psychopharmacology).

Joshi V, Subbanna S, Shivakumar M, Basavarajappa BS. CB1R regulates CDK5 signaling and epi-genetically controls Rac1 expression contributing to neurobehavioral abnormalities in mice post-natally exposed to ethanol. Neuropsychopharmacology. 2018 Aug 22. PMID: 30143782.

**FROM AROUND THE INSTITUTE**

OMH Medical Director Dr. Lloyd Sederer recently published a Personal Account – “Opioids: From Being a Doctor to Being a Patient” – in Psychiatric Services. His new book, The Addiction Solution: Treating Our Dependence on Opioids and Other Drugs, was published by Scribner earlier this year.
Michael Milham, Xavier Castellanos, and Stan Colcombe (Biomedical Imaging & Neuromodulation) are among the authors of this article published in the online, open access journal *Nature Communications*.


Babak Ardekani (Biomedical Imaging & Neuromodulation) is a coauthor of this article published online in *Alcoholism: Clinical & Experimental Research*. Dr. Ardekani provided a summary:

“Despite evidence of structural and functional brain recovery following abstinence from long-term heavy alcohol use, some residual brain abnormalities persist in individuals with Alcohol Use Disorder (AUD). The present study found volumetric and microstructural abnormalities and their associations with poorer performance on visuospatial memory and problem-solving ability in abstinent individuals with AUD. These findings have important implications in planning and implementation of intervention and rehabilitation strategies in AUD.”


David Yuan and Ralph Nixon (Dementia Research), along with many NKI coauthors, published this research in the online, open access journal *Translational Psychiatry*. This work involved collaboration among several departments at NKI.


John and Diana Sidtis (Brain & Behavior Laboratory) have a new open access paper in *Brain and Cognition*.

Van Lancker Sidtis D, Sidtis JJ. **Cortical-subcortical production of formulaic language: A review of linguistic, brain disorder, and functional imaging studies leading to a production model.** Brain Cogn. 2018 Oct; 126:53-64. PMID: 30176549.

The laboratory of Raj Balapal (Analytical Psychopharmacology) is responsible for this publication in *Neuroscience*.

Subbanna S, Joshi V, Basavarajappa BS. **Activity-dependent Signaling and Epigenetic Abnormalities in Mice Exposed to Postnatal Ethanol.** Neuroscience. 2018 Jul 20. PMID: 30031835.
Catia Teixeira and colleagues in the Emotional Brain Institute published this article recently in eNeuro, the online, open access journal of the Society for Neuroscience. The paper was selected for promotion by the Society, which prepared a summary and press release, leading to some media attention. In addition, the article was featured in a Research Highlight piece published by the journal. From the press release: “A mother's presence may have immediate and long-term effects on her child's developing brain by modulating the serotonin system … The research provides a potential mechanism by which separating a child from his or her mother early in life could derail development.”


Nunzio Pomara (Geriatric Psychiatry) and coauthor Davide Bruno have published a Commentary piece in the open access Journal of Alzheimer’s Disease Reports. Dr. Bruno’s explanatory article for a general audience, “Alzheimer’s disease – don’t give up on plaque-busting drugs just yet,” appears on The Conversation website.


Menahem Krakowski’s (Clinical Research) latest paper appears in Schizophrenia Research.

Krakowski MI, Czobor P. Distinctive profiles of traits predisposing to violence in schizophrenia and in the general population. Schizophr Res. 2018 Jul 16. PMID: 30021703.


This article in Neurobiology of Disease comes from the laboratory of Efrat Levy (Dementia Research) and NKI colleagues.

Alexander Opitz, Michael Milham, and Charles Schroeder (Biomedical Imaging & Neuromodulation) are among the coauthors of this recent Neuroimage paper.


INFO UPDATE

The Things You Can Do with an NCBI Account!

Here are just some of the tasks an NCBI account can help with:

- Getting alerts when new records are available
- Creating collections of materials
- Managing your own publication list (bibliography)
- Complying with NIH’s Public Access Policy for your funded grants
- Customizing the display of search results

It’s almost like having a personal assistant. For more details (and a video tutorial), see this NCBI Insights blog.

Improved Search Now Available Across NCBI Databases

In other NCBI news, an improved search feature developed at NCBI Labs that interprets plain language to give better results for common searches is now available on NCBI’s Nucleotide, Protein, Assembly, and Genome database searches. Whether you are searching for a specific gene or for a whole genome, you will now retrieve NCBI’s best results regardless of the database you search. The NLM Technical Bulletin has the full announcement.

Nature Briefing delivers a free daily roundup of science news, analysis, and opinion to your email inbox. You can sign up here.

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 offers a comfortable, quiet space for reading, work, and small meetings. To use the library’s Wi-Fi network, 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.
An Aspirin a Day … May Not Be All Its Cracked Up To Be

Clinical trial results recently published in the New England Journal of Medicine call into question the popular belief that a daily low dose of aspirin is beneficial for older people (including healthy ones). The upshot of this research is that while aspirin is recommended for many people at high risk for heart attack or stroke, it does not appear to be helpful for older people who are not at risk, and in fact it may be harmful. You can read more about the ASPREE study in NIH Research Matters, in The New York Times, and on NPR.

EVENTS AND SEMINARS

NAMI-NYS 2018 Education Conference

Moving Forward: Identifying and Advocating for the Latest Breakthroughs in Research and Treatment of Mental Health Issues and Neurobiological Disorders

New York State 2018 Education Conference

Friday – Sunday, October 26th – 28th
The Albany Marriott
Click here for conference details.

Center for Dementia Research Seminar Series

Held on Thursdays at 10 am

Philip Wong, PhD
Boston University School of Medicine
Recent progress in microglias and exosome mediated progression of Alzheimer’s disease
October 18th

Wenquan Zou, MD, PhD
Case Western Reserve Univ. School of Medicine
Title TBD
October 25th

Neil MaLusky, PhD
University of Guelph, Ontario, Canada
Neuroprotective Effects of Androgen Metabolites – are they the basis for sex differences in the incidence of Alzheimer’s Disease?
November 15th

Wenbiao Gan, PhD
New York University
Title TBD
November 29th

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.
2018 International Mental Health Research Symposium

Hear the 2018 Outstanding Achievement Prizewinners and two Young Investigator Grantees present updates on leading research discoveries across brain and behavior disorders, as well as featured speakers Dr. Altha Stewart and Judge Steven Leifman.

Friday, October 26th
9:00 am – 4:30 pm
Kaufman Music Center
129 West 67th Street, New York, NY 10023

Click here for more information.

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 5,900 items dating back to 1995 and can be searched from the myNKI website.


Fernandes TMP, Silverstein SM, Butler PD, Kéri S, Santos LG, Nogueira RL, Santos NA. Color vision impairments in schizophrenia and the role of antipsychotic medication type. Schizophr Res. 2018 Sep 7. PMID: 30201549.


Joshi V, Subbanna S, Shivakumar M, Basavarajappa BS. CB1R regulates CDK5 signaling and epigenetically controls Rac1 expression contributing to neurobehavioral abnormalities in mice post-natally exposed to ethanol. Neuropsychopharmacology. 2018 Aug 22. PMID: 30143782.


Krakowski MI, Czobor P. Distinctive profiles of traits predisposing to violence in schizophrenia and in the general population. Schizophr Res. 2018 Jul 16. PMID: 30021703.


Krakowski M, Czobor P. Psychopathy, impulsivity and trait aggression as predisposing factors to violence in schizophrenia and in the general population: A profile analysis. European Psychiatry 48[Suppl. 1], S124-S125. 2018. [Abstract]
