The Information Sciences Division (ISD) has played a key role within the Nathan Kline Institute since the Institute’s founding. As far back as the 1960’s, ISD pioneered the use of computer technology in psychiatric care and research. In recent years, under the leadership of Jim Robinson, ISD has continued to merge technology and mental health research with its Acquire electronic data capture system and its teams of data managers, study monitors, and developers.

While many staff members know ISD only as the “Computer Center” support group, the division has one of the most active research programs in the Institute, providing data management services and software for numerous clinical trials and projects, from small investigator-initiated studies to prominent national clinical trials such as RAISE (Recovery After an Initial Schizophrenia Episode).

In an increasingly regulatory climate, it’s no longer enough to say you’ve collected data. Sponsors want to be assured that the data is secure, verifiable, unaltered, “clean,” and can be authenticated through an audit trail. ISD’s data management staff and the Acquire system ensure these conditions.

How does ISD data management work? A single data manager is assigned to a research project from beginning to end. The data manager reviews the protocol, develops a data management plan, builds all study forms in consultation with the research staff, ensures adherence to protocol, monitors data continually throughout the study, assists with Data and Safety Monitoring Board submissions, and provides clean data to the research team upon study completion.

The primary tool of the data manager at ISD is Acquire EDC, a web-based electronic data capture (EDC) system designed and built by ISD’s own developers. Data is entered by research staff, and reviewed and queried by data managers. Both groups have real-time access to study data, reports, and such tools as Subject Management, which allows site staff to view the current status of an individual subject or all subjects in a single view.

(continued)
The software runs on all common web browsers, including those on tablets, Macs, and PCs, and is compliant with regulations set forth by HIPAA, FDA, and FISMA, the federal computer security act, which is an exhaustive and costly compliance now being required in many federal contracts and grants.

Acquire EDC has been used with investigators at NKI, NYU, Yale, Harvard, UCLA, and Duke. So what can it provide the NKI researcher? First and foremost, a safe and regulated place for your data. All study data is stored in a SQL Server database, which is backed up every 15 minutes. Secondly, Acquire EDC is a flexible system that easily meets the needs of most clinical projects. Advanced features include support for multiple levels of blinding, self-reported forms such at patient diaries, and an integrated randomization tool.

For projects without the budget for full data management, ISD offers several data management options to assist with study design and startup, including grant development consultation at no charge. ISD can also assist with regulatory requirements and HIPAA compliance, allowing investigators to benefit from ISD’s extensive experience with such federal sponsors as NIMH, HHS, CMS, and NIDA.

Also available are Self-Acquire, an affordable solution that allows investigators to build their own Acquire EDC system and forms without using ISD’s data management or development staff; and Acquire ACASI (audio computer-assisted self-interview), which is used for capturing sensitive self-reported data from subjects.

ISD welcomes the opportunity to respond to any questions, clarify any of our services, and to assist in any way to make the NKI researcher’s project successful. For further information please contact Jim Robinson (x6506), Constance Klein (x6636), or Bill Alexander (x6508).
GRANTS AND FUNDING

National Institute on Deafness and Other Communication Disorders (NIDCD)

Emmanuelle Courtiol, PhD (Emotional Brain Institute) has received a three year award (R03) for her project entitled “Olfactory thalamus and odor perception” from the National Institute on Deafness and Other Communication Disorders. As Don Wilson notes, this grant comes just two years after Dr. Courtiol received her PhD.

NYU School of Medicine

Michael Milham, MD, PhD (Center for Biomedical Imaging & Neuromodulation) has received a two year sub-award for his grant entitled “Enhancing the Autism Brain Imaging Data Exchange to Define the Autism Connectome” from New York University School of Medicine.

ALZHEIMER’S DISEASE CENTER
CENTER FOR COGNITIVE NEUROLOGY

Áine Duffy, PhD (Center for Dementia Research) is one of three recipients selected to receive a pilot study award from the NYU Alzheimer’s Disease Center (ADC) for the 2015-16 grant year. Dr. Duffy’s research interest is the p75 receptor, a novel target for oxidative stress in Alzheimer’s disease. The purpose of the ADC pilot award is to provide funding to promising junior investigators and bring new investigators into the field to foster innovative research. Proposals were received from many departments within NYU School of Medicine and also from external institutions.

FROM AROUND THE INSTITUTE

STARTING A NEW CHAPTER

After 42 years of dedicated and integral service, mostly as the IRB Coordinator, Erna Ostrom is saying goodbye to NKI. On May 21st, many colleagues and friends gathered for a luncheon at The 76 House in Tappan to mark the occasion. Erna is looking forward to being able to devote more time to her hobbies and crafts, as well as to “new projects on the horizon”. In her own words:

I grew up at NKI, have enjoyed working here, the people have been wonderful and I have made many friends, including meeting and marrying my wonderful husband, but it is time to run off and experience a new life.

We wish her a long and satisfying retirement!

[3]
A new State time and attendance system went into effect at NKI on May 28th. NYS employees will use a daily sign in/sign out (SISO) sheet that will replace your former time sheets. The SISO will be used to record exceptions to your usual daily schedule.

It is important to use the SISO every day for accurate timekeeping. At the end of a pay period, the recorded times will be used to generate timesheets similar to the old triplicate ones. These are to be reviewed, signed, and submitted to your supervisor as before.

So remember:

- Sign in and sign out every day
- Continue using the usual time off requests for planned time off
- In case of sickness, emergency, etc., alert your supervisor as well as your department administrator
- The old triplicate timesheet is now electronic and will automatically calculate your accruals/uses

Stephen Ginsberg, PhD (Dementia Research) participated in an interview about Down syndrome and DS models for a new program called The Best Medicine on Columbia University public radio (WKCR). “The Wisdom of Down Syndrome” was originally broadcast on May 26th, and is now available online at thebestmedicineradio.com.

NAMIWalks NYC, a benefit for the National Alliance on Mental Illness of New York City, was held on May 9th at the South Street Seaport. The Walk is one of the city’s largest events to support mental health and fight the stigma of mental illness. Members of Dr. J.P. Lindenmayer’s Manhattan Psychiatric Center (MPC) psychopharmacology research team were proud to join this event and support education programs for families and individuals living with mental illness. MPC researchers staffed two booths, and Dr. Mohan Parak and Samantha Fregenti (pictured) completed the 5K run. Also in attendance were Veronica Ozog, Abraham Goldring, Dr. BJ Parker, Dr. Amod Thanju, and Dr. Raghid Charara.

Contributed by Theresa Abad, MSN, RN
GROWING FAMILIES

Not one, not two, but THREE babies joined the extended NKI family in the last few months. Congratulations to the new parents and (great) grandparents!

On January 10th, Nicole Gogel (Center for Dementia Research) gave birth to her daughter, Julia Teresa Gogel. Nicole says that “We couldn’t have wished for a better baby. She makes us laugh every day.”

Also on May 4th, Scott Gerum (Center for Brain Imaging and Neuromodulation) and his wife Aleda welcomed their son Marc William. Marc weighed in at 6 lbs., 12 oz. (i.e., 3061.75 grams).

Olivia K. Lucas, great granddaughter of Victor Dyakin (Center for Brain Imaging and Neuromodulation), was born on May 4th at Phelps Memorial Hospital.
Helen Scharfman (Center for Dementia Research) contributed this Perspectives piece to the March 20 issue of *Science*. She was then interviewed on the subject by *The Pharmaceutical Journal*.


This recent paper from the lab of Ralph Nixon in the Center for Dementia Research culminates nearly twelve years of work on neurofilaments.


Jan Hrabe (Medical Physics Laboratory) and colleagues at SUNY Downstate Medical Center published a paper in a recent issue of *Biophysical Journal*. This paper was selected as "New and Notable" by the editors and is accompanied by a commentary piece ("Anomalous Diffusion Inspires Anatomical Insights").


Two new papers from the Recovery After an Initial Schizophrenia Episode Early Treatment Program (RAISE-ETP) study have been published. Jim Robinson (Information Sciences) is a coauthor.


Deputy Director Antonio Convit and NYU colleagues have a new paper online in *Appetite* online.


A new paper from Regina Sullivan’s lab (Emotional Brain Institute) appears in *Frontiers in Behavioral Neuroscience*.


Vilma Gabbay (Child & Adolescent Psychiatry), along with colleagues at Mount Sinai and NYU, published this report on the significance of anhedonia in adolescent major depression. The publisher issued a press release about this study.


Matthew Hoptman (Schizophrenia Research) authored this paper on impulsivity in *CNS Spectrums*.


The latest publication by Latha Devi and Masuo Ohno (Dementia Research) appears in the open access journal *Molecular Brain*.


Papers by NKI investigators appear in three recent issues of *The Journal of Neuroscience*.


Cameron Craddock, Rosalia Tungaraza, and Michael Milham (C-BIN) published this paper in the open access journal *GigaScience*.


Bonnie Kerker (Child & Adolescent Psychiatry) is the lead author of this paper in the April issue of *Psychiatric Services*.


The National Center for Biotechnology Information conducts periodic webinars on resources and tools that you may find useful. These sessions are then archived for future viewing, and you can browse the archived and upcoming webinars here. Recent programs have been on PubMed Commons and on BioProject.

You can stay informed of NCBI’s offerings by subscribing to their listserv or to their YouTube channel.

*Shrinks: The Untold Story of Psychiatry* is a new book by Dr. Jeffrey Lieberman, chairman of the psychiatry department at Columbia and director of the NYS Psychiatric Institute. Of course, Dr. Nathan Kline is featured in this historical account of psychiatry, in a section on “The Pioneers of Psychopharmacology”. A copy will be available to borrow from the NKI Library.


The 4th edition of *Helping Parents and Teachers Understand Medications for Behavioral and Emotional Problems* is also new. It is a useful resource for educating parents and teachers about psychotropic drugs prescribed for children and adolescents. An information sheet is provided for each medication.
The Schizophrenia Research Forum has introduced a new audio component with Schizophrenia Forum Radio. These are podcasts that “include a mix of recent news and interviews with leading researchers from the different disciplines that study schizophrenia and related disorders and basic science”. Two episodes are available so far.

New Journals Debut

Several new psychiatric journals have been introduced in 2015. Two are open access companions to the Alzheimer’s Association’s Alzheimer’s & Dementia, called Diagnosis, Assessment & Disease Monitoring (DADM) and Translational Research & Clinical Interventions, respectively. Nunzio Pomara, MD and colleagues have an article in the first issue of DADM, and a second one in press. More about these new AD journals can be found on Alzforum.

The schizophrenia publishing field is also expanding, with npj Schizophrenia just launched by Nature Publishing and the Schizophrenia International Research Society. This follows closely behind Schizophrenia Research: Cognition, which started last year. Read more about these new open access titles on Schizophrenia Research Forum.

Finally, a new companion to Biological Psychiatry is also on the horizon. The first issue of Biological Psychiatry: Cognitive Neuroscience and Neuroimaging will be published beginning in January, 2016.

Toolbox is Nature’s hub for scientific software, apps, and online tools. An entry from 2014 suggests “How to tame the flood of literature” by using recommendation services.

The Digital Public Library of America (DPLA) “brings together the riches of America’s libraries, archives, and museums, and makes them freely available to the world. It strives to contain the full breadth of human expression, from the written word, to works of art and culture, to records of America’s heritage, to the efforts and data of science.” And now, through collaboration among the Southeastern NY Library Resources Council (SENYLRC), Hudson River Valley Heritage (HRVH), and Empire State Digital Network (ESDN), numerous digital collections from New York institutions are now available in the DPLA. These New York records (nearly 90,000 of them) join more than 10 million items already available through DPLA.

MedlinePlus and MedlinePlus en español – the National Library of Medicine’s websites for patients and their families and friends – were recently updated with a new responsive design that automatically adjusts the layout to fit your screen, whether it is on a phone, tablet, or desktop. See the announcement page for more details.

May is National Mental Health Awareness Month, and several organizations marked the occasion with efforts to inform and advocate. NAMI’s website offers mental health facts and ways to participate. The Stepping Up Initiative – a national effort to reduce the number of people with mental illnesses in jails – created a series called “31 Days, 31 Stories,” profiling a different person for each day of the month. And the Brain & Behavior Research Foundation ran an awareness campaign called Stop Stigma with Science.
In a recent post on his blog, NIMH Director Thomas Insel discussed the Research Domain Criteria (RDoC) initiative and how it aligns with the new push for precision medicine. And since “RDoC is a working model to be debated, discussed, and edited,” NIMH has established an online forum for RDoC-related discussion and commentary.

**DEPARTMENT OF WONDER**

Unsolved Problems

Ralph Adolphs (California Institute of Technology) considers the current state of neuroscience research in “The unsolved problems of neuroscience”, which appears in the April issue of Trends in Cognitive Sciences.

A Balanced View?

The publication of Understanding Psychosis and Schizophrenia by the British Psychological Society (2014) was met with a range of responses – exemplified by anthropologist Tanya Luhrmann’s New York Times op-ed piece titled “Redefining Mental Illness” on one hand, and psychiatrist Jeffrey Lieberman’s response on the other. To catch up on this debate, and perhaps to find a middle ground, you could do worse than Joseph Pierre, MD’s blog on the subject for Psychology Today. His piece is called “Psychosis Sucks! Antipsychiatry and the romanticization of mental illness”.

The Beginning of the End

Oliver Sacks, the beloved neurologist and author of many popular books, learned earlier this year that he has terminal cancer. He reflects on his mortality in this New York Times op-ed.

**NKI ON THE ROAD**

The 15th International Congress on Schizophrenia Research (ICOSR) was held in Colorado Springs from March 28 – April 1, with several NKI investigators in attendance.

Pamela Butler, PhD presented with Steven M. Silverstein (Rutgers) in an RDoC symposium. Their talk was titled “The RDoC domain of perception: how it informs heterogeneity and fundamental symptoms of schizophrenia and other disorders”.

Donald Goff, MD contributed to a poster on “Second and third relapses in a relapse prevention trial of long-acting injectable versus oral antipsychotics: a comparative analysis of successive relapses over 30 months”.

Menachem Krakowski, MD, PhD presented a poster on “Violence in patients with schizophrenia: predisposing factors and symptoms”.

Jean-Pierre Lindenmayer, MD presented in a workshop on “Social Cognition – From New Targets to New Treatments and Measurements”, which was chaired by Anzalee Khan, PhD. Dr. Lindenmayer also contributed two posters – “Pretreatment predictors of targeted outcomes in Cognitive Remediation Therapy” and “Comparing the efficacy of two types of computerized cognitive remediation therapy in schizophrenia: COGPACK vs. Brain Fitness”.

Pejman Sehatpour, PhD spoke at a workshop session on “Brain Stimulation for Schizophrenia”. He presented findings using Transcranial Direct Current Stimulation (tDCS) in schizophrenia – how tDCS can modulate cortical networks, and its potential as an investigational and therapeutic tool.
NKI was also represented at the 12th International Conference on Alzheimer’s and Parkinson’s Diseases, held in Nice, France from March 18 – 22.

Efrat Levy, PhD gave an oral presentation in a symposium on “Seeding, spreading, and prion-like mechanisms”. Her talk was titled “Neuroprotective regulation of exosome secretion by cystatin C”.

In a symposium on Metabolism, Jose Morales-Corraliza, PhD presented on “Decreased hippocampal neprilysin in a type 1 diabetes primate model leads to an increase in abeta levels”.

Rocio Perez-Gonzalez, PhD presented a poster on “Amyloid-beta-associated brain-derived exosomes promote amyloid seeding in a mouse model of amyloidosis”.

Dr. Siegel also presented at two seminars sponsored by Scottish Universities Insight Institute, at the University of Strathclyde (Glasgow) on April 9th and at Heriot-Watt University (Edinburgh) on April 10th. The program was titled “Exploring access to mental health care services for linguistically and culturally diverse patients”. In a session on “Global issues and challenges,” Dr. Siegel spoke about “Cultural competency in behavioral healthcare: NYS/USA perspective,” and in a session on “Research application: examples of good practice,” she presented on “Cultural activation: its value and how to accomplish it”. Countries represented in addition to the US were the UK, Sweden, South Africa, Australia, and China.

Contributed by Jennifer Hernandez, MPA

Carole Siegel, Lenora Reid-Rose, and Sandra Mitchell (peer specialist), with Onaje Muid (Clinical Associate Director, Reality House)
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 5,000 items dating back to 1995, and can be searched from the NKI web site.


Tanner AS, Eryilmaz H, Nitenson AZ, Ho NF, Manoach DS, Goff DC et al. Effects of supplemental folic acid and vitamin b12 on brain activation during working memory and related functional connectivity in schizophrenia. Biological Psychiatry 77[9 Suppl. 1], 2025-2035. 2015. [Abstract]

Sullivan RM. Maternal control of the infant brain and transitions between attachment and fear. Biological Psychiatry 77[9 Suppl. 1], 293S. 2015. [Abstract]

Yousefzadeh-Fard Y, Pantazatos SP, Miller JM, Oquendo MA, Cooper TB, Cisneros S et al. Omega-3 fatty acid treatment effect on regional brain responses to a stroop task in major depression. Biological Psychiatry 77[9 Suppl. 1], 112S. 2015. [Abstract]


Bedwell JS, Butler PD, Chan CC, Trachik BJ. Transdiagnostic psychiatric symptoms related to visual evoked potential abnormalities. Biological Psychiatry 77[9 Suppl. 1], 379S. 2015. [Abstract]

Iyengar SS, La Francois JJ, Scharfman HE. Use of ethosuximide to improve outcome in the kainic acid model of temporal lobe epilepsy. Epilepsy Currents 15[S1], 400. 2015. [Abstract]

La Francois J, Bermudez-Hernandez K, Scharfman HE. Spike-wave discharges before and after the induction of epilepsy in rats. Epilepsy Currents 15[S1], 405. 2015. [Abstract]


Krakowski MI, Czobor P. Violence in patients with schizophrenia: predisposing factors and symptoms. Schizophrenia Bulletin 41[Suppl. 1], S111. 2015. [Abstract]

Butler PD, Silverstein SM. The RDoC domain of perception: how it informs heterogeneity and fundamental symptoms of schizophrenia and other disorders. Schizophrenia Bulletin 41[Suppl. 1], S70. 2015. [Abstract]


Bedwell JS, Butler PD, Chan CC, Trachik BJ. Transdiagnostic psychiatric symptoms related to visual evoked potential abnormalities. Schizophrenia Bulletin 41[Suppl. 1], S12. 2015. [Abstract]