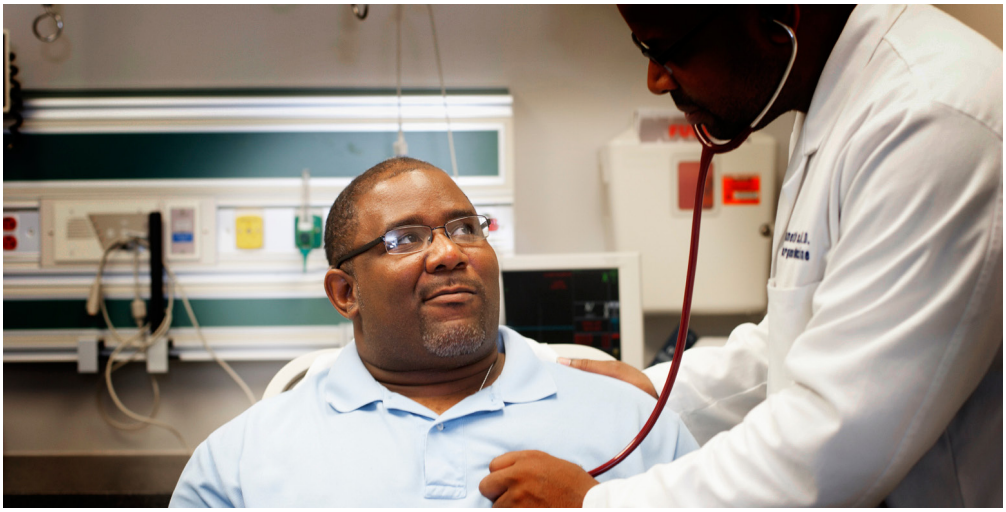
FSM Researcher

Feinberg School of Medicine Research Office

January/February 2012



Pilot projects for the Center for Advancing Equity in Clinical Preventive Services include colorectal cancer screenings, heart medication compliance, and vaccinations.

New Research Center Addresses Equity Issues, Preventive Medicine

Northwestern University Feinberg School of Medicine has received a three-year, $4.3 million dollar federal grant to establish the Center for Advancing Equity in Clinical Preventive Services. The center, one of three National Centers of Excellence established by the United States Department of Health and Human Services' Agency for Healthcare Research and Quality, focuses on creating innovative solutions to help practices reduce disparities in the use of clinical preventive services.

The Center was funded to conduct three initial projects, and the group plans to expand this portfolio further with pilot projects. The first project aims to increase rates of colorectal cancer screening, the second looks to increase the use of medications to decrease heart disease in high risk patients, and the third strives to increase African American seniors' acceptance of the pneumococcal vaccination.

These projects will act as prototypes to develop and test solutions in private practices and community health centers in Chicago and throughout the United States.

"Our hope is by working with this wide variety of clinics we can come up with real-world solutions that can then be disseminated across the country to decrease disparities in use of preventive services," says **David Baker, MD, MPH**, principal investigator for the center, chief of the

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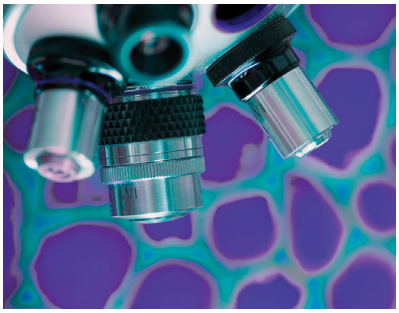

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n-mladic@northwestern.edu

NORTHWESTERN UNIVERSITY FEINBERG SCHOOL OF MEDICINE

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Division of General Internal Medicine and Geriatrics, and Michael A. Gertz Professor of Medicine.

The grant is the culmination of 10 years of research in the Division of General Internal Medicine under Dr. Baker's leadership. The division has concentrated on research areas in health literacy, quality improvement strategies, use of health information technology, and reducing disparities. The new center brings this experience and expertise together to develop multifaceted interventions to address patient, provider, and system-level barriers to improving quality of care and outcomes.

"We've created multimedia programs to develop tools to explain to people why they need to be screened for colorectal cancer, and at the same time, we've worked on methods to use electronic health record systems for accurately identifying those patients who need to be screened," Baker says.

One of the first projects in the Center, led by Dr. Baker, brings these lines of research together to conduct an electronic health record-supported outreach program to promote colorectal cancer screening among predominantly Spanish-speaking, Latino patients cared for by Erie Family Health Center in Chicago. The study will use low-cost and sustainable interventions such as text messages and automated calls to motivate people to be screened.

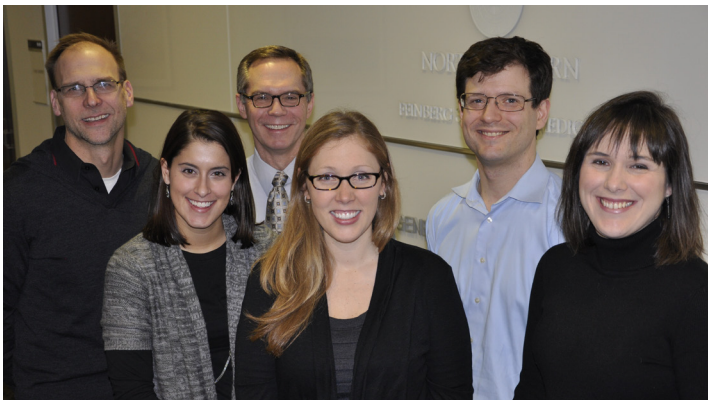
In another project Stephen Persell, MD, MPH, assistant professor in the Division of General Internal Medicine and Geriatrics and a member of the Institute for Healthcare Studies, promotes the use of cholesterol- lowering medications to prevent cardiovascular disease for high risk patients.

In this study, Persell uses data from electronic health records from a network of community health centers in Chicago and northern Arizona to calculate heart disease risk scores and identify high-risk patients. He then reaches out to the patient to encourage them to initiate a discussion about preventive medications with their physician. His group will measure how many patients adopt the use of preventive medicine and the results of the treatment.

To be successful, this project needs to overcome multiple barriers, including patients' perceptions that they are not at risk for heart disease if they feel fine and the fact that many of these patients are not getting routine, preventive care.

"One of our biggest quality of care problems is that we are often not even seeing high-risk patients," says Baker.

"We will look at how we can devise a strategy to overcome the barriers," Persell says. "The field of promoting equity and reducing disparity has moved very far, from just saying there are big disparities that exist to trying to determine what is actually causing them and finding interventions that address these causes."



Members of the Center, from L: Michael Wolf, Tiffany Brown, David Baker, Deidre Weber, Stephen Persell, and Kenzie Cameron

Baker plans for the center to become a national resource in addressing equity, disparities, and prevention. One of the goals of the center is to create a pipeline for generating and testing initial ideas, developing solutions that work in a few clinics and practices, and then testing the solutions out on a larger scale.

Economic analyses will be part of all projects.

"To disseminate successful interventions, practices and clinics first need to know if it works. But they also need to know how much it is going to cost and if it's sustainable," Baker says.

"When you address the access problems, the patient information problems, and the system solutions simultaneously and have multifaceted interventions, you'll get synergy between them and you'll see radical improvements in quality of care," he notes.

Another benefit of the Center is that it brings different people and departments at Feinberg together. The steering committee of the center includes faculty from the Departments of Family Medicine, Pediatrics, Preventive Medicine, and the Division of General Internal Medicine.

"The idea is that we can learn from each other and help each other develop our research agendas," Baker says. "This is really a great opportunity for people to come together, and we have a strong infrastructure for providing support and for incubating these projects. I really hope this will take our research in the area of prevention to a whole different level."

For more information on the center, call 312-503-6400 or contact David Baker at dbaker1@nmff.org; or Stephen Persell at spersell@nmff.org.

Driskill Foundation Gives IGP $10 Million Gift

Northwestern University Feinberg School of Medicine recently received a $10 million gift commitment from the Walter S. and Lucienne Driskill Foundation to endow and name the Walter S. and Lucienne Driskill Graduate Training Program in Life Sciences, formerly known as the Integrated Graduate Program in the Life Sciences (IGP).

The gift will support graduate student training in the life sciences at Feinberg, including the recruitment of candidates for the medical scientist training program, which leads to a dual MD-PhD degree for those pursuing training in basic or clinical research.

IGP Students, 2011 incoming class. All IGP students will be referred to as "Driskill Scholars" moving forward.

"If you look across the country, you'll find a number of graduate schools, departments, and fellowships that are named and endowed, but you'd be hard pressed to find a graduate program such as ours named or endowed," said William Karpus, PhD, Driskill Graduate Program director, Fleming Professor of Pathology, and professor of microbiology-immunology.

"That's a testament to the leadership here — in the Dean's Office, the Research Office, and Development — to invest in a PhD training program at that level, to seek donors, and to endow the program. This gift will afford our graduate student population more opportunity, while making the Northwestern program more competitive in the recruitment process. It will elevate the pace and quality of science taking place here."

Current students, who will soon be referred to as "Driskill Scholars," will find numerous enhanced opportunities for study as a result of the gift. These opportunities may include travel stipends to attend national meetings and exclusive opportunities to showcase work to a broader audience; an annual research symposium for Driskill Scholars will be inaugurated in October.

"Doctoral candidates are among the medical school's most promising investigators and, with our life sciences faculty, have made tremendous strides in understanding fundamental causes of disease," said Eric Neilson, MD, vice president for medical affairs and Lewis Landsberg Dean at Feinberg. "This generous gift will help ensure our graduate students have one of the most enriching and productive training experiences in the country."

Driskill Scholars will continue to train with graduate program faculty in a wide range of areas across the medical school, including cancer biology, cell biology, chemical biology, drug discovery, developmental biology, evolutionary biology, genetics, genomics, medicine biology, immunology, microbial pathogenesis, neurobiology, pharmacology, structural biology, biochemistry, biomedical informatics, and translational sciences. "The nuts and bolts of the program won't change," said Karpus. "What does change is the ability to support and reward highly productive students, and the ability to be more competitive in the recruitment of driven, ambitious, and intellectually curious graduate students."

The program currently receives more than 400 applications each year for between 25 to 30 spots. There are about 220 students in the IGP program for the 2011-2012 academic year.

Karpus notes that recruiting high-quality graduate students is especially important. "Students fuel basic and translational research across the enterprise, which enhances the development of new therapies and treatments here at Feinberg. Attracting more and higher quality graduate students, will enhance the process of scientific discovery."

Student News

Jennifer Krcmery, a PhD student in the laboratory of **Hans Georg-Simon, PhD**, has been selected to receive the first MRIC Outstanding Graduate Student Award in recognition of her heart development research, teaching, and mentoring activities, and professional contributions to Children's Memorial Research Center.

This competitive award consists of $5,000 to be used by the recipient for research-related supplies.

Critical Power Supply Plan Phase II Completed

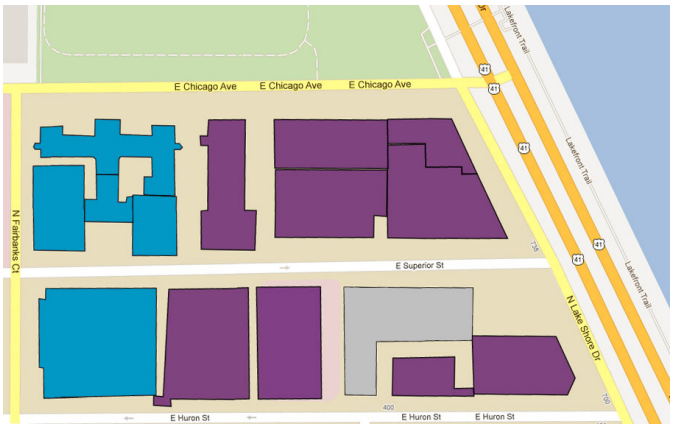
The Feinberg Research Office and Northwestern University Facilities Management are pleased to announce that Phase II of the Critical Power Supply (CREPS) plan is complete. CREPS, a multi-million dollar initiative to upgrade and modernize the power supply in the Ward, Morton, Searle, and Tarry buildings, was executed in response to historic power failures at the medical school in 2009.

The goal of Phase II, started in late 2010, was to permanently link the generators in the Lurie building to the Ward, Searle, Morton, and Tarry buildings providing an extra layer of security in the event of a power loss to one or all of ComEd feeds.

"By having both multiple independent power feeds from ComEd and a hard-wired connection to emergency generators, we have developed an extremely robust backup system that will ensure that critical equipment in the Ward, Morton, Searle, Tarry complex will have power in all but the most catastrophic circumstances," says Eric Boberg, PhD, executive director for research.

Phase II built on key milestones completed in Phase I, which provided the four buildings with multiple, different power feeds from ComEd. Now that the permanent connections have been established to the emergency generators in Lurie, Feinberg will no longer rely on a transient backup generator in the event of a catastrophic power loss. The entire process, which began October 2009, spanned 26 months and totaled $2.5 million.

"With the completion of Phase II, investigators in the Ward, Morton, Tarry, and Searle complex now have a permanent backup power supply to support the vital research taking place on the Chicago campus," says Rex Chisholm, PhD, vice dean of scientific affairs and graduate education. "CREPS is an important step in modernizing our academic medical center. But as the pace of scientific discovery accelerates and the equipment needed to conduct research on campus continues to evolve, we in the Dean's administration will remain vigilant to ensure we can protect the decades of research housed in our buildings."



Ward, Morton, Searle, and Tarry (blue) are now permanently connected to the Lurie (blue) generator, which will provide critical power in the event of an emergency.

The entire upgraded system was tested in early December 2011 to confirm that the generator could support all Feinberg's critical research equipment in the affected buildings. The test was successful, and engineers confirmed that the total load at Feinberg is less than the generator capacity.

Faculty Profile: Marcus Peter, PhD

Professor of Medicine – Hematology/Oncology

Marcus Peter, PhD

Marcus Peter, PhD, professor in medicine-hematology/oncology at Northwestern University Feinberg School of Medicine, balances destruction in the lab with creation outside of it. Studying the process of apoptosis, a form of programmed cell death, Peter hopes to use his research to better understand and treat cancer. When he needs a break from the breakdown of cells, Peter occasionally trades in his white coat for white keys.

"My hobbies include making and writing music," Peter said. "I started to play the piano when I was five years old. I view playing the piano as therapy to better cope with the demands of my work."

A dual German-U.S. citizen, Peter has lived in the Midwest with his family since 1999, when he began working at the University of Chicago. Before that, he completed his undergraduate studies in Frankfurt in 1982; he moved to Bayreuth, Germany, to complete his master's and doctorate program in 1988. He joined Feinberg two years ago.

Q&A

What are your research interests?

My lab has two major interests. Our main focus is on the Fas receptor and how it induces apoptosis in normal tissues and in diseases. In addition, we recently found that while Fas is required to induce apoptosis in immune cells, it acts as a survival factor for cancer cells. We are in the process of testing whether blocking Fas signaling can be used to treat cancer.

We are also interested in the role that microRNAs play in cancer progression. We previously identified classes of microRNAs that are deregulated during tumor progression and are using microRNAs to treat cancer. Our main focus is currently on ovarian cancer.

What is the ultimate goal of your research?

A better understanding of how biology works. We are using both experimental and informatics tools to study complex systems. We hope to eventually use this knowledge to positively impact the treatment of cancer. I want to make discoveries and understand how things work. If I cure a disease in the process, that will be an added benefit – and a great one, no doubt about it.

What types of collaborations are you engaged in across campus and beyond?

I started a very productive collaboration on ovarian cancer with Ernst Lengyel, MD, PhD, when I was still at the University of Chicago. We are in the process of expanding this collaboration and including other investigators like Kay Macleod, PhD, from the University of Chicago, and Navdeep Chandel, PhD, and Chad Mirkin, PhD, at Northwestern.

When did you begin your research regarding apoptosis?

When I was exposed to apoptosis the first time I really had not heard of it, which is no surprise because at the time virtually no one had. That was in '92. There was about one publication on apoptosis per year, and then after I was done with my time at Heidelberg, it was 1,000 publications a month.

At the time, biology was viewed basically in two different ways, and that was cell growth and senescence. The '80s was the decade of the cell cycle. We learned so much about how cells divide, how they proliferate. Cancer was viewed as a disease of uncontrolled growth and all conventional cancer therapy that we use to this day was discovered by trying to interfere with that uncontrolled growth. Nobody ever considered that there would be a mechanism of cell death that's physiologically important.

My seminal finding, which was made in '95-96, was the discovery of a key gene that at the time was viewed to have only one function, and that was to induce cell death. This caused a dramatic shift. Having a loaded gun inside a cell was not even considered because it was viewed as too complicated to control and way too dangerous. If all our cells are loaded with killer molecules, how could we possibly survive? What was underestimated is that this is exactly what you need in order to not get cancer all the time. You want to kill off cells rather than running the risk of having them transform into a cancer.

So that was the big shift at the time in the '90s, when everyone became aware of cell death. The gene we discovered is called caspase-8. I and my group at Heidelberg helped to identify and clone it. It turned out to be a key component in this process. I think it was the third most-cited paper worldwide the following year, so it was huge.

Continued on pg. 6

Peter, continued from pg. 5

What do you think are some of the fundamental ingredients to success in science?

What I teach my students and postdocs, and what you need to learn in order to be successful, is multitasking. You need to be able to follow three or four projects in parallel, and every one with the same concentration, dedication, and a lot of work. And then if only one of them comes out the way you predicted it, well, then you are lucky. But you would have never found it without trying it.

What other areas of science interest you?

I am very much interested in science philosophy. People have been thinking about this now for 50 years and it hasn't really changed. You read a book from these people in the '60s and then you realize at the end that it's the same, it's very simple. It's not so much about science, it's about people. It's how we think, how we work, how we act, how we plan, and ambition and all of the driving forces. All of that is something that will never change and that's what's shaping the course of science to a large extent.

Core Fact

Are you aware that Mass Spec services are available in the IBNAM Peptide Synthesis Core, located on the 11th floor of the Robert H. Lurie Medical Research Center?

The core can provide accurate molecular weight determination of small molecules/peptides/oligonucleotides, structural analysis of small molecules and peptide sequencing by tandem MS, or LC/MS analysis for purity determination.

For more information please contact Xuan Yue (x-yue@northwestern.edu).

Welcome New Faculty

Rosemary Braun, PhD, MPH, joins as assistant professor in preventive medicine.

Braun earned a Bachelor of Science in physics from SUNY Stony Brook in 1995, followed by a doctorate degree in physics in 2004 from the University of Illinois–Urbana-Champaign, where she worked on computational models biomolecular interactions. Following, Braun earned a master's degree in biostatistics from the Johns Hopkins Bloomberg School of Public Health in 2005 and obtained a postdoctoral Cancer Prevention Fellowship at the National Cancer Institute, where she worked with the Laboratory of Human Carcinogensis, the Laboratory of Population Genetics, and the NCI Center for Biomedical Informatics and Information Technology. Braun joined Northwestern University as an assistant professor in the Department of Preventive Medicine in 2011 and is affiliated with the Robert H. Lurie Comprehensive Cancer Center.

She is interested in the development of methods for integrative, systems-level analysis of high-dimensional genomic and proteomic data. These methods incorporate bioinformatic information with experimental data to characterize the networks of interactions that lead to the emergence of complex phenotypes, particularly cancers.

Ajit Singh Paintal, MD, joins as assistant professor of pathology.

He most recently completed a fellowship in cytopathology at the University of Chicago, and prior, a fellowhip in oncologic pathology at Memorial Sloan Kettering Cancer Center in New York City. He received his Doctor of Medicine degree from University of Illinois at Chicago College of Medicine, and completed his residency at the University of Chicago Hospital and Medical Center, where he served as chief resident in his final year.

Paintal's research interests include cytologic-histologic correlation and aspiration cytology.

Staff Q&A: Lynn Steiner

Project Manager, Mental Health Services & Policy Program

Lynn Steiner

Where are you originally from?

I'm from the North side of Chicago – Rogers Park. My whole family still lives here; we're all within a few miles of each other.

What is your educational background?

I graduated from Brandeis University in Waltham, Mass., with a Bachelor of Arts in psychology, and then a few years later I received my master's in social work (MSW) from Jane Addams College of Social Work at the University of Illinois – Chicago. Fun fact: I worked with President Schapiro as chair of the Northwestern University Staff Advisory Council (NUSAC), and I met Brandeis' president (Fred Lawrence) at local Brandeis events; it turns out that President Lawrence is a friend of President Schapiro, so when I happen to see one I give him an update on the other!

Tell us about your professional background.

My first job out of college was working in a group home for adults with mental illness. After a few years I returned to graduate school for my MSW, and went back into the field as a quality assurance supervisor at a social service agency that served adults with mental illness. After a year of this I realized that it was not work that I enjoyed, so I looked around, I found a description for a research position at Northwestern, and applied for it. This was for a project coordinator in the Institute for Policy Research on the Evanston campus for a research study on community policing.

I learned a great deal in that position, and worked there for about five years until grant funding ended. In 2004, I applied for my current position, also a project coordinator, in the Mental Health Services and Policy Program in the Department of Psychiatry on the Chicago campus. We mainly work with the Department of Children and Family Services to evaluate how their kids are doing – psychiatrically and functionally – and how stable their living arrangements are, but we also have faculty who focus on the areas of child trauma, juvenile justice and child mental health.

What is your role at the medical school?

That's a good question! Doing social science research in a program in the Department of Psychiatry means that we're very different from most other programs in the medical school.

When you work mainly with state departments and social service providers, and child assessments, it's sometimes difficult to see how your research fits in with the focus on medical research, doctors, lab rats, and blood samples that characterizes the medical school. As a senior staff member in my program, I see myself in many roles, some of them perhaps connected to Feinberg or the larger University community.

First I am a project manager, so I work in a manager role to make sure that we are meeting deadlines and that are products are useful for our clients. I also coordinate our monthly program meeting, and in that role I am responsible for bringing topics of interest (and guest speakers) to our meeting to inform our staff, faculty and students. As a long-time employee, I sometimes take on the role of "expert," knowing what to do when and who to go to for what. Finally, as a current member (and former chair) of NUSAC, I function as a "big picture" person, working to forge connections among people in various departments and schools, trying to help people access resources that make working at Northwestern a great experience and encouraging people to look outside their narrow world within a program to become involved within the larger medical school or the University.

What is your favorite part of the job?

For me, the best part of my job is problem solving. One of my responsibilities involves staffing a help desk, and I receive great satisfaction from being able to address the problems that come in through that email account. It's a good day when I can fix a problem and make our client's job a little easier. Outside of this, I really enjoy working with my staff and colleagues to brainstorm about how to make a process more efficient, or how to resolve inconsistencies and puzzling information in the assessments that we receive from human service providers, or how to better generate or convey information that agencies can use to improve service provision to the kids.

- Read the entire Q&A **online**.
- Connect with Steiner on **LinkedIn**.

Sponsored Research

David Cella, PhD
Chair, Department of Medical Social Sciences and Professor in Medical Social Sciences, Institute for Healthcare Studies, Preventive Medicine-Health and Biomedical Informatics, and Psychiatry and Behavioral Sciences

Project title: "PROMIS Statistical Center"

Sponsor: National Institute of Arthritis and Musculoskeletal and Skin Diseases

The Patient-Reported Outcomes Measurement Information System (**PROMIS**) Statistical Center (PSC) advises and educates members of the **network** on a range of qualitative research methods. The PCS develops and implements processes to ensure data quality, provides leadership in the development of PROMIS-approved translations of new and extant domains; assists in the development and implementation of protocols, provides consultation on research design, sample size, sampling plans and power estimates for item bank testing; and provides psychometric and statistical support for the network.

The PSC serves as the repository for all data collected across the PROMIS network, enabling central quality assurance of data and analysis integrity. Investigators provide leadership and expertise in mixed quantitative and qualitative methods approaches to develop, test and refine PROMIS items banks and assessment tools. The PSC also participates with the PROMIS Network Steering Committee (PNSC) to prioritize the science and other decisions to be made regarding PROMIS measurement science and tools to support its widespread use.

PSC investigators are international leaders in the development and evaluation of PRO instruments and item banks; the design, implementation and coordination of clinical and survey research studies; and the development and application of psychometric, statistical and qualitative methods for analysis of self-report data, and cross-cultural PRO development and evaluation, including multi-lingual translations.

Our own work in developing PROs, and developing and using various forms of technology for their administration, affords us valuable experience in collaborating with informatics experts, such as the PTC, to advance the use of these tools in research and practice. (Investigators have four years of collaborative experience on PROMIS I and even more on related research.)

The PSC offers the combination of the scientific and collaborative experience of our psycho-metric, statistical and qualitative investigators; capabilities in data and project coordination and management; and a track record of network leadership and interdisciplinary and inter-institutional collaboration. Through three functional cores and an admin unit, we solicit, coordinate and activate input from the PNSC, PTC, PNC and the PRS investigators to ensure the success of the PROMIS initiative.

Multi-Investigator Seed Grants

Seed funding is still available through Feinberg's Multi-Investigator Seed Grant Program. The Program provides up to $15,000 (up to $500 to $1,000 for a retreat, and up to $14,000 for application preparation) to initiate new Multi-Investigator Program Project or Center Grant applications involving Feinberg faculty.

The funds are intended to support new applications, preferably to the National Institutes of Health. There is an expectation of casting a wide net, such that research projects ought to involve at least two faculty members from outside the home department of the principal investigator, which may include Evanston.

This funding can be used to cover reasonable expenses for a retreat to bring together key faculty, staff and students, then to provide reagents for key preliminary experiments, costs for preparing the application, and other reasonable expenses. Our centralized research administration services group can assist with staff support for the retreat and proposal preparation, if the principal investigator wishes.

To be considered for seed funding, visit the **Research Office web page**.

Save the Date!

The ACCR is hosting a ClinicalTrials.gov overview for Northwestern faculty and staff on Friday, February 17.

Rebecca Williams, Pharm D, MPH, assistant director, ClinicalTrials.gov, Lister Hill National Center for Biomedical Communications, National Library of Medicine, will present a free overview and answer questions.

Learn more about the event **here** (opens as a Word doc).

High Impact Factor Research
November & December 2011

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Research in the News

***Chicago Tribune* January 18**
Trying to Get Ahead of Parkinson's
Tanya Sinumi was quoted.

***Self Magazine* January 17**
How Your Metabolism Changes as You Age
Mary Ellen Pavone was quoted.

WTTW-TV January 17
"Chicago Tonight"
Tsutomu Kume was interviewed.

WMAQ-TV (NBC Chicago) January 13
Northwestern Testing Potentially Baby-Saving Invention
William Grobman's research was featured.

***New York Times* January 12**
With Robots, a New Way to Understand Strokes
Jules DeWald research was featured.

***Chicago Tribune* January 11**
What is Broken Heart Syndrome?
Clyde Yancy was quoted.

***The Wall Street Journal* January 10**
Starting Early for Heart Health
Norrina Allen was quoted.

***Chicago Tribune* January 10**
Stem Cell Trial's Cancellation Disappoints Paraplegic Patient and a Northwestern Researcher
Richard Fessler's research was featured.

***MSN Health* January 6**
The Hidden Health Benefits of a Cellphone Ban
John Pandolfino was quoted.

***Washington Post* January 6**
Study: Routine Prostate Cancer Testing Does Not Save Lives
William Catalona was quoted.

WLS-TV (ABC Chicago) January 4
National Sleep Day
Phyllis Zee was interviewed.

More headlines

High Impact Research, continued from pg. 9

Helfand BT, Donovan JL, Hamdy FC, Badescu D, Codreanu O, Jinga M, Csiki IE, Constantinescu V, Badea P, Mates IN, Dinu DE, Constantin A, Mates D, Kristjansdottir S, Agnarsson BA, Jonsson E, Barkardottir RB, Einarsson GV, Sigurdsson F, Moller PH, Stefansson T, Valdimarsson T, Johannsson OT, Sigurdsson H, Jonsson T, Jonasson JG, Tryggvadottir L, Rice T, Hansen HM, Xiao Y, Lachance DH, O Neill BP, Kosel ML, Decker PA, Thorleifsson G, Johannsdottir H, Helgadottir HT, Sigurdsson A, Steinthorsdottir V, Lindblom A; Swedish Low-risk Colorectal Cancer Study Group, Sandler RS, Keku TO, Banasik K, Jørgensen T, Witte DR, Hansen T, Pedersen O, Jinga V, Neal DE, **Catalona WJ**, Wrensch M, Wiencke J, Jenkins RB, Nagore E, Vogel U, Kiemeney LA, Kumar R, Mayordomo JI, Olafsson JH, Kong A, Thorsteinsdottir U, Rafnar T, Stefansson K. A germline variant in the TP53 polyadenylation signal confers cancer susceptibility. *Nature Genetics*. 2011 2011 Nov;43(11):1098-1103.

Tormos KV, Chandel NS. Seeing the Light: Probing ROS In Vivo Using Redox GFP. *Cell Metabolism*. 2011 Dec 7;14(6):720-1.

Tran JC, Zamdborg L, **Ahlf DR**, Lee JE, **Catherman AD, Durbin KR, Tipton JD**, Vellaichamy A, **Kellie JF, Li M,** Wu C, **Sweet SM**, **Early BP**, Siuti N, LeDuc RD, **Compton PD**, **Thomas PM**, **Kelleher NL**. Mapping intact protein isoforms in discovery mode using top-down proteomics. *Nature*. 2011 Dec 8;480(7376):254-8.

Traverse JH, Henry TD, Ellis SG, Pepine CJ, Willerson JT, Zhao DX, Forder JR, Byrne BJ, Hatzopoulos AK, Penn MS, Perin EC, Baran KW, Chambers J, Lambert C, Raveendran G, Simon DI, **Vaughan DE**, Simpson LM, Gee AP, Taylor DA, Cogle CR, Thomas JD, Silva GV, Jorgenson BC, Olson RE, Bowman S, Francescon J, Geither C, Handberg E, Smith DX, Baraniuk S, Piller LB, Loghin C, Aguilar D, Richman S, Zierold C, Bettencourt J, Sayre SL, Vojvodic RW, Skarlatos SI, Gordon DJ, Ebert RF, Kwak M, Moyé LA, Simari RD; Cardiovascular Cell Therapy Research Network. Effect of intracoronary delivery of autologous bone marrow mononuclear cells 2 to 3 weeks following acute myocardial infarction on left ventricular function: the LateTIME randomized trial. *JAMA- Journal of the American Medical Association*. 2011 Nov 16;306(19):2110-9.

Help Feinberg Track Journals

The Feinberg Research Office regularly tracks research published by Feinberg investigators. The citations are used on web pages, in newsletters and social media, for internal reporting, and more. To more accurately track these journals, the Research Office asks that Feinberg investigators use the following institution name in the address field when publishing in peer-reviewed journals: **"Northwestern University Feinberg School of Medicine, Chicago, Illinois."**

Funding Opportunities

Research Awards for Basic and Clinical Research
More information

Sponsors: Autism Speaks
Submission Deadline: Mandatory LOI, March 15, 2012
Upper Amount: $450,000

Synopsis: Autism Speaks invites grant applications to conduct innovative basic or clinical biomedical research into the causes, diagnosis, treatment, prevention, and cure of Autism Spectrum Disorders (ASD).

Proposals on the following topics are particularly encouraged: Gene discovery and genetic risk assessment; gene-environment interactions, environmental risk factors; animal models and other model systems; in vivo methods for defining pathophysiology; synaptic function and neuroplasticity; signaling pathways; biomarkers or clinical phenotypes that potentially index autism subtypes/response to treatment; translational research; early detection/screening (including studies in low-income regions); underrepresented and underserved populations; diagnosis of ASD in adults and the developmental course of ASD with aging; development of efficient and valid diagnostic instruments; pilot prevalence studies; and services and dissemination science research.

The relevance of the proposed research to ASD must be explicitly stated.

Development of Novel and Emerging Technologies for the Accurate Detection and Diagnosis of Polymicrobial Infections in Biomedical Laboratory Animal Models (SBIR [R43/R44])
More information

Sponsor: United States Department of Health and Human Services (HHS), National Institutes of Health (NIH)
Submission Deadline: April 5, 2012
Upper Amount: $1.15 million

Synopsis: There is a need to develop systems that are sensitive, selective, automated, cost effective, and capable of detection and identification of polymicrobial infections that may represent a threat to the survival of valuable biomedical animal resources. This announcement seeks projects for rapid and sensitive detection of infectious agents as a key requirement for microbial identification in laboratory animal models. The diagnosis of polymicrobial infections has become increasingly important in enabling biological resource centers to meet the needs for establishing pathogen-free biological resources for current and future biomedical research needs.

View more funding opportunities

Featured Events

2/14 **Lectures in the Life Sciences**
"Transcriptional regulation for cell-specific gene expression," presented by Bing Ren, PhD, Ludwig Institute for Cancer Research, UCSD

Date: Tuesday, February 14, 4 to 5 p.m.
Location: Lurie Medical Research Center – Hughes
303 E. Superior St. (Chicago campus)
Contact: jindan-yu@northwestern.edu
More information

2/16 **Arts and Medical Sciences Lecture Series**
"Painting pathologies and symptomatic sculptures," presented by Annie Morse, Department of Museum Education at The Art Institute of Chicago

Date: Thursday, February 16, 4 to 5 p.m.
Location: Prentice Women's Hospital – Canning Auditorium, 3rd Floor
250 E. Superior (Chicago campus)
Contact: a-slattery@northwestern.edu
More information

2/23 **Institute for Health Care Studies Seminars**
"The Bridge Model: An Evidence-based social work model of transitional care for older adults with chronic conditions," presented by Kristen Pavle, MSW, Center for Long-Term Care Reform, Health and Medicine Policy Research Group

Date: Thursday, February 23, Noon to 1 p.m.
Location: Weiboldt Hall, Room 421
339 E. Chicago Ave. (Chicago campus)
Contact: t-crawford@northwestern.edu
More information

2/24 **Physiology Seminars**
Meredith Le Masurier, PhD, scienfific editor, Neuron

Date: Friday, February 24, Noon to 1 p.m.
Location: Montgomery Ward Building 5-230
303 E. Chicago Ave. (Chicago campus)
Contact: kirsten-byers@northwestern.edu
More information

3/1 **Children's Memorial Distinguished Lecture Series**
"At the crossroads of adhesion and signaling in tissue morphogenesis," presented by Kathleen Green, PhD, Feinberg

Date: Thursday, March 1, Noon to 1 p.m.
Location: Children's Memorial Research Center, Wolfson Auditorium
2430 N. Halsted, Chicago
Contact: 773-755-6355
More information

More events

Event organizers are encouraged to submit calendar items on Plan-It Purple for consideration. Please contact the Research Office with further questions.