Wisner Will Lead Asher Center with Focus on Effects of Childbearing

The office of Katherine L. Wisner, MD, MS, director of the Asher Center for Research and Treatment of Depressive Disorders, is more defined by the mission within than the name on its door.

“When somebody has a mood disorder, particularly one that is more difficult to treat, when nobody knows what to do with that patient, I want the first thing to come to mind to be the Asher Center,” said Wisner, Norman and Helen Asher Professor of Psychiatry and Obstetrics and Gynecology. “In five years, I want our center be seen as the premier place for the treatment of mood disorders in the Midwest, if not the nation.”

A leading expert in women’s mental health, Wisner arrived at Northwestern University Feinberg School of Medicine in July with a clear undertaking: create a prominent center of cutting-edge research, and translate those findings in a manner that will alleviate the suffering of individuals.

It’s that mission – coupled with access to Prentice Women’s Hospital and the leadership of John Csernansky, MD, chair of psychiatry and behavioral sciences – that brought Wisner to Chicago after a decade in Pittsburgh. Motivated by the added responsibility of coordinating a group of prominent basic and clinical scientists, Wisner’s vision for the center was affirmed during a late-August visit with the Asher Family.

“Our treatments for depression are kind of stuck. Over the last couple of decades there have been various types of antidepressants, but the bottom line is that none of them...
are highly effective,” Wisner said. “What the Ashers really want to do is move this field forward by promotion of thinking outside the box.”

**Getting Established**

The mission starts with developing an administrative infrastructure that will enable the center to support translational research.

Future projects will consider the perspective of the life span with a primary focus on childbearing. They will include work on postpartum depression, treatment for pregnant and breastfeeding women, depression during the menopausal transition, and anxiety disorders among adolescents. Clinical trials involving new drugs with novel actions and the use of environmental therapies – such as light therapy and other chronobiological manipulations – will also play a large role in the center’s charge.

The first step in this commitment will be linking the center with scientists so that their findings can be tested in the Asher clinic. Integrated deeply with research, the clinic will be a registry program where patients will agree to have their de-identified clinical information and biological samples used for hypothesis testing by basic scientists.

With concurrent consideration of health policy, a second major component will be bringing new treatments to the people of Chicago.

“What we want to do is really grease the wheel in terms of working with basic scientists, clinical scientists, and health policy makers to bring new treatments rapidly from the bench to the bedside,” Wisner said. “We will have an accessible base of patients and have their biological samples to study hypotheses, test those novel treatments, and then to more broadly disseminate them.”

According to the National Institute of Mental Health (NIMH), one in five women and one in eight men will suffer major depression at some point in their lifetime; a large majority of those individuals are never identified or treated. The depth of the problem is a major reason the Asher Center will push to make treatment options more accessible and acceptable to the American public.

**Wisner’s Research**

Wisner’s own research continues to expand, though her specialty remains reproductive psychiatry. During the past 30 years, she became the first American psychiatrist to develop a technique to monitor possible infant toxicity caused by psychotropic medication in breast milk, and her leadership of a subcommittee of the American Psychiatric Committee on Research on Psychiatric Treatments led to publication of the first comprehensive model of risk-benefit evaluation for treatment of depression during pregnancy and breastfeeding. She also performed the first comparative drug study for postpartum depression, and her work in public health resulted in the first comprehensive NIMH-funded demonstration screening project for postpartum depression.

The recipient of the American Medical Women’s Association 2011 Women in Science Award, Wisner was the director of Women’s Behavioral HealthCARE and a professor of psychiatry and of obstetrics, gynecology, and reproductive sciences at the University of Pittsburgh School of Medicine since 2002. The principal investigator of several foundation and NIMH-funded research projects, her work studying the impact of exposure to major depression and treatment options during pregnancy has resulted in more than 165 publications.

“In my programs, what I’ve typically done as a leader is to keep the mission very much front and center,” said Wisner, who plans to hang a framed version of the Asher Center’s mission statement inside her office. “I’m always trying to view myself as providing an experienced scaffold to support all of the people that work alongside me.”

Her philosophy of service leadership will result in faculty having every opportunity to develop components of the Asher Center and using the director to help them become as productive as possible.

“That always has to be the primary goal,” Wisner said. “My question is always: How can I act in a way that allows the function of the team to be greater than the individual pieces? That is what allows creative research and clinical care to flourish.”
New Director Named for Driskill Graduate Program

Nicholas Cianciotto, PhD, professor of microbiology-immunology, has been named director of the Walter S. and Lucienne Driskill Graduate Training Program in the Life Sciences (DGP).

A member of the Northwestern University Feinberg School of Medicine faculty since 1990 and of the DGP program since its inception that same year, Cianciotto is an accomplished investigator and educator, having earned the National Foundation for Infectious Disease Young Investigator Award in 1993 and Outstanding Teacher Award in 2008.

“Nick has a passion for mentoring and developing the careers of young scientists,” said Rex Chisholm, PhD, vice dean of scientific affairs and graduate education and Adam and Richard T. Lind Professor of Medical Genetics. “In addition to his commitment to graduate student training, he has taught medical school courses for more than 20 years, and many of his students and post-docs hold faculty and scientific research positions at institutions around the world.”

During the course of his career, Cianciotto has directly mentored 25 graduate students, served on the thesis committee for another 30, taught and directed microbiology graduate courses, directly trained 18 post-doctoral fellows, and served on the DGP Admissions and Program Committee.

Beginning in 2012, Cianciotto also took on the role of director of the National Institute of Allergy and Infectious Diseases (NIAID) training program in immunology and molecular pathogenesis.

“I am privileged to have had a successful career at Feinberg, and by taking on the role of DGP director, I feel that I will have the opportunity and privilege to serve our students in an even greater capacity,” he said.

Maintaining an active laboratory that researches an agent of Legionnaires Disease, Cianciotto’s work is funded by grants from the National Institutes of Health and the NIAID. He has served as author or co-author on more than 90 peer-reviewed articles and numerous books and book chapters. He is a member of the American Society for Microbiology and the American Academy of Microbiology, and is currently on the editorial board of Infection and Immunity and the International Journal of Medical Microbiology.

Cianciotto succeeds William Karpus, PhD, Marie A. Fleming Research Professor of Pathology and professor of microbiology-immunology, who undertakes a new position with the graduate school as associate dean for student affairs.

Global Health poster session. Students, residents, and faculty participate in Feinberg’s second annual Global Health Poster Session, held in September in the Lurie Building.

Research Administration Workshops

Feinberg’s Research Administration Services, the Northwestern University Office for Sponsored Research, and Accounting Services for Research & Sponsored Programs will again host a series of research administration workshops for Feinberg research administrators on important topics in research administration.

Workshops run Thursdays between October 4 and November 15. Topics include cost principles, proposals, salary and effort reporting, subcontracts, expense monitoring, and more.

Download the program flyer and contact e-boberg@northwestern.edu to attend one or more sessions.
For James Elliott, PT, PhD, assistant professor in physical therapy and human movement sciences, whiplash is less about the 200 milliseconds it takes for the neck to snap forward and back, and more about the unexplainable: the transition of two in 10 patients from acute to chronic pain.

“The prevailing thought around the world is that something in the neck has been injured, and that initial injury is stimulating a cascade of profound physiological events,” Elliott said. “We can’t excuse psychological variables because they do exist and some psychological factors, such as post-traumatic stress, are robust predictors of chronic pain, but we can’t forget about the biological factors either.”

Growing up in Chicago’s west suburbs, Elliott’s dreams of a long career in professional baseball came to an end after two seasons with the San Diego Padres organization. But just three minutes in front of renowned physiotherapy professor Gwen Jull, PhD, from the University of Queensland in Australia, enlivened entirely different pursuit.

**Q&A**

What are your research interests?

My research interest is primarily in whiplash-associated disorders, the kind you suffer in a motor vehicle collision. I became extremely interested in whiplash as a physical therapist in Colorado while working in a specialty practice with a few physicians dealing mostly with people who had had car accidents and transitioned to chronic pain. My research is focused on understanding the pathophysiological mechanisms underlying this transition. This exploration is based on my clinical and research experience and has expanded here at Northwestern University Feinberg School of Medicine through interdisciplinary efforts involving the fields of magnetic resonance physics, radiology, biomedical engineering, neurophysiology, speech language pathology, and physical therapy.

What is the ultimate goal of your research?

I use structural and advanced magnetic resonance imaging (MRI) applications to quantify the progressive development of altered spinal cord biochemistry and neck muscle degeneration as potential cellular and molecular causes of persistent pain. We know those fatty changes in the muscle occur about one month after the injury and in tandem with a complex set of symptoms, like post-traumatic stress disorders and altered processing of pain, in those who transit to chronic pain. We endeavor to use this information to develop a more informed set of treatments aimed at preventing or retarding any of these possibly irreversible changes.

How did you become interested in this area?

After attending the University of Denver, playing baseball, and scouting future talent for the Colorado Rockies organization for five years, I pursued a degree in physical therapy and began working as a PT in Denver.

I noticed that the majority of individuals suffering from whiplash very rarely, if ever, had any structural injury on their MRIs that would point to the problem. But in chronic pain, they all seemed to have muscles that just didn’t look very healthy. Clearly that was simply a qualitative clinical observation, and so I started knocking on the door of every radiologist I could find in Colorado. One in particular agreed that there seemed to be clear evidence of fatty changes in those muscles.

I was very much aware at that time that the major literature on whiplash was (and still is) produced by the Australians, at the University of Queensland in particular. A while later I learned that professor Jull was coming to give a talk in Denver, and I quickly signed up for the course and lined up afterward to have a word with her and show her the pictures of these MRIs. She said, “That is a fantastic PhD question, and I think you should pursue it.”

I went on a fruitless hunt to find someone to take me on as a PhD student. A few months later, after September 11, 2001, I was in Edinburgh, Scotland, and I bumped into Jull at a conference. She mentioned a remote PhD program at University of Queensland and asked me to write a proposal. I wrote it that night in my hotel, and three months later I was in the program working in the Whiplash and Diagnostic Research Unit and the Center for Magnetic Resonance with renowned magnetic resonance physicist Graham Galloway, PhD, University of Queensland.

From our clinical observations, we were able to develop a very simple MRI measure to quantify that fat in those muscles. We found that people who did have chronic whiplash pain-related disability had an awful lot of fat compared with healthy controls in the muscle tissue, so it appeared to be...
Following my PhD, I embarked on a three-year post-doc with Michele Sterling, PhD, University of Queensland, a world-renowned expert in whiplash-associated disorders. That experience was by far the most influential three years of my professional life.

What types of collaborations are you engaged with?

Jules Dewald, PT, PhD, chair of physical therapy and human movement sciences, has been instrumental in connecting me with people to quantify the temporal expression of altered spinal cord metabolism and identify an acute marker that may provide insight into the risk of transition to chronic pain.

One of my strongest collaborations is Mark Courtney, MD, associate professor in emergency medicine, with the help of Jim Adams, MD, professor and chair of emergency medicine. Mark has really helped get the ball rolling to recruit subjects soon after their motor vehicle collision. I usually see them within an hour of their accident, once they have been medically screened for fractures and they are stable. We have a large prospective study right now that is supported by the Northwestern University Clinical and Translational Sciences KL2 program, where we measure the acute, progressive changes in spinal cord metabolism and muscle degeneration to try to tease out who is at risk for transition to chronic pain.

One of my other key collaborators are Todd Parrish, PhD, and Timothy Carroll, PhD, who are in radiology and biomedical engineering. Both are magnetic resonance physicists who specialize in MRI applications to get to the cellular level of some of these events. I also work with Wellington Hsu, MD, assistant professor in orthopaedic surgery. I am a firm believer, as a physical therapist with a PhD, that interdisciplinary collaboration is the way to go. I’ve only been here two years, but I’ve never been anywhere where collaboration is stronger and more promoted.

Can you discuss the role of mentoring throughout your career?

From a research perspective, I have had excellent mentoring, and if I can be half as good as Gwen was for me and many others, I’d be a great adviser. I had the experience of co-supervising research students at University of Queensland, but not until recently as the primary mentor, and now I have two new PhD students at Feinberg. I want to see them thrive. I want them to go from the nine billion questions they want to ask initially and help them refine their approach to one or two key, and potentially translational, questions. My role will be as the big-picture person to help them maintain their focus and make a strong impact to the body of knowledge.

Welcome New Faculty

Peng Ji, MD, PhD, joins as assistant professor of pathology.

Ji recently completed his residency in clinical pathology at Feinberg, and also completed post-doctoral research fellowships at the Whitehead Institute for Biomedical Research in Cambridge, MA, and the Beijing Genomic Institute, Chinese Academy of Science. He completed his medical internship at the Beijing Hospital, China, and earned his Doctor of Medicine degree at Peking University Health Science Center, in Beijing, China. He earned his doctorate degree in developmental and molecular biology from Albert Einstein College of Medicine, New York. He serves as principle investigator on two active grants.

Ji’s research interest is to understand basic molecular mechanisms of the mDia formins and their functions in the migration of hematopoietic stem cells. Understanding these processes is highly relevant for bone marrow transplantation therapies to treat blood-related diseases.

Grant Barish, MD, joins as assistant professor in endocrinology.

Barish most recently served as clinical assistant professor of medicine at University of California-San Diego, staff physician at the La Jolla VA Medical Center, and staff scientist at The Salk Institute Gene Expression Laboratory. Prior, he completed a post doctoral research fellowship at The Salk Institute and an endocrinology and metabolism fellowship and categorical internal medicine residency at the University of California-San Francisco. He received his Doctor of Medicine degree from the University of Michigan in Ann Arbor. He holds one active NIH grant.

Barish plans to focus his research on the transcriptional basis of inflammation and metabolism, using mouse model systems and human samples for analysis.
Where is your hometown?
Grand Blanc, Michigan, a suburb of Flint.

What is your educational background?
I obtained my bachelor of science degree in microbiology from the University of Michigan, Ann Arbor. During my undergraduate career, I performed research in the laboratory of Janine Maddock, PhD. In those years I aimed to understand how the spatial organization of proteins was conferred in a prokaryotic cell. It was previously thought that the lack of organelles in the prokaryotic cell correlated to a lack of sub-cellular complexity. However, it has since been discovered that the prokaryotic cell possesses a high degree of sub-cellular organization in the sense of protein localization.

The goal of my project was to identify proteins that localized specifically to the middle (septum) or end (polar) of the cell by performing a large screen. Graduate students in the lab are currently pursuing the mechanism by which some of those candidates find their cellular addresses.

What research are you involved with today?
My graduate training is taking place in the laboratory of Mark Mandel, PhD, Feinberg. My fundamental research objective is to understand how specific symbiotic relationships between microbes and their animal hosts are established. It is known that animals form functional beneficial relationships with bacteria, and we have come to understand that these relationships are vital, yet to date little is known about how animals acquire beneficial bacteria from the environment. To study this phenomenon, I utilize a model system in which Euprymna scolopes (squid) is colonized specifically by its beneficial microbial partner, the luminescent bacterium Vibrio fischeri.

My thesis project is to identify novel genetic factors required for the establishment of the symbiotic relationship between V. fischeri and the squid. To accomplish this goal, I am conducting a high-throughput negative selection screen that combines high-density transposon mutagenesis with Illumina deep sequencing technology. To date I have identified a number of genes required for survival in oxidative and nitrosative stress conditions, envelope integrity, DNA mismatch repair, and protein stability. The squid environment is known to be replete with toxic compounds, and these mutants provide tools to understand how the bacterial symbionts signal and survive during symbiotic development. It is worth noting that pathogenic bacteria also utilize similar stress-responsive genes in order to cause disease, and these data suggests that many of the genes required for microbe-animal associations are conserved between beneficial and pathogenic bacteria.

What is the goal of your research?
Many people would be shocked to find that we as humans form life-long, beneficial relationships with more than 1,000 different bacterial species. This diverse collection of bacteria aid not only in the development of both our immune and digestive systems, but also to protect against the invasion of pathogenic bacteria. Although we ultimately get colonized by trillions of bacteria, we are born germ-free, and it is through interactions with our environment that we become host to the specific lineages of bacteria that make up our microbial consortia. My plan of research seeks to clarify how beneficial bacteria are reliably acquired from the environment by their animal hosts to the exclusion of pathogenic bacteria.

What attracted you to the Driskill Graduate Program?
When I was looking at schools, the determining factor for me was interaction with the faculty members. The faculty at Feinberg seemed very excited when I discussed my previous research and seemed enthusiastic about the research they presented to me. That kind of passion only breeds good science, and that was one of the keynotes that brought me to Feinberg.

What do you hope to do in the future?
After graduate school I aim to obtain an academic post-doctoral fellowship, as my goal is to ultimately become a professor.
Navdeep Chandel, PhD
Professor in Medicine-Pulmonary and Cell and Molecular Biology

Project title: Mitochondrial Metabolism and ROS Regulate Lung Cancer

Sponsor: National Cancer Institute

Lung cancer is the most common cause of cancer-related death in both men and women in the U.S. Eighty percent of lung cancers are non-small cell lung cancers (NSCLCs), and thirty percent of these are adenocarcinomas, which include a rising population of cancer cases that occur in nonsmokers.

Mutations in the Kras oncogene, which signals through a cascade of kinases to promote cellular proliferation, have been identified in 20 to 30 percent of NSCLCs. Therapeutic targeting of Kras-driven tumors necessitates the identification of signaling pathways required for oncogenic Kras-driven proliferation. Kras-driven lung cancer cells display higher levels of reactive oxygen species than noncancerous lung cells. Reactive oxygen species have been proposed to serve as signaling molecules to activate numerous signaling pathways, including PI3K, ERK1/2 MAPK, and the transcription factors hypoxia inducible factors (HIFs), which promote tumor cell proliferation, angiogenesis, and metastasis.

The major form of reactive oxygen species that participates in signaling in the cytosol is hydrogen peroxide (H2O2), which is generated by its conversion from superoxide (O2-) by copper-zinc superoxide dismutase (SOD1) in the cytosol. We have reported that O2- from mitochondrial complex III and its conversion to H2O2 in the cytosol are required to initiate Kras-induced cellular proliferation and hypoxic activation of HIFs in tumor cells.

Presently, it is not known whether complex III-generated O2- or H2O2-dependent signaling in the cytosol is required for oncogenic Kras-driven lung tumorigenicity in vivo. Recent studies indicate that glutamine is a major fuel for the tricarboxylic acid (TCA) cycle to generate NADH and FADH2. These reducing equivalents donate electrons to the electron transport chain resulting in complex III-generated superoxide.

Chandel's team recently reported that Kras-driven tumor cells also utilize glutamine to fuel the TCA cycle. Glutamine can be converted by glutaminase (GLS) to glutamate, which enters the TCA cycle through conversion into alpha-ketoglutarate by aminotransferases (GPT2 or GOT2) or glutamate dehydrogenase (GDH).

Preliminary data indicate that preventing glutamine entry into the TCA cycle using inhibitors of aminotransferases or RNAs of GPT2 reduces anchorage independent growth of oncogenic Kras-driven tumor cells. However, it is not known if inhibition of GPT2 would attenuate lung adenocarcinoma in vivo or if GPT2 is dispensable for normal tissues in the adult mouse.

The major goal of this grant is to genetically determine whether diminishing complex III-generated superoxide, production of cytosolic hydrogen peroxide, and glutamine utilization by the TCA cycle will attenuate tumorigenesis in the oncogenic Kras-driven mouse model of lung adenocarcinoma and in an orthotopic mouse model using human A549 lung adenocarcinoma cells harboring a Kras mutation.

Chandel's lab has recently contributed to the field of cell metabolism and cancer. His own lab and collaborations have been published in PNAS, Nature Cell Biology and two articles in Nature.

John Crispino, PhD
Robert I. Lurie, MD and Lora S. Lurie Professor, and Professor in Medicine-Hematology/Oncology

Project title: Novel Therapies for Pre-B Cell ALL

Sponsor: Leukemia & Lymphoma Society

Acute Lymphoblastic Leukemia (ALL) is the most common blood cancer in children. Although dramatic improvements have been made in the outcome for patients with this cancer, the current treatments do not cure everyone and are associated with many side effects, including the potential for development of other tumors years after therapy has been completed. Children with Down syndrome, who have an extra copy of chromosome 21 in all of their cells, are at a 20-fold increased risk of developing ALL. Moreover, these children tend to develop more severe side effects from methotrexate, one of the current standard therapies. Thus, there is an urgent need to develop new, less toxic therapies that specifically target the abnormal ALL cells in these children.

Crispino and his collaborator David Weinstock, MD, assistant professor, Harvard Medical School, and attending physician at the Dana Farber Cancer Institute, have recently...
identified two approaches for blocking the growth signals that drive pediatric ALL. The first approach involves a class of drugs called HSP90 inhibitors, which can kill ALL cells dependent on alterations that are common in cases from children with and without Down syndrome.

The second approach involves blocking a gene on chromosome 21 called DYRK1A. Crispino’s team recently showed that myeloid leukemias in children with Down syndrome depend on DYRK1A, and that targeting its activity with a small molecule drug can block the growth of these leukemias. They will determine whether the same effect is present in cases of ALL from children with Down syndrome as well as without Down syndrome.

Crispino’s mission is to develop new agents that interfere with abnormal processes in leukemia and thereby improve long-term survival and reduce complications. To that end, the team created mouse models of human ALL in mice lacking a functional immune system. These resources can help determine the ability of drugs targeting HSP90 or DYRK1A to effectively kill human ALL cells in a live animal—the best evidence for trying a drug in patients with this disease. Of note, leukemias from adults and children who do not have Down syndrome also commonly have extra copies of chromosome 21, so the impact of these studies extends to a large fraction of people affected by leukemia.

In addition to the collaboration with Weinstock, Crispino has also recently established a collaboration with Nobuko Hijjya, MD, associate professor of pediatrics, Feinberg, and attending physician at Ann & Robert H. Lurie Children’s Hospital of Chicago, to study Acute lymphoblastic leukemia (pre-B ALL) in children. Researchers will be asking parents to allow for donation of samples to research by informed consent. The specimens will be critical to helping develop a new generation of therapies for the malignancy.

Sponsored research, continued from pg. 7

NIH announced the launch of a new Proactive Financial Conflict of Interest (FCOI) Compliance Program to assess institutional implementation and compliance with the 2011 revised federal FCOI regulatory requirements pertaining to NIH grants and cooperative agreements. According to the notice, “In addition to providing oversight, the FCOI Compliance Program will assist grantees in fully developing and implementing their FCOI policies by providing assistance in the form of constructive feedback. The objective of this initial phase of the FCOI Compliance Program is to obtain and evaluate publicly accessible FCOI policies for a sample of NIH grantee institutions; however, the identity of participating institutions and correspondence with NIH will remain confidential. As with other compliance programs, if deficient areas are noted, institutions will be expected to formally address and resolve all identified issues.”

More information

Frances Feinberg Memorial Lecture

Faculty, staff, students and friends attended the Frances Feinberg Memorial Lecture, presented by Richard Lifton, MD, PhD, of the Howard Hughes Medical Institute.
Research in the News

Crain's Chicago Business September 24
Chicago biotech gets a shot in the arm
Rex Chisholm was quoted.

National Public Radio September 21
Who’s next in line for a kidney transplant? The answer is changing
John Friedewald was quoted.
► Friedewald was also quoted in The New York Times.

US News & World Report September 21
Untreated food allergies more likely in poor, minority kids
Ruchi Gupta’s research was featured.

CNN September 20
Your memory is like a game of telephone
Donna Bridge’s research was featured.

ABC News September 19
Low-fat yogurt may cut high blood pressure risk
Robert Bonow was quoted.

The New York Times September 18
In ‘Obesity Paradox,’ thinner may mean sicker
Mercedes Carnethon’s research was featured.

Los Angeles Times September 14
Growing body parts and improving prosthetics
Todd Kuiken was quoted.

Reuters September 12
Peanut allergies seen on the rise
Ruchi Gupta was quoted.

Fox News September 12
What every parent should know about temper tantrums
Laurie Wakschlag’s research was featured.

WTTW-TV Chicago September 12
SuperAgers
Emily Rogalski’s research was featured.

More headlines

High Impact Factor Research August 2012


Please use the following institution name in the address field when publishing in peer-reviewed journals: “Northwestern University Feinberg School of Medicine.”
### Funding Opportunities

**Basic Cancer Research in Cancer Health Disparities (U01)**  
More information

Sponsors: United States Department of Health and Human Services (HHS), National Institutes of Health (NIH), National Cancer Institute (NCI)  
Submission Deadline: November 20  
Upper Amount: $1.25 million  

Synopsis: Through this opportunity, the Center to Reduce Cancer Health Disparities, the Division of Cancer Biology, and Division of Cancer Prevention at the NCI encourage grant applications from investigators interested in conducting basic, mechanistic research into the biologic and genetic causes of cancer health disparities. These cooperative agreement research awards (U01) will support innovative studies designed to investigate biological and/or genetic bases of cancer disparities, and may include the development and testing of new methodologies and models, secondary data analyses, and mechanistic studies of identified biological factors associated with cancer disparities, including those related to basic research in prevention strategies. This opportunity is also designed to aid and facilitate the development of a nationwide cohort of scientists with a high level of basic research expertise in cancer health disparities research who can develop resources and tools, such as biospecimens, cell lines, and methods that are necessary to conduct basic research in cancer health disparities.

**Strategic Alliances for Medications Development to Treat Substance Use Disorders (R01)**  
More information

Sponsor: United States Department of Health and Human Services (HHS), National Institutes of Health (NIH), National Institute on Drug Abuse (NIDA)  
Submission Deadline: December 7 (LOI November 7)  
Upper Amount: $6 million  

Synopsis: This opportunity will leverage the strengths of two or more organizations toward a common goal of medications development. It is anticipated that in comparison with traditional grant-funded research, strategic alliances will increase the pace at which medications to treat substance use disorders move through the drug development process. Project aims can range from the development of a new molecular entity to the expansion of an existing medications’ clinical indication(s), but each project should have a defined entry and exit point with the objective of advancement in the approval process. It is hoped that support for these collaborations will accelerate the rate of medications development for substance use disorders.

**View more funding opportunities**

### Featured Events

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<tr>
<th>Date</th>
<th>Event Title</th>
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| 10.16  | Eckenhoff Lecture & Smart Symposium                                         | The 2012 lecture, “Rising healthcare costs: How to bend the cost curve downwards, right now,” will be presented by George D. Lundberg, MD, president and chair of the Lundberg Institute, and Stanford University professor. A poster session (The John and Gwen Smart Symposium) begins immediately after.  
Date: Tuesday, October 16, 4 to 6 p.m.  
Location: Prentice Women's Hospital  
Canning Auditorium — 3rd Floor  
250 E. Superior St. (Chicago campus)  
Contact: v-roman@northwestern.edu  
More information |
| 10.18  | Lurie Cancer Center Tumor Cell Biology Seminar                             | “Genetic-epigenetic interactions in oncogenesis and clinical translation into non-cytotoxic differentiation therapy,” presented by Yogen Saunthrarajah, MD, Cleveland Clinic  
Date: Thursday, October 18, 1 to 2 p.m.  
Location: Lurie Research Center — Searle  
303 E. Superior St. (Chicago campus)  
Contact: cancer@northwestern.edu  
More information |
| 10.22  | Distinguished Lecturer in Regenerative Medicine                            | “Bioengineered niches to control stem cell fate and function,” presented by Helen Blau, PhD, Stanford University  
Date: Monday, October 22, 3:30 to 4:30 p.m.  
Location: Lurie Research Center — Hughes  
303 E. Superior St. (Chicago campus)  
Contact: jill-johnson@northwestern.edu  
More information |
| 10.29  | Diet-Heart and Nutritional Epidemiology: Lessons Not Learned               | Presented by Christopher T. Sempos, PhD, coordinator, Vitamin D Standardization Program (VDSP), National Institutes of Health  
Date: Monday, October 29, 3 to 4 p.m.  
Location: 680 N. Lake Shore Drive, Suite 1400  
14th Floor (Chicago campus)  
Contact: f-nichols@northwestern.edu  
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.