NU Prosthetics-Orthotics Center Unifies Research and Education Missions

The Northwestern University Prosthetics-Orthotics Center (NUPOC) recently moved all faculty, staff, and students from two different floors in the Rehabilitation Institute of Chicago to a central location at 680 North Lake Shore Drive. The new location will allow for greater cross-fertilization between the education and research arms of the center, which has completely absorbed the Northwestern University Prosthetics Research Laboratory under its umbrella.

“During the past few years, we’ve made progress operationally and administratively toward greater integration between our two missions,” says Steven Gard, PhD, research associate professor in the Feinberg School of Medicine Department of Physical Medicine and Rehabilitation (PMR) and executive director of NUPOC. “We’re excited about the opportunities that will occur as a result of increased communication between our research and teaching faculty.”

Moving forward, Gard visualizes all NUPOC faculty having some level of involvement in both education and research efforts.

“Ideally, educators will help steer research, since they are current with clinical

Continued on pg. 2
practice. By doing so, NUPOC educators influence the direction of our research program, while staying informed of cutting edge research," he says. "The educators can incorporate these experiences and knowledge into their lecture materials and pass them along to NUPOC students, who can implement those research findings directly into clinical practice."

Gard serves as director of the center’s Jesse Brown Veterans Affairs Chicago Motion Analysis Research Laboratory, the hub for most of NUPOC’s research. The newly designed and equipped lab uses advanced technology to characterize human movement.

“The Motion Analysis Lab contains complex systems for measuring pressure, effort, and force as they relate to standing, walking, reaching, and grasping, and the corresponding utilization of prosthetics and orthotics devices for these activities,” says Gard. “It’s really at the heart of our research activity.”

While the center performs dozens of studies simultaneously, all of its research aims to achieve one of two objectives: to better understand how prostheses and orthoses assist human movement; or to improve technology to increase functionality for people with prostheses and orthoses.

Returning Farmers to the Fields

With funding from the National Institute on Disability and Rehabilitation Research, one NUPOC study attempts to assess and respond to the unique prosthetic needs of farmers and ranchers. Working with the National AgrAbility Project, Gard and co-principal investigator (PI) Stefania Fatone, PhD, research assistant professor of PMR, are concerned with providing disabled farmers and ranchers more independence and the ability to return to work.

“Farmers and ranchers suffer a great deal of accidents, yet they remain an underserved group due to their geographic isolation and need for durable limbs that can withstand weather conditions and chemicals,” Gard says.

Now in the early stages of the five-year grant, NUPOC researchers Kathy Waldera, MS, and Craig Heckathorne, MS, are currently gathering information and surveying users to identify the major issues and questions for this demographic, such as: Are different prostheses needed for farm versus city use? How are farmers’ current prostheses breaking or failing?

“We also need to assess whether these individuals are able to afford multiple prostheses and determine if there are any low cost solutions,” says Gard.

In the end, the team hopes the study will result in reduced prosthetic device failure and secondary injuries through improved prosthetic options for both farmers and ranchers.

Adjusting Alignment: Transforming an Art into Science

Just getting underway, another NUPOC project investigates prosthetic alignment in individuals with above-the-knee amputations. Funded by the Department of Veterans Affairs, the study seeks to take the guess work out of prosthetic limb alignment — an important aspect in restoring user function, minimizing movement deviations, and ensuring comfort. This project is a part of the PhD work of Sara Koehler, MS, a student in the Department of Biomedical Engineering and a Gard advisee.

“The field of prosthetics is largely an art form that requires a keen eye by prosthetists, combined with much skill and expertise, to successfully fit their clients. In particular, experienced prosthetists have a distinctive ability to suitably modify prosthetic alignment in above-knee prostheses to provide users with an appropriate balance between stability and controllability during walking. However, the current process is largely subjective and lacks good evidence to support clinical practice,” Gard says.

NUPOC researchers expect to find an objective basis for clinical prosthetic practice by better understanding the relationship between variations in prosthetic alignment and the response of the user.

“We’re looking at how muscular effort at the hip is affected by adjustments in alignment and how that effort affects energy expenditure,” Gard says. “Ultimately, we want to establish a more systematic approach to the alignment process that is supported by scientific evidence.”

A Better Prosthesis for Injured Soldiers

The center recently embarked on a new United States Department of Defense (DoD)-funded grant that aims to further the development of more functional prostheses for highly active above-the-knee amputees. Current
Enhanced Cores Program Enables Fast-Paced Adaptation for Feinberg Researchers

Advances in technology, such as live animal imaging and high-throughput DNA sequencing, have helped to transform the biological sciences. To stay at the forefront of their fields, researchers require access to an ever-evolving array of sophisticated instruments and services that often are prohibitively expensive or otherwise unavailable to individual researchers.

To address these changing needs, the Feinberg Research Office has worked to enhance the school’s Research Cores Program. Prior to Rex Chisholm’s tenure as dean for research, the school invested “limited amounts of money in a limited number of cores,” says Jeff Weiss, PhD, director of research core planning. A shared resources committee met once per year to consider funding of various cores or instruments, and no further management or infrastructure was offered to support the core directors.

The Cores Program today is decidedly more robust. With Chisholm and Weiss at the helm, the program has become an ongoing source of administrative guidance, critical feedback, and financial support to help core directors navigate a competitive, complex, and evolving research environment.

“The nature of science is that the needs of investigators change,” says Weiss. “It’s difficult for an individual to predict what services their work will require in two years time, and it’s even harder for the institution to anticipate the broad needs of our community. The goal for the Cores Program is to ensure that investigator needs are identified and addressed. We have a solid foundation to do that now.”

The medical school doesn’t own or operate any cores per se. Rather, the Research Office provides the following services:

- Administrative support. Through Chisholm’s team in the Research Office, including Weiss, Eric Boberg, PhD, Catie Hor, and Kristin Jacobsen, core directors receive guidance regarding budgeting, space, communications, and more. Additionally, NUCORE, a transaction processing system, is being developed to decrease the administrative burden on core directors. NUCORE officially launched on October 1.

- Cores Program web site. The web site, launched in 2009, serves as a point of entry for investigators who use core services, as well as for those thinking of starting a core. Results are published for all to view on the Cores Program web site.

- Annual user satisfaction survey. Gone are the days of multiple surveys to users of core services. Weiss and his team consolidated several pre-existing user surveys into one annual process for all cores. Results are published for all users interested.

Weiss says the next step for the Cores Program, having laid a strong foundation, is to focus on increasing the efficiency of individual cores. This past year, for example, the Genomics Core and the Transgenic and Targeted Mutagensis Laboratoy each underwent a formal external review designed to streamline their organization and operations. In the coming year, additional cores can expect to participate in similar reviews.

Those interested in learning more about developing a core at Feinberg can visit the Cores Program web site or contact Jeff Weiss directly at jeff.weiss@northwestern.edu.

Core Fact

Did you know Feinberg now has a Metabolic Hormone Assay Core, providing blood endocrine hormone and cytokine testing? The core offers routine processing of small volumes of mouse plasma and serum in addition to human sample testing. The laboratory is managed by Weimin Song, MD, and supervised by Joe Bass, MD, PhD, with the goal of facilitating metabolic disease research across the Northwestern community.

To learn more, contact Drs. Bass and Song at basslab@northwestern.edu.
Faculty Profile: Meet Navdeep Chandel, PhD
Associate Professor of Medicine and Cell and Molecular Biology

Honored with the 2006 Anthony Linnane Young Investigator Award from the Mitochondrial Research Society and published in *Proceedings of the National Academy of Sciences* for his findings on mitochondrial metabolism regulation of cancer, Navdeep Chandel, PhD, associate professor of medicine and cell and molecular biology, earned an undergraduate degree in mathematics and a PhD in cell physiology from the University of Chicago. He joined the medical school nearly 11 years ago to study the function of mitochondria as signaling organelles.

Outside of his research interests, Chandel enjoys traveling, reading, and cooking and is an avid soccer fan. Most recently he visited Peru, and he has also lived in the Himalayan Mountains and the beaches of Miami.

Q&A

What are your research interests?

My laboratory is interested in how mitochondria function as signaling organelles. We and others have demonstrated that mitochondria can release reactive oxygen species (ROS) that can initiate signaling. ROS have been proposed as a common causal agent in cancer, diabetes, inflammatory diseases, ischemia related diseases, neurodegeneration, and aging.

We hypothesize that mitochondrial-generated ROS at complex III provides for an oxidative environment in the cytosol that is permissive for the fitness of cells and the organism. My ultimate goal is to demonstrate that complex III is a major signaling hub regulating multiple physiological processes. I aim to understand how mitochondrial signaling regulates diseases like cancer.

How did you become interested in this area of research?

I found the field of mathematics to be limiting because you work alone in solving problems. Biological sciences encourage a team approach to tackling a problem. Also, there is an intellectual ceiling to mathematics. I remember receiving a take home exam for my last class in mathematics. It took me a week to finish only half the exam while a classmate of mine finished it within two hours. I knew it was time to look for a new discipline.

I love biology because it ultimately is an observational discipline. The key is to know which observations to ignore and which observations one should pay attention to.

Which honors are you most proud of and why?

I recently organized the Keystone Symposia on hypoxia. It was extremely gratifying to organize a major meeting in a field I had been working in for only ten years. I started as an assistant professor in January 2000. During my first five years, most investigators within the hypoxia field did not believe our findings that mitochondrial complex III regulates hypoxic gene expression. During the past five years, we and others have provided genetic evidence that complex III regulates gene expression, and slowly we have converted most of the hypoxia community to believing that this idea is correct.

What do you enjoy about mentoring students?

To date, I have had seven students finish their PhD in my laboratory. Currently, I have five PhD students. I have always enjoyed mentoring young minds because they are immensely curious and willing to do just about any crazy experiment; they don’t have enough information or reasoning to discount any crazy idea. I also like the energy and enthusiasm that they bring to a project. Most of the students at that age believe in the “work hard, party hard” mentality to life. I continue to live by that motto, so I thoroughly enjoy my interaction with the students.
above-the-knee amputees. Current prosthetic socket designs encase the hip joint and portion of the pelvis, limiting range of motion at the hip and compromising comfort.

“This study is funded by the DoD because the military would like to offer wounded soldiers the opportunity to return to service in some capacity,” says Fatone, adding that service persons have higher expectations for function post-amputation since they are generally young and in excellent health prior to their combat-related injury.

Fatone’s research also explores techniques and materials for improved fabrication of prosthetic sockets using advanced manufacturing techniques.

“Improvements in socket comfort and connectivity can benefit all individuals with above-the-knee amputations, not only those who are highly active,” Fatone says.

For more information about the Northwestern University Prosthetics-Orthotics Center, contact Steven Gard at sgard@northwestern.edu or (312) 503-5718.

Welcome New Faculty

Melissa Johnson, MD, joins as assistant professor in Medicine-Hematology/Oncology.

Johnson attended medical school at the University of Pennsylvania and completed her internship and residency in Internal Medicine at the Weill Cornell Medical Center/New York Presbyterian Hospital. She completed her fellowship in Medical Oncology at Memorial Sloan-Kettering Cancer Center where she served one year as chief fellow.

Her research interests include investigating novel targeted therapies designed to inhibit lung cancer tumor growth and metastasis. Johnson also has a special interest in the genetic mutations which underlie racial variation in lung cancer development.

Mary Ellen Pavone, MD, joins as assistant professor in Obstetrics and Gynecology.

Pavone attended medical school at Boston University School of Medicine and completed her residency in Gynecology and Obstetrics at Johns Hopkins Hospital in Baltimore. She completed her fellowship in Reproductive Endocrinology and Infertility at Northwestern University.

Pavone is currently conducting research on how alterations in retinoid signaling contribute to differences in apoptotic and proliferation pathways in endometrium and endometriosis.

Faculty Honors

Donald Lloyd-Jones, MD, ScM, chair, Department of Preventive Medicine, was awarded the American Heart Association (AHA) 2010 Chairman’s Award for excellence in volunteer service. AHA recognized Lloyd-Jones for his “exceptional leadership to the Association as it completed and implemented an historic redefinition of its strategic goals.” Lloyd-Jones led the process that created the Association’s 2020 Impact Goals.

The American Society for Bone and Mineral Research (ASBMR) has honored Paula Stern, PhD, professor in Molecular Pharmacology and Biological Chemistry, by creating the ASBMR Paula Stern Achievement Award. The Award will annually recognize a woman in the bone field who has made significant scientific achievements and who has promoted the professional development/advancement of women in the field. Stern was the first female president of ASBMR.

The Feinberg Medical Faculty Council has named Kiang Liu, PhD, professor in Preventive Medicine and Medicine, and Stanford Shulman, MD, professor in Pediatrics, the 2010 Mentors of the Year. The Council annually honors outstanding faculty members who demonstrate a deep commitment to fostering the professional growth and development of their colleagues. For the first time, the organization distributed two mentor awards, allowing honors in both the clinical and the research fields.
The NIH published a request for comments on a set of Frequently Asked Questions (FAQs) to Explain Costing Issues for Core Facilities. Comments are due on the document by December 10. [More information.]

NIH Loan Repayment Programs (LRP’s) represent an opportunity for researchers who have incurred significant educational debt. To qualify, researchers must commit to conducting two years of qualified biomedical or behavioral research at a nonprofit or government institution (of his or her choice). The two-year awards repay up to $35,000 of student loan debt annually (for program details, see NOT-OD-10-105). On average, nearly 40 percent of all new LRP applications are funded, and the awards are renewable. The deadline for LRP applications is November 15.

The newest NIH “All About Grants” podcast features Dr. Sally Amero, NIH Review Policy Officer, discussing NIH review criteria and scoring.

The new issue of Peer Review Notes, published by the NIH Centers for Scientific Review, is now available. Highlighted are pilot projects aimed at reducing the need for special emphasis review panels and the new limits on post-submission supplementary materials. The issue also features a top ten list of positive changes for reviewers.

NIH has created a web site for researchers to stay updated on the latest embryonic stem cell news.

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NIH News

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Sponsored Research

Christian Stehlik, PhD
John P. Gallagher Research Professor of Rheumatology
Assistant Professor in Medicine-Rheumatology

Project title: “POP3: A novel inhibitor of endothelial cell activation”

Sponsor: National Heart, Lung, and Blood Institute

Cardiovascular disease (CVD) remains the leading cause of death in developed countries. Persistent and exaggerated inflammation, such as reactions to infection and injury that remain unresolved, can cause tissue damage and significantly contribute to CVD. Therefore, understanding the molecular mechanism by which such inflammatory reactions are terminated is crucial to prevent these detrimental effects.

A key event promoting inflammation is the local recruitment of circulating immune cells to sites of infection, which requires their crossing through the activated endothelial cell layer which lines the blood vessels. Activated endothelial cells express adhesion molecules and chemokines to foster this step, which in part requires the transcription factor NF-κB, which is induced by inflammatory cytokines.

Recently, the interferon-inducible protein IFI16 has been identified as a positive regulator of endothelial cell activation in response to inflammatory cytokines, such as TNFα and IL-1β, through a novel mechanism of NF-κB activation, leading to the upregulation of adhesion molecules, cytokines, and chemokines that are required for the crossing of immune cells through endothelial cells.

In collaboration with Drs. Dorfleutner and Perlman from the Division of Rheumatology, Stehlik’s study will investigate the molecular mechanism regulating this particular pathway, and the role of a newly identified IFI16-interacting protein using in vitro and in vivo approaches with a novel transgenic mouse model. The overall goal is to characterize specific inhibitors of this inflammatory activation of endothelial cells in order to prevent recruitment of immune cells into the tissue. Rationale for this study is that understanding the molecular mechanism responsible for the resolution of endothelial cell activation will permit the development of novel strategies for CVD prevention and treatment. At the same time, the expectation is that the study will contribute to greater understanding of fundamental biological principles underlying inflammation-mediated endothelial cell activation and CVD.

Grant Writing Resources

Looking to improve your grant writing skills? Eric Boberg, PhD, executive director for research at Feinberg, shared these helpful web resources:
- [Getting started at NIH](#)
- [NIH New Investigators’ Page](#)
- [NIH Commons](#)
- [Research Funding Service (U Wash)](#)
- [NU Office for Sponsored Research - Proposal Development Page](#)
New Clinical Trial: Study to Identify Clinical, Imaging, and Biological Markers of Parkinson’s Disease Progression (PPMI)

**Investigator:** Tanya Simuni, MD, associate professor in Ken and Ruth Davee Department of Neurology

**Sponsor:** Michael J. Fox Foundation for Parkinson’s Research

**Collaborators:** Institute for Neurodegenerative Disorders

Northwestern’s Parkinson’s Disease and Movement Disorders Center has been selected as one of 18 official study sites for the Parkinson’s Progression Markers Initiative (PPMI), a landmark observational study that aims to identify the biomarkers for Parkinson’s disease. By using a combination of advanced imaging, biologics sampling, and behavioral assessments to track newly diagnosed patients, researchers hope to gain knowledge that will improve the diagnosis of patients and accelerate the development of breakthrough treatments for the future.

“Parkinson’s is a disease without a clear-cut diagnosis and without a cure,” said Tanya Simuni, MD, associate professor of neurology, director of the Parkinson’s Disease and Movement Disorders Center and principal investigator for the trial. “While significant strides have been made in the development of drugs to manage the disease, hope for the future lies in the development of new drugs to slow or stop the progression of Parkinson’s.”

An estimated one million Americans suffer from Parkinson’s disease.

Simuni and her colleagues have been at the forefront of Parkinson’s research for years, but say that the missing link for the next generation of therapies is the identification of biomarkers or objectively measurable characteristics that indicate the presence of the disease.

Together with study sites across the United States and in Europe, Northwestern will play a critical role in this collaborative effort to further Parkinson’s research. The study is sponsored by the Michael J. Fox Foundation.

Michael J. Fox, who was diagnosed with young-onset Parkinson’s disease 19 years ago said, “This is an ambitious undertaking, no doubt. But nothing worth having comes easily. Everything we’ve learned up to now, the partnerships we’ve worked to forge, the results of research we’ve funded — it’s all put us in position to launch this effort. We’re ready to roll up our sleeves and, hopefully, get this done.”

PPMI study participants will undergo numerous tests and assessments on bodily processes related to Parkinson’s, but will not receive an experimental drug or treatment. This study will use a combination of imaging techniques, collection of blood, urine and spinal fluid, and clinical tests to track for potential changes that could indicate the progression of the disease. Northwestern hopes to enroll 20 subjects beginning in September who will be followed for approximately two years.

For more information on the study and the Parkinson’s Disease and Movement Disorders Center, please visit [www.parkinsons.northwestern.edu](http://www.parkinsons.northwestern.edu/).

Pharmaceutical Assets Portal

The CTSA Pharmaceutical Assets Portal invites researchers to join in the effort to find new uses for discontinued drugs.

The Portal project is jointly supported by the Pfizer Corporation and NCRR. Portal members are given an unprecedented opportunity to request compounds from the Pfizer Indications Discovery Unit, a division of Pfizer vested with finding new uses for old drugs. In addition to the compounds that many are aware of from publically-available sources, Pfizer is also encouraging inquiries about the existence and availability of little-known Pfizer compounds that target specific mechanisms in which researchers may have an interest.

The goal of the program is to leverage existing compounds to advance mechanistic understanding of human disease and develop novel treatments for patients. Integration of academic investigators into collaborative repositioning efforts with Pfizer would substantially increase the knowledge base and the pool of methodologies available for proof of concept studies. These matches will undoubtedly result in an increased number of approved drugs for new indications and considerable public benefit.

Membership in the Portal is free for CTSA researchers. To learn more about the Portal project, visit [www.ctsapharmaportal.org](http://www.ctsapharmaportal.org).
Research in the News

ABC News (National) August 2
Meat preservatives linked to bladder cancer?
Dr. Shilajit Kundu was quoted.

USA Today August 2
Adult stem cell research far ahead of embryonic
Dr. Douglas Losordo’s research was featured.

New York Times August 7
Trying improv as therapy for those with memory loss
Darby Morhardt’s Memory Ensemble was featured.

UPI August 9
Zinc may be key to healthy embryo
Postdoctoral student Alison Kim’s research was featured.

Dan Rather Reports August 10
Kids, head injuries and the NFL
Dr. Hunt Batjer was interviewed.

Chicago Tribune August 12
Durbin’s outlook good after rare stomach tumor removed
Dr. Mary Mulcahy was interviewed.

Time August 16
Chocolate helps the heart - but not if you eat it every day
Dr. Linda Van Horn was quoted.

The Bonnie Hunt Show August 18
Dr. Jeffrey Raizer was interviewed.

New York Times August 28
Boston Globe August 28
Years later, no magic bullet against Alzheimer’s disease
Dr. Martha Daviglus was quoted.

Allure Magazine Sept 8
The real secrets to losing weight
Dr. Robert Kushner was quoted.

More headlines

High-Impact Factor Research
August 2010


Animal Corner

The Institutional Animal Care and Use Committee (IACUC) and the Center for Comparative Medicine (CCM) would like to remind researchers that approval is needed in their Animal Study Protocol for the use of special diet or fluids, fasting of animals, and the restriction of diet or fluids. If you fall into this category, you must adhere to 9.112.X POLICY (Policy on Fasted Animals and Animals on Special or Restricted Diets or Fluids).

Please keep in mind the following points:

► Special diet and fluids may have shorter shelf life and could be expensive. Therefore, the quantity or volume provided in each cage may be less than what is normally provided.

► Ensure fresh diets or fluids are replenished at the frequency recommended by manufacturer or based on knowledge of stability or freshness of product.

► This is not applicable to pre-anesthetic fasting.

► If cages are found with insufficient levels of special diets or fluids, or restricted or fasted animals were not checked within the last 24 hours, CCM will attempt to contact the research personnel.

► If arrangements to provide special diet, fluids, or appropriate care have not been made by 3 p.m. on weekdays or 11 a.m. on weekends and holidays, CCM will provide standard diet and RO water appropriate for the species.

► Investigators providing special or restricted diets/fluids, or fasting animals must use the 1.103.x FORM (Monthly Feeding/Fluid Log) and follow the instructions 1.103.x SOP (Instructions for Special or Restricted Diet and Fluid Log).

This Policy may be found at the IACUC web site.

The Standard Operating Procedure and Log may be found at the CCM web site.
Funding Opportunities

**Investigators in the Pathogenesis of Infectious Disease**

*More information*

**Submission Deadline:** November 1, 2010  
**Upper Amount:** $500,000

**Synopsis:** Sponsored by the Burroughs Wellcome Fund (BWF), this program provides opportunities for assistant professors to bring multidisciplinary approaches to the study of human infectious diseases. The goal of the program is to provide opportunities for accomplished investigators still early in their careers to study the pathogenesis of infectious disease at its most fundamental level — the points where human and microbial systems connect. The program supports research that sheds light on the fundamentals that affect the outcomes of this encounter: how colonization, infection, commensalism, and other relationships play out at levels ranging from molecular interactions to systemic ones. BWF is particularly interested in work focused on the host, as well as host-pathogen studies originating in viral, bacterial, fungal, or parasite systems. Studies supported by the program may have their roots in the pathogen, but the focus of the work should be on the interplay of host and microbe.

**Lung Cancer Early Detection Clinical Consortium Award**

W81XWH-10-LCRP-LCEDCC  
*More information*

**Submission Deadline:** November 19, 2010  
**Upper Amount:** Estimated multi-year total of $13.5 million

**Synopsis:** The Departmet of Defense’s LCRP Early Detection Clinical Consortium Award mechanism is being offered for the first time. The intent is to fund clinical studies focused on characterizing, developing, or improving early detection for lung cancer. At the time of award completion, it is anticipated that the recipient will have established a strong infrastructure for an early detection program in order to continue clinical studies that will lead to improved patient outcomes. Projects should be militarily relevant, have well defined objectives, should control for confounders, have a patient population that will provide a sample size of sufficient statistical power, and be capable of producing results that are likely to change clinical practice for early detection of lung cancer. Studies involving non-military patient populations must describe how they pertain to the targeted population (i.e., Armed Forces and/or the US veteran population). Studies proposed for this multi-institutional consortium effort can include small randomized or pilot clinical trials, as well as large randomized clinical trials. All projects should be limited to clinical research and clinical trials.

View more funding opportunities

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**Featured Events**

12  
**Silverstein Lecture Series: The Biologic Basis of Obesity**  
*Presented by Dr. Jeffrey Friedman, Marilyn M. Simpson Professor and head of the Laboratory of Molecular Genetics at Rockefeller University*

**Date:** October 12  7 to 8:30 p.m. (Chicago)  
October 13  6 to 7:30 p.m. (Evanston)

**Location:** Robert H. Lurie Medical Research Center,  
Hughes Auditorium  
303 E. Superior St. (Chicago campus)  
McCormick Tribune Forum (Evanston campus)

**Contact:** Megan-Boyle@northwestern.edu  
*More information*

15  
**An Overview of HTSA: Community-Based Research on Diabetes Prevention and Obesity Management**  
*Presented by Ann Chester, PhD, assistant vice president for Health Sciences for Social Justice, West Virginia University, and Catherine Morton-McSwain, state education coordinator, Health Sciences Technology Academy*

**Date:** October 15  1 to 2 p.m.

**Location:** Feinberg Pavilion, Room 1-401  
240 E. Huron St., Chicago campus

**Contact:** Megan-Boyle@northwestern.edu  
*More information*

19  
**Salmonella: A Window into Biology**  
*Presented by Ferric Fang, PhD, University of Washington - Seattle*

**Date:** October 19  Noon to 1 p.m.

**Location:** Lurie Medical Research Center  
Baldwin Auditorium  
303 E. Superior St., Chicago campus

**Contact:** s-trotter@northwestern.edu  
*More information*

28  
**Frances Feinberg Memorial Lecture**  
“MicroRNA Control of Cardiovascular Disease from New Biology Toward New Therapeutics”

**Date:** October 28  4 to 5 p.m.

**Location:** Feinberg Pavilion, 3rd Fl., Conf. Rm. A  
Northwestern Memorial Hospital  
251 E. Huron St., Chicago campus

**Contact:** dir635@northwestern.edu  
RSVP by October 15  
*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.