NanoFlare Technology Detects Circulating Cancer Cells in Blood

METASTASIS IS BAD NEWS for cancer patients. Northwestern University scientists now have demonstrated a simple but powerful tool that can detect live cancer cells in the bloodstream, potentially long before the cells could settle somewhere in the body and form a dangerous tumor.

The NanoFlare technology is the first genetic-based approach that is able to detect live circulating tumor cells out of the complex matrix that is human blood -- no easy feat. In a breast cancer study, the NanoFlares easily entered cells and lit up the cell if a biomarker target was present, even if only a trace amount. The NanoFlares are tiny spherical nucleic acids with gold nanoparticle cores outfitted with single-stranded DNA “flares.”

“This technology has the potential to profoundly change the way breast cancer in particular and cancers in general are both studied and treated,” said Chad A. Mirkin, PhD, George B. Rathmann Professor of Chemistry in the Weinberg College of Arts and Sciences and professor of medicine, chemical and biological engineering, biomedical engineering and materials science and engineering, and a corresponding author of the study.

» Continued on page 5

First Liz and Eric Lefkofsky Innovation Research Award Recipients Announced

THE LURIE CANCER CENTER is pleased to announce the first recipients of the 2015 Liz and Eric Lefkofsky Innovation Research Awards. Funded by a generous donation the Lefkofsky Family Foundation, the awards were established to provide Lurie Cancer Center investigators with the resources to conduct highly innovative cancer-relevant pilot studies that can serve as foundations for larger, nationally funded studies.

The inaugural Liz and Eric Lefkofsky Scholars are:

Laura Lackner, PhD, Assistant Professor of Molecular Biosciences, Weinberg College of Arts and Sciences - Identifying new ways to inhibit mitochondrial division, a process essential for cancer cell proliferation and metastasis

Marcus Peter, PhD, Professor of Hematology/Oncology, Feinberg School of Medicine - Targeting tumor suppressors to kill cancer cells

Athanasios Vasilopoulos, PhD, Assistant Professor of Radiation Oncology, Feinberg School of Medicine - Acetylation of KRAS lysine 147 is a novel onogenic post-translational modification directed by SIRT2

Direct questions regarding this funding opportunity to Benette Phillips, PhD.

» Read more
Green Appointed Associate Director for Basic Sciences Research

KATHLEEN GREEN, PhD, a leader in the field of epithelial cell biology, has been appointed Associate Director for Basic Sciences Research at the Lurie Cancer Center. Green is the Joseph L. Mayberry, Sr., Professor of Pathology and Toxicology, and Professor of Dermatology at the Feinberg School of Medicine.

In this role, Green will report to Lurie Cancer Center Director, Leonidas Platanias, MD, PhD, and will be responsible for the development and coordination of the Lurie Cancer Center's basic science research programs, as well as fostering interdisciplinary and inter-programmatic collaborations. In addition, she will serve on the Executive Committee and Leadership Group, playing a critical part in establishing the strategic direction, policy and priorities of the Lurie Cancer Center, and oversee the development and operation of the basic research laboratory facilities on the Chicago and Evanston campuses.

Green replaces Thomas O’Halloran, PhD, the Charles E. and Emma H. Morrison Professor of Chemistry and Professor of Molecular Biosciences at the Weinberg College of Arts and Sciences, and Director of the Chemistry of Life Processes (CLP) Institute, who will assume a new leadership role at the Lurie Cancer Center as Senior Advisor to the Director.

“Kathy is a superb addition to the senior leadership of the Lurie Cancer Center. She is an outstanding investigator and a strong leader,” Platanias said. “She will drive the expansion of our basic research programs, which are key to our clinical-translational capabilities and our success as a cancer center.”

Green’s research program is focused on understanding the molecular basis for how cells stick together, not only to provide mechanical strength to tissues, but also to regulate chemical signals important for development and differentiation. She has a particular interest in tissues such as skin and heart that are major targets for adhesion-related diseases, including inherited, autoimmune and bacterial-toxin mediated disorders and cancer.

» Read more

William Karpus, PhD, Named Director for Flow Cytometry Core

WILLIAM KARPUS, PhD, Professor of Pathology and Microbiology-Immunology at the Feinberg School of Medicine and Associate Dean for Student Affairs of the Graduate School of Northwestern University, has been named Director of the Lurie Cancer Center’s Flow Cytometry Core Facility.

The Flow Cytometry Core Facility provides investigators with comprehensive flow cytometry and cell sorting services; supporting enhanced scientific interaction and productivity within the Lurie Cancer Center and affording access to reliable, quality-controlled, specialized technology in a cost-effective manner. The facility serves as a focus for investigators interested in cellular based measurements and cellular heterogeneity in disease.

In his role as Director, Karpus is responsible for the technical oversight and management of the core facility, as well as new assay development and advising investigators on experimental design, data analysis, and data interpretation. Karpus, who served as the facility’s Associate Director since 1997, replaces recently retired Director, Charles Goolsby, PhD, the Floyd Elroy Patterson Research Professor and Professor Emeritus of Pathology.

Dr. Karpus’s laboratory is interested in the pathogenesis and treatment of multiple sclerosis and has studied the regulation of chemokine production and chemokine receptor expression since he joined the Department of Pathology in 1996. Karpus has been an attending pathologist in clinical flow cytometry at Northwestern Memorial Hospital since 1998 and has served as associate editor of Cytometry since 2002. In addition, he holds membership in Northwestern University’s Interdepartmental Immunobiology Center, Center for Genetic Medicine, Center for Molecular Innovation and Drug Discovery, and the Lurie Cancer Center.

» Read more about the Flow Cytometry Core Facility

» Read more
Exploring How Arsenic Combats Leukemia

A COMPOUND OF ARSENIC called arsenic trioxide is currently used in very small doses to treat patients with acute promyelocytic leukemia. The small doses do not work against other types of the cancer, and larger doses would be toxic.

“We wanted to understand the mechanisms by which other types of leukemia can escape the anti-cancer effect of arsenic,” said Leonidas Platanias, MD, PhD, Director of the Lurie Cancer Center and senior author of the study. With post-doctoral fellow Elspeth Beauchamp, PhD, first author of the paper, Platanias identified how a defensive pathway stops arsenic from killing cancer in other leukemia cells. Their findings were published in Molecular Cancer Therapeutics.

“He for the first time, we provide evidence that arsenic can bind directly to a kinase called AMPK. This creates a series of events that correlate with the anti-leukemic activity,” Dr. Platanias said. “We can target another kinase engaged in the process, called RSK, to make leukemia cells more sensitive to arsenic.”

He said that this new knowledge could help scientists develop combination therapies that treat a wider variety of leukemia types with arsenic while blocking the defensive pathways working against the compound – hopefully leading to better treatments for patients.

> Read more

Study Suggests Potential New Therapy for Pediatric Brain Tumor

LURIE CANCER CENTER scientists have discovered a new potential drug therapy for a rare, incurable pediatric brain tumor by targeting a genetic mutation found in children with the cancer. By inhibiting the tumor-forming consequences of the mutation using an experimental drug called GSKJ4, they delayed tumor growth and prolonged survival in mice with pediatric brainstem glioma.

Also known as diffuse intrinsic pontine glioma (DIPG), the disease occurs when tumors form in the brainstem, which controls essential body functions such as breathing, heartbeat and motor and sensory pathways. The tumors are inoperable because of their vital location, and radiation and chemotherapy are largely ineffective. Most patients do not survive more than a year after diagnosis.

“No significant advances in the survival of DIPG patients have been made over the last few decades, and new therapeutic approaches are desperately needed,” said first author of the study Rintaro Hashizume, MD, PhD, Assistant Professor of Neurological Surgery at Feinberg School of Medicine.

Working with senior author C. David James, PhD, Professor of Neurological Surgery at Feinberg, Dr. Hashizume focused on a mutation in the H3F3A gene that was recently discovered in the majority of patients with DIPG. The mutation encodes a type of protein called a histone that helps package DNA inside cells. The unexpected finding suggested the mutation had a role in DIPG development.

In the study, published in Nature Medicine, mice who received GSKJ4, a small molecule inhibitor previously reported to increase methylation for immune disorder treatment, survived significantly longer than those in a control group that did not receive GSKJ4.

There are still a lot of unknowns, including how GSKJ4 drug therapy might translate to humans and if the drug will be developed by pharmaceutical companies for treating cancer patients, but the scientists are optimistic. “We’re hopeful about what these findings might do for children with this disease,” James said.

> Read more
New Partnerships to Advance Clinical Research

The Lurie Cancer Center and Northwestern Medicine Developmental Therapeutics Institute (NMDTI) have launched two new research alliances with NeoGenomics, Inc. and Foundation Medicine, Inc.

NEOGENOMICS

THE LURIE CANCER CENTER and Northwestern Medicine Developmental Therapeutics Institute (NMDTI) have entered into a research agreement with NeoGenomics, Inc. that will provide the basis to initiate a broad-spectrum translational program designed to expand the established clinical utility of comprehensive genomic profiling technologies in the development of oncology therapeutics from early pre-clinical studies to clinical practice.

The Lurie Cancer Center and NMDTI expect to conduct a broad range of research studies with NeoGenomics that will expand current protocols focused on the matching of cognate agents with targets identified by the NeoTYPE line of cancer profiling tests.

"Our joint research efforts with NeoGenomics are important elements of the Lurie Cancer Center and NMDTI’s roles as global leaders in delivering personalized medicine," stated Leonidas C. Platanias, MD, PhD, Director of the Lurie Cancer Center.

"This is a time of fundamental change in cancer therapy. We are being challenged to optimally incorporate the translation of molecular biology into personalized medicine while we also have a blossoming of immune-oncology as a therapeutic approach. As a result, we need to perform appropriate molecular analyses on all possible patient tumors. NeoGenomics is a key ally in NMDTI’s focus on individualized patient care with cognate therapies directed at key molecular targets in cancer. The NeoTYPE cancer profiles are important solutions that help us address this challenge," said Francis J. Giles, MD, Director of the NMDTI and Deputy Director of the Lurie Cancer Center.

» Read more

FOUNDATION MEDICINE

THE LURIE CANCER CENTER and Northwestern Medicine Developmental Therapeutics Institute (NMDTI) announced the initiation of a new clinical translation program with Foundation Medicine, Inc. designed to assist in the development of oncology therapeutics and further expand the clinical utility of Foundation Medicine’s comprehensive genomic profiling technologies.

The Lurie Cancer Center and NMDTI expect to conduct a broad range of clinical translation studies with Foundation Medicine that will build on their existing relationship focused on areas including individualized patient care, investigational therapeutics predicated on matching of genomic profiles with cognate agents, and fundamental cancer biology in both pre-clinical models and patient-derived samples.

"Foundation Medicine is a pioneer in the use of molecular information to translate cancer biology into improved anti-cancer therapies, better treatment selection and enhanced care of patients with cancer. Our alliance with them reinforces our leadership in the application of personalized medicine at both the individual patient and research levels," stated Leonidas C. Platanias, MD, PhD, Director of the Lurie Cancer Center. "Foundation Medicine has already been instrumental to our rapidly expanding programs that offer patients cancer treatment tailored to the specific genomic alterations that drive their malignancies. This new program reflects our ongoing commitment to being a national leader in the battle to overcome cancer."

"Our Lurie Cancer Center and Northwestern Medicine communities are focused on delivering personalized therapies for patients with cancer, an approach that utilizes advanced molecular technologies, like those from Foundation Medicine, to match patients with targeted treatments that optimize chances for response," added Francis J. Giles, MD, Director of the NMDTI and Deputy Director of the Lurie Cancer Center.

"Already a dynamic ally, we look forward to strengthening our collaboration with Foundation Medicine through this new translational program, which furthers our efforts to establish Northwestern and the Lurie Cancer Center as a global leader in the delivery of personalized cancer care."

» Read more
**First in the Midwest: New xSPECT System for Integrated Molecular Imaging**

IT’S GOOD TO BE FIRST when it comes to providing optimal imaging and earlier, more accurate treatment decisions. Northwestern Radiology’s new hybrid SPECT/CT scanner, the Symbia Intevo, is the first -- not only in Illinois, but also in the Midwest region -- and one of only five in the United States.

Surpassing current technology, this leading-edge nuclear medicine scanner from Siemens fully integrates SPECT and CT data during reconstruction. A new data alignment method known as xSPECT allows for higher resolution and image detail of lesions and their precise location. Enhanced image contrast and reproducible results help to better distinguish between degenerative disease and cancer. These features increase diagnostic confidence, reduce interpretation time, and allow clinicians to provide study results more quickly.

“This state-of-the-art scanner will enable our Nuclear Medicine Division to deliver unsurpassed diagnostic quality and efficient workflow to the great benefit of our patients,” says Eric Russell, MD, Chair of the Department of Radiology at Northwestern University Feinberg School of Medicine.

The Symbia Intevo also enhances the patient experience. It facilitates delivering the lowest possible radiation dose through an automated dosing system, flexible CT protocols and a unique collimator design. In addition, the scanner cuts acquisition time by up to 75 percent, making it easier for patients to tolerate and, consequently, reducing motion artifacts. Improved clinical decision-making may ultimately lead to shorter hospital lengths of stay.

The new scanner can be used for most nuclear medicine imaging procedures such as bone scans, yttrium-90 microsphere liver studies, lymphoscintigraphy, octreoscan and prostascint exams, and 1131 whole body, hepatobiliary, parathyroid and adrenal scans.

The Department of Radiology expects to begin scheduling patients on the Intevo system by mid-January.

**NanoFlare Technology Detects Circulating Cancer Cells in Blood**

CONTINUED FROM FIRST PAGE

Mirkin’s colleagues C. Shad Thaxton, MD, PhD, Assistant Professor of Urology, and Chonghui Cheng, MD, PhD, Assistant Professor of Hematology/Oncology at Feinberg, are also corresponding authors and members of the Lurie Cancer Center. The research team, in a paper published by the Proceedings of the National Academy of Sciences (PNAS), reports two key innovations:

- The ability to track tumor cells in the bloodstream based on genetic content located within the cell itself, as opposed to using proteins located on the cell’s surface (current technology)
- The ability to collect the cells in live form, so they may be studied and used to inform researchers and clinicians as to how to treat a disease -- an important step toward personalized medicine

“This could lead to personalized therapy where we can look at how an individual’s cells respond to different therapeutic cocktails,” said Mirkin, whose lab developed NanoFlares in 2007.

» Read more

**Summer Research Opportunities for Students**

TRAINING THE NEXT generation of clinicians and scientists is at the foundation of the Lurie Cancer Center's mission. Our summer research programs give students the opportunity to learn and become active participants in cancer research. The hope is that these new experiences will inspire students to consider health and science-related careers.

The CURE (Continuing Umbrella of Research Experience) Program offers underserved undergraduate students the opportunity to participate in laboratory summer research experiences.

The application deadline is March 2, 2015.
Details and application here.
Bharat B. Mittal, MD, was named the William M. Brand Professor of Radiation Oncology. Mittal is Professor and Chair of the Department of Radiation Oncology at the Feinberg School of Medicine.

Richard Silverman, PhD, the John Evans Professor of Chemistry and a Professor of Molecular Biosciences in the Weinberg College of Arts and Sciences well known for his leading work on the molecular mechanisms of drug action, was recognized as a 2014 Fellow of the National Academy of Inventors. Election to NAI Fellow status is a high professional distinction accorded to academic inventors who have demonstrated a prolific spirit of innovation in creating or facilitating outstanding inventions that have made a tangible impact on quality of life, economic development and the welfare of society.

Three Named AAAS Fellows

Three Northwestern University faculty members, have been elected fellows of the American Association for the Advancement of Science (AAAS), the world’s largest general scientific society. AAAS is an international nonprofit organization dedicated to advancing science around the world. It publishes the journal Science, as well as newsletters, books and reports.

The three Lurie Cancer Center members are being honored for their scientifically or socially distinguished efforts to advance science or its applications. New fellows will be honored Feb. 14 at the 2015 AAAS Annual Meeting in San Jose, California.

Mark Hersam, PhD, the Bette and Neison Harris Professor in Teaching Excellence and Professor of Materials Science and Engineering in the McCormick School of Engineering and Applied Science. Hersam was chosen for his distinguished contributions to the fundamentals and applications of nanoelectronic materials, including the development of methods for isolating monodisperse carbon nanotubes, graphene.

Thomas J. Meade, PhD, the Eileen Foell Professor in Cancer Research and Professor of Chemistry in the Weinberg College of Arts and Sciences. Meade was chosen for his distinguished contributions to the field of bioinorganic chemistry and for pioneering bio-activated magnetic resonance imaging probes and commercializing electronic DNA and protein biosensors.

Igal Szleifer, PhD, the Christina Enroth-Cugell Professor of Biomedical Engineering in McCormick. Szleifer was chosen for his distinguished contributions to the field of biomaterials and biointerfaces, particularly for theoretical modeling of molecular organization and biorelated function in polymer modified surfaces.
THE LURIE CANCER CENTER is committed to educating the public about cancer prevention and treatment, and offers a wide range of community events and patient programs throughout the year. Below is a list of programs scheduled through March 2014.

**LEARN MORE AND REGISTER AT**
cancer.northwestern.edu or call 312.695.1390

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**Wellness House Programs**

Clinicians and supportive oncology team members are speaking at a number of upcoming patient education programs at Wellness House, 131 N. County Line Road, in Hinsdale:

**Know Your NET: Understanding Your Neuroendocrine Tumor and Your Care**
**Saturday, January 10, 2015**
Speaker: Bridget O’Brien, DNP, APN, FNP-BC, AOCNP

**Clinical Trials 101: What You Should Know About Clinical Trials and the Drug Approval Process**
**Thursday, January 15, 2015**
Speaker: Sara Duffey, Clinical Research Recruitment and Education Specialist

**Issues in Oncofertility Dinner Presentation**
**Thursday, January 22, 2015**
Speaker: Kristin Smith, Fertility Preservation Patient Navigator

**The Role of Personalized Medicine in Cancer Treatments**
**Thursday, January 29**
Speaker: Jason Kaplan, MD
Northwestern Medicine Developmental Therapeutics Institute

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**Leukemia Research Foundation Annual Town Hall Meeting**

**Sunday, January 25**
Belvedere Events and Banquets, Elk Grove Village

Speaker: Jane Winter, MD

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**Conversations about Colorectal Cancer**

**Saturday, March 7**
Robert H. Lurie Medical Research Center, Hughes Auditorium

Chair: Mary Mulcahy, MD

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**Pink Zone Basketball Game for Breast Cancer Survivors**

**Saturday, February 8**
Northwestern’s Welsh-Ryan Arena, Evanston

Tickets are free for breast cancer survivors to cheer on the Northwestern University Women’s Basketball team at a game dedicated to raising breast cancer awareness. Tickets for friends and family are $3 each.
Fundraising Events

Life’s a Beach

Wednesday, January 21
Weather Mark Tavern
1503 S. Michigan Ave.

Enjoy a taste of summer at this fundraiser for the Lurie Cancer Center’s Lymphoma Research Program.

Eisenopoly

Friday, January 23
The Walnut Room, Macy’s State Street, 111 N. State St.

The Associate Board of The Harold E. Eisenberg Foundation hosts this Monopoly-themed fundraiser for gastrointestinal cancer research at the Lurie Cancer Center, where the Foundation funds a GI Cancer Tissue Bank.

DANSTOCK Benefit Showcase

Thursday, February 5
Lincoln Hall, 2424 N. Lincoln Ave.

Chicago’s music community is joining together for the 3rd annual concert to benefit melanoma research at the Lurie Cancer Center.

Be My Valentine Family Event

Sunday, February 8
Ritz-Carlton Chicago, 160 E. Pearson St.

The Lynn Sage Cancer Research Foundation’s brunch and morning of family activities raises funds for breast cancer patient care, education and research at Northwestern Medicine and the Lurie Cancer Center.
THROUGHOUT THE YEAR, the Lurie Cancer Center offers professional education on various cancer related topics. Below is a list of programs scheduled through March 2015.

LEARN MORE AND REGISTER AT cancer.northwestern.edu or call 312.695.1391

**Brief Overview of the Person-Centered Assessment Resource**

January 12, 2015  
Robert H. Lurie Medical Research Center, Gray Seminar Room  
Speaker: Susan Yount, PhD

**Genome-wide Approaches to Pharmacogenomic Discovery in Oncology**

January 20, 2015  
Robert H. Lurie Medical Research Center, Baldwin Auditorium  
Speaker: M. Eileen Dolan, PhD  
University of Chicago Cancer Center

**NCCN 2015 Congress Series: Breast Cancer with Updates from the 2014 San Antonio Breast Cancer Symposium**

February 13, 2015  
Prentice Women’s Hospital, Conference Room L  
Chair: William Gradishar, MD

**Illinois Leukemia & Lymphoma Symposium on Hematologic Malignancies**

March 14, 2015  
Robert H. Lurie Medical Research Center  
Chair: Jane Winter, MD

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**Weekly Lectures**

**GRAND ROUNDS**  
Wednesdays: 12:00 p.m. to 1:00 p.m

Sponsored by the Division of Hematology/Oncology, Feinberg School of Medicine and the Lurie Cancer Center. This activity has been approved for 1 AMA PRA Category 1 Credit™

» Schedule at cancer.northwestern.edu/grandrounds

**TUMOR CELL BIOLOGY SEMINARS**  
Thursdays: 1:00 p.m. to 2:00 p.m.

» Schedule at cancer.northwestern.edu/tcb

To receive weekly reminders about Grand Rounds or TCB Seminars please contact Denise Marshall at d-marshall4@northwestern.edu.

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**SAVE THE DATE: JULY 9, 2015**

7th Annual Lurie Cancer Center Symposium  
and the 28th Annual Scientific Poster Session

Robert H. Lurie Medical Research Center
Funding Opportunities

Travel Grants

**Travel Fellowship Awards**

**The Katten Muchin Rosenman Travel Scholarship Program** allows doctoral students and postdoctoral fellows to present the results of their basic cancer research.

**The Center for Genetic Medicine Travel Fellowship** allows doctoral students and postdoctoral fellows to present the results of their basic cancer research showing its genetics relevance.

**The Cancer Prevention Travel Scholarship Program** allows doctoral students and postdoctoral fellows to present the results of their laboratory, clinical, population or behavioral research with implications for cancer prevention.

The next available Travel Fellowship Award application deadline is March 6, 2015.

» Details and application here

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Basic Sciences Research Division

**H Foundation Incentive Awards** provide funding for faculty who have submitted and received a score on a RO1 grant to the NCI for the first time in their career. If additional funds are available, awards will be made to other faculty for new, first-time NCI RO1 submissions, which are scored but not yet funded.

**H Foundation Bridge Awards** provide up to $20,000 of support for competing renewals of NCI-sponsored RO1 research that missed the payline.

Applications for H Foundation Incentive and Bridge Awards are reviewed on a rolling basis and accepted until funds for the year are expended.

» Details and application here

**Lea Charitable Trust Equipment Grants**

Through the generous support of the Lea Charitable Trust, a pool of funds is available to full members of the Lurie Cancer Center affiliated with one of the Basic Sciences Research Programs for use by multiple investigators or to support small equipment grants for collaborative research projects.

**Lea Charitable Trust Equipment Grants** are made on a rolling basis as funds become available.

» Details and application here

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Big Ten Cancer Research Consortium Oncology Trial Concepts

The Big Ten Cancer Research Consortium (BTCRC) is actively seeking concepts for highly translational oncology trials that leverage the scientific and clinical expertise of Big Ten universities. The BTCRC is setting the goal to receive at least one new concept from each institution during 2014.

Once submitted, concepts will be discussed through a clinical trial working group mechanism. These disease-specific working groups are another way to increase collaboration across the BTCRC institutions and provide an opportunity for senior investigators to mentor junior investigators throughout the development of these translational trials.

» Details & application here
Welcome New Members and Staff

Lurie Cancer Center Appoints New Members

David Conroy, PhD, is a Professor of Preventive Medicine at the Feinberg School of Medicine, and also serves as Deputy Director of both the Division of Behavioral Medicine and the Center for Behavior and Health (Institute of Public Health and Medicine). An exercise psychologist, his research involves motivation for physical activity and sedentary behavior and the health and well-being consequences of those behaviors.

Conroy is particularly interested in developing more effective behavioral interventions by enhancing motivational processes that lie outside of people’s awareness (e.g., habits) and the effects of substituting light-intensity physical activity for sedentary time on both patient-centered outcomes and biomarkers of recovery. Conroy has ongoing work evaluating the feasibility of behavioral intervention to promote standing and walking with pancreatic cancer survivors across the treatment continuum from the preoperative prehabilitation to postoperative rehabilitation, and the effects of light-intensity physical activity changes on quality of life in older breast, prostate, and colorectal cancer survivors.

Contact Dr. Conroy at 312.503.4241 or conroy@northwestern.edu

Amanda Saratsis, MD, is an Assistant Professor of Neurological Surgery at Feinberg. She has expertise in the clinical management and molecular biology of pediatric brain tumors, with particular focus on pediatric high-grade and brainstem glioma.

The goal of Saratsis’s research is to develop techniques for tumor subtyping and targeted therapy to improve clinical outcomes for children with brain tumors. Working closely with the neurosurgical and neuro-oncology clinical and research teams at Northwestern University and Ann & Robert H. Lurie Children’s Hospital of Chicago, Saratsis is involved in multiple laboratory studies of pediatric high-grade glioma, and the development of new clinical trials for children with this cancer.

Contact Dr. Saratsis at 312.227.4220 or asaratsis@luriechildrens.org

Keith Tyo, PhD, is an Assistant Professor of Chemical and Biological Engineering at the McCormick School of Engineering and Applied Science. His research is focused on novel biosynthetic routes to anti-cancer drugs and drug-derivatives. Tyo’s lab is pioneering novel approaches to create drug variants by chemically modifying drugs using enzymes. The other focal point of Tyo’s lab is engineering biosensors; their goal is to make low cost, in-home screening for cancer biomarkers.

Tyo is also Co-Director of the Recombinant Protein Production Core (rPPC) which supplies custom purified proteins and antibodies to many Lurie Cancer Center investigators.

Contact Dr. Tyo at 847.868.0319 or k-tyo@northwestern.edu

New Staff

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The Oncology Tag Ontology: Professional-Centered Collaboration and Networking on Twitter

JUST OVER A YEAR ago, the Cancer Tag Ontology (CTO), a set of disease-specific hashtags to help people interested in specific types of cancer connect on Twitter. The CTO tags have been helpful to start curating and sharing health information. Many people and organizations, including the Lurie Cancer Center use them regularly.

Although clinicians and scientists use the CTO hashtags, they are essentially patient-centered. The Oncology Tag Ontology (OTO) was developed by radiation oncologist (and Northwestern University Alumnus), Matthew Katz, MD, in collaboration with colleagues at the NCI and ASCO to organize and network around professional priorities.

View the Oncology Tag Ontology’s list of scientific disciplines and clinical hashtags. Contact Jennifer Bowker at j-bowker@northwestern.edu or 312.695.0502 if you are interested in learning more about using Twitter.

Read more about the OTO

what’s new

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Help Wanted:
Reporters

PLEASE SEND SUGGESTIONS for this newsletter to Jennifer Bowker, j-bowker@northwestern.edu

Lurie Cancer Center Weekly Updates

INFORMATION TO BE CONSIDERED for inclusion in the Lurie Cancer Center’s weekly e-mail updates must be received at least two weeks in advance. Submit suggestions to Denise Marshall at d-marshall4@northwestern.edu.