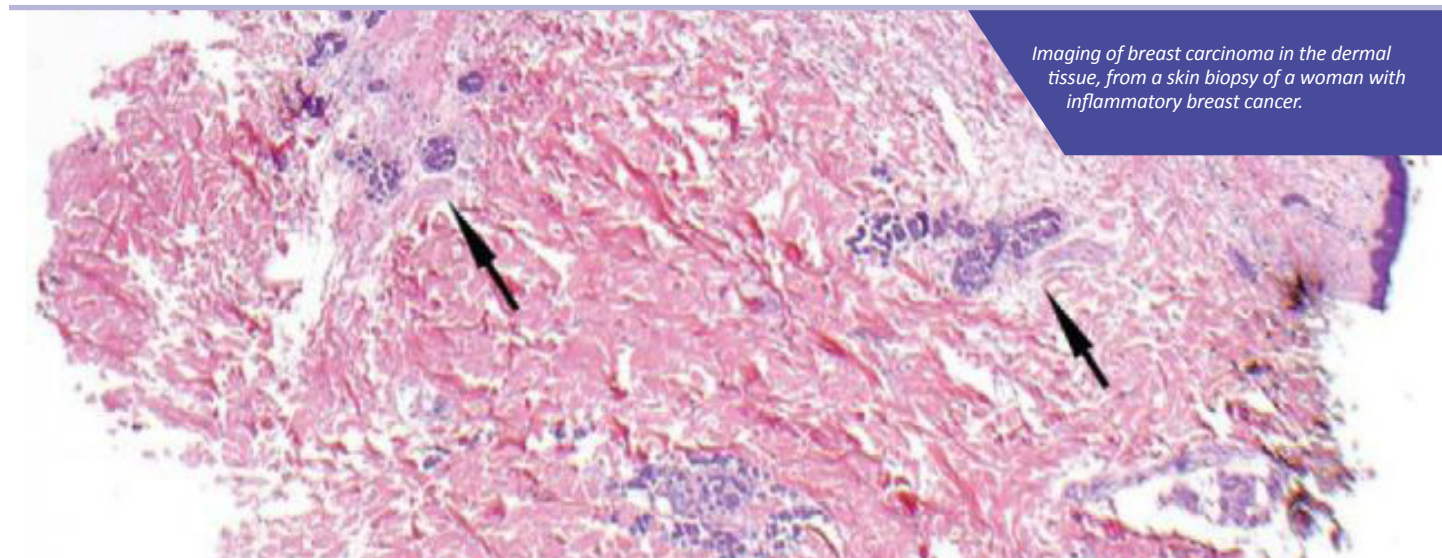


# Breakthroughs

Feinberg School of Medicine Research Office

April 2017



*Imaging of breast carcinoma in the dermal tissue, from a skin biopsy of a woman with inflammatory breast cancer.*

## Pioneering Precision Medicine in Cancer

By Anna Williams

It's a concept that seems simple, but it's poised to transform the field of cancer care and research: All patients, and their cancers, are unique.

It's also an approach that the physicians and scientists at [OncoSET](#), the flagship clinical and research program of the [Robert H. Lurie Comprehensive Cancer Center of Northwestern University](#), take to heart every day.

Launched in 2015, OncoSET is the Lurie Cancer Center's entry into the emerging precision medicine movement. Through an innovative three-step process — Sequence, Evaluate, Treat — the clinic combines oncology with genomic sequencing to provide cutting-edge cancer care personalized for each patient.

"Science and technology are driving big changes in the way we treat cancer, and as the leading cancer center in Chicago, we thought we should bring this to our patients first," said [Leonidas Platanias, MD, PhD](#), director of the Lurie Cancer Center. "I believe very strongly that this is the way medicine will be practiced 10 years from now."

There are multiple advantages to confronting cancer with a

precision approach. In the clinical arena, by identifying the unique features of a patient's tumors, physicians can offer their patients treatment plans that better target specific genetic abnormalities.

But there's also a broader benefit to the OncoSET model: Through its collection and analysis of extensive genomic data, OncoSET informs ongoing cancer drug discovery and helps to advance pre-clinical research taking place at Feinberg and around the world.

"There were a couple of major goals we wanted to accomplish very quickly," said [Massimo Cristofanilli, MD](#), director of OncoSET and associate director for Translational Research and Precision Medicine at the Lurie Cancer Center, who joined Northwestern Medicine in 2015. "One, of course, was to be more precise in treatment planning for patients and establish the clinical service. But at the same time, we wanted to do so in a way that also advances translation and feeds our research purpose."

The OncoSET process begins with a blood draw from a patient for a liquid biopsy (in some cases, a tissue biopsy is available as well). Through its collaborations with commercial partners, OncoSET leverages next-generation genomic sequencing to produce a genomic profile of a patient's tumors and pinpoints changes in specific genes.

## Pioneering Precision Medicine in Cancer

(continued from cover page)

The program's Molecular Tumor Board, co-directed by Cristofanilli and [Amir Behdad, MD](#), assistant professor of [Pathology](#), discusses and analyzes each patient's individual genomic profile, one by one. In this evaluation stage, it's all hands on deck: The multidisciplinary team includes medical, surgical and radiation oncologists, as well as pathologists, molecular scientists, radiologists, bioethicists, pharmacologists and cancer geneticists, among other experts.

With input from scientists across a range of specialties, the board draws up a comprehensive report for each patient, detailing the results of the sequencing and devising an optimal treatment plan. That treatment, based on the molecularly defined targets, might include an available drug or enrollment in an early-stage clinical trial being conducted at Northwestern.

"We've created the first clinic in Chicago — and one of only a few in the country — where it doesn't matter where the tumor is located," explained Platanias, also the Jesse, Sara, Andrew, Abigail, Benjamin and Elizabeth Lurie Professor of Oncology. "What matters now is the composition of the tumor, and the patient's genomic analysis."

Since its inception last year, the Molecular Tumor Board has evaluated the genetic profiles of more than 80 patients, all of whom had advanced disease or cancer that was unresponsive to standard treatment. Not only has the model helped to make a real difference in individual outcomes, but the hope is that data collected through the clinic may eventually serve as the building blocks of tomorrow's cures.

"By doing these gene profiles and analyses of patients, we can bring all that information back to the lab," Platanias explained. "We can try to better understand some of the abnormalities we detect — many of which we still don't know their importance — conduct more studies, develop new drugs and, eventually, bring them back to the clinic."



Massimo Cristofanilli, MD, is the director of OncoSET at the Lurie Cancer Center.

### Demonstrating the Value of a Precision Approach

In just the few years since its launch, OncoSET has also emerged as a national leader in advocating for a precision medicine approach to cancer care and research.

"One important area of success for this program is in educating physicians on the value of this," said Cristofanilli, also a professor of [Medicine](#) in the Division of [Hematology and Oncology](#). "We want to be on the forefront in demonstrating the utility of this model."

Patients at OncoSET have been enrolled in a prospective registry study, and the OncoSET team is also actively working on developing retrospective analyses of treatment outcomes. The team plans to present their findings at major conferences in the next year.

"We coordinate our data with other institutions all over the country," said Platanias, also a professor of Medicine in the Division of Hematology and Oncology, and of [Biochemistry and Molecular Genetics](#). "Eventually, after enough information has accumulated, there will be a tipping point — really a drastic change — in the way we practice oncology."

With this mission in mind, OncoSET will host its first [symposium](#) later this month for physicians and other healthcare professionals. The conference, to be held Friday, April 28, will share significant advances in precision medicine for cancer, emerging technologies and strategies for translating new discoveries into clinical practice.

[Warren Kibbe, PhD](#), director of the Center for Biomedical Informatics and Information Technology at the National Cancer Institute (NCI), will deliver the keynote address. Kibbe, also an adjunct professor of [Preventive Medicine](#) in the Division of [Health and Biomedical Informatics](#), will speak on precision medicine in the age of [NCI MATCH](#) — the institute's major precision medicine clinical trial, launched in 2015 — and the Cancer Moonshot, former Vice President Joe Biden's initiative in search of a cure.

(continued on page 9)

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# Interdisciplinary Approach to Studying Nicotine Addiction

Ryan Drenan, PhD, associate professor of Pharmacology



Studying nicotine addiction and its affects on the brain has led [Ryan Drenan, PhD](#), associate professor of [Pharmacology](#), to uncover new information on nicotine receptors, called receptor nicotinic acetylcholine receptors.

By using a combination of behavioral, electrophysiological and biochemical techniques, he hopes to better understand this receptors' activity and how they are linked to not only addiction, but also neurological diseases such as Parkinson's, schizophrenia and depression.

Before coming to Northwestern in 2016, he was an assistant professor at Purdue University. Drenan earned his PhD from Washington University and completed postdoctoral training at the California Institute of Technology. He is the principal investigator on two National Institutes of Health R01 grants and has published more than 26 peer-reviewed journal articles.

## Q&A

### What are your research interests?

We study how the brain sends and receives signals by examining a particular receptor/neurotransmitter pair. Acetylcholine is an evolutionarily ancient yet crucial transmitter system important for muscle movement, cognitive function, attention, mood/affect and motivated behaviors. We study this transmitter's action, along with the action of nicotine, at nicotinic acetylcholine receptors to gain a better understanding of this important system.

### What is the ultimate goal of your research?

We want to uncover that which is still unknown about the brain. We hope to add to the knowledge base related to our areas of interest, which could lead to better drugs or treatment strategies to treat brain disorders/diseases.

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

We are a very collaborative lab. At Northwestern, we collaborate with the labs of [Yevgenia Kozorovitskiy, PhD](#), in the Department of Neurobiology and [Anis Contractor, PhD](#), (Department of [Physiology](#)) in our studies of the detailed molecular and cellular aspects of cholinergic neurotransmission.

We also collaborate with Alfred George, MD, in Department of [Pharmacology](#) on one of his projects that seeks to understand the molecular basis of a severe neurological disorder of childhood. We have external collaborations with investigators at Janelia Farm Howard Hughes Medical Institute Research Campus, California Institute of Technology and Purdue University.

### How is your research funded?

Our work has been continuously funded by the National Institute on Drug Abuse for the past 11 years. We have also received prior funding from the Brain & Behavior Research Foundation, as well as other public and private organizations.

### Which honors are you most proud of and why?

I'm most proud of the achievements of my students, as it is a joy to see successful careers launched. I've had several great students so far in my career, each of which has been successful at publishing papers and obtaining external recognition through fellowships and other awards/distinctions. I had great support from my graduate and postdoctoral mentors, so I am very happy to pay it forward to my students and postdocs.

### What resources at Northwestern have been helpful for your research?

Northwestern has an unusually large number of talented investigators applying advanced imaging and physiology methods to questions related to brain science. These intellectual resources have been extremely valuable to us as we seek to apply these advanced techniques to our research questions.

[Watch a video](#) about Drenan's research.



# 13th Annual Lewis Landsberg Research Day Winners

## Tripartite Winner

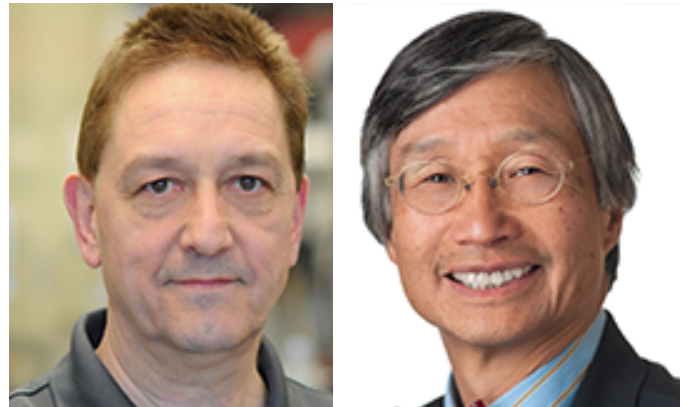


Richard Pope, MD, is the winner of the 2017 Tripartite Legacy Faculty Prize in Translational Science and Education.

[Richard Pope, MD](#), professor of Medicine in the [Division of Rheumatology](#) and the Solovy/Arthritis Research Society Professor, is the winner of the 2017 Tripartite Legacy Faculty Prize in Translational Science and Education. Pope's lab studies the biology of macrophages in rheumatoid arthritis, specifically directed at defining the mechanisms that promote resistance to cell death or apoptosis.

[Watch a video](#) about his award-winning career.

## Mentors of the Year



Claus-Peter Richter, MD, PhD, and Rowland W. Chang, MD, MPH, are recipients of the 2017 Mentor of Year Award.

The Medical Faculty Council honored two faculty members with Mentor of Year Awards. The winners are [Claus-Peter Richter, MD, PhD](#), professor of Otolaryngology – Head and Neck Surgery and [Rowland W. Chang, MD, MPH](#), professor of [Preventive Medicine](#) in the Division of Epidemiology, of Medicine in the Division of Rheumatology, and of [Physical Medicine and Rehabilitation](#).

[Watch a video](#) about Richter's approach to mentoring.

[Watch a video](#) about how Chang mentors others.

## 2017 Research Day Poster Award Recipients

### **Basic Science Research**

- First place: David Barefield, PhD, postdoctoral fellow
- Second: Andrea Piunti, PhD, postdoctoral research fellow
- Third: Patricia Brazee, graduate student

### **Clinical Research**

- First place: Brian Joyce, PhD, postdoctoral fellow
- Second: Jacob Kresovich, PhD, postdoctoral fellow,
- Third: Julianne Ubago, MD, fellow in Pathology

### **Public Health and Social Sciences Research**

- First Place: Lauren Gard, MPH, research project coordinator
- Second: Lindsay Pool, PhD, AHA postdoctoral fellow
- Third: Amy Curtis, MD, resident in Psychiatry and Behavioral Sciences

### **Award for Excellence in Women's Health Research**

#### **Basic Science**

- Deborah Ikkena, MD, MPH, fellow in reproductive endocrinology and infertility

### **Award for Excellence in Women's Health Research**

#### **Clinical, Education or Public Health**

- Luis Blanco, Jr., MD, assistant professor of Pathology

### **Education Research**

- First place: Jackson Herzog, third-year medical student,
- Second: David Salzman, assistant professor
- Third: Celia O'Brien, PhD, instructor of Medical Education, and Marianne Green, MD, senior associate dean for Medical Education

[Read more about this year's winners.](#)

# Investigating the IDH3 Enzyme and Its Role in Glioblastoma

## Jasmine May, Medical Scientist Training Program



Jasmine May, a fifth-year student in the Medical Scientist Training Program (MSTP), studies the pathophysiology of glioblastoma, a grade IV brain tumor, in the laboratory of [Alexander Stegh, PhD](#), assistant professor of [Neurology in the Division of Neuro-Oncology](#) and [Medicine](#).

May earned her undergraduate degree in medicinal chemistry

from the State University of New York at Buffalo. She hopes to someday develop better therapies for patients with glioblastoma.

## Q&A

### Where is your hometown?

I am from Sanborn, New York, in the Erie County area. It is about 30 minutes from Niagara Falls, New York.

### What are your research interests?

My current research interests involve understanding the pathophysiology of glioblastoma, a grade IV brain tumor, which has a terrible prognosis of about 15 months after diagnosis. I am especially interested in understanding the metabolism of these tumors and what proteins are key for driving progression and disease development. I am also interested in the application of nanotechnology for the treatment of such tumors. I think there is great potential in the utilization of nanotechnology to improve current treatment regimens and imaging modalities.

### What exciting projects are you working on?

My current project focuses on an enzyme in the isocitrate dehydrogenase (IDH) family, IDH3. In particular I am interested in understanding the role IDH3 and its subunits play in the progression and vascularization of glioblastoma. A lot of work has been done on the other members, IDH1 and 2, in the setting of glioblastoma and different blood cancers but very little is known about IDH3 outside of the role it plays in the citric acid cycle to produce alpha ketoglutarate. Through a better understanding of the biology of IDH3, we hope to help in the development of better therapies for glioblastoma, while also making sure those therapies do not upset the normal metabolic processes of healthy cells.

### What attracted you to the MD/PhD program?

What attracted me to the program were the students and the administration. When I came to interview at Northwestern all of the students seemed truly happy to be at Northwestern. They also seemed like the type of people I would get along with, which is especially important since you spend seven to eight years in such a program. I also got the sense that the administration does all that it can to support the students during both the medical and graduate phases of their education.

### What has been your best experience at Feinberg?

My best experience at Feinberg has been the MD/PhD program retreats, which happen every summer. These retreats are great for developing better relationships with my fellow students, the MD/PhD administration and the Feinberg faculty, who are invited to attend. It is a time when we get to relax and just get to know each other better without the pressures of school or research.

### How would you describe the faculty at Feinberg?

Many of the faculty at Feinberg are spectacular. All understand the purpose of the school, to train and grow the next generation of researchers and physicians. In turn, the faculty are great mentors and do what they can to see the students succeed.

### What do you do in your free time?

In my free time I like to relax and hang out with my husband, dog and friends. Usually this consists of walking through different Chicago neighborhoods, checking out small businesses and trying new restaurants. That last one is the only thing that gets me to run in the mornings.

### What are your plans for after graduation?

My plans after graduation are to move into a neurology residency position and eventually make my way into neuro-oncology. I would like to have a clinic, see patients with brain tumors, and focus on glioblastoma. I would like for this to be at an academic institution where I would teach and mentor the next generation of physicians and physician-scientists. I also plan to mentor young high school students to increase the number of underrepresented minorities pursuing higher education and professional education. Lastly, I am intrigued by clinical research opportunities and would like to explore this research as a potential translation of the basic science work that I currently do in the lab.

Connect with Jasmine on [LinkedIn](#).

[Watch a video](#) about her research.

# Transforming Healthcare Through Education, Innovation and Scholarship

Elizabeth Wylie, MHA, Executive Director, Northwestern Simulation



Elizabeth Wylie, is the executive director for [Northwestern Simulation](#) and director of operations for the [Department of Medical Education](#).

Northwestern Simulation strives to provide exceptional simulation-based education to improve the cognitive, technical and professional skills of healthcare providers.

## Q&A

### Where are you originally from?

I am originally from Dubuque, Iowa, and have lived in Chicago for five years.

### What is your educational background?

I have a bachelor's degree from the University of Northern Iowa in political science and another in public administration with an emphasis in economics and finance.

I earned my master's in healthcare administration from Tulane University. I really enjoyed my studies in government and public administration but was drawn to the unique challenges and complexities of healthcare.

### Tell us about your professional background.

I worked at the Tulane Cancer Center in clinical operations and special projects for the hospital as a whole while simultaneously doing consulting work for a healthcare firm specializing in transplant and oncology service lines.

After I left New Orleans, I took a position at Cancer Treatment Centers of America on their business development and government relations team. I accepted a position at Northwestern Faculty Foundation as the manager of Hospital Medicine.

My current role at the medical school has allowed me to blend the different components of past positions that I really enjoy – operations, business development and government relations.

### Why did you choose to work at Northwestern?

I really enjoy the academic medical center environment. I think education is so important and working in a collaborative place such as Northwestern, with a mission to further innovation, research and education, is a great fit for me.

### What is your favorite part of the job?

There is a lot of variety in my job from day-to-day. I also enjoy the team-oriented culture within the Department of Medical Education. The collaborative environment allows us to not only work within our department but across the university.

### What exciting projects are you working on?

I'm so excited to work with the university's Office of Government Relations and Alderman Brian Hopkins' office in June to facilitate an outreach event where we will teach CPR in Lakeshore Park to members of the community.

Northwestern Simulation and palliative medicine is also working with the simulation centers across Northwestern Medicine (Lakeforest, Cadence, etc.) to teach skills that help physicians deliver and communicate difficult news.

### What do you like to do in your spare time?

In my spare time I love to travel around the country and internationally, attend vinyasa yoga classes, sail on Lake Michigan and explore different neighborhoods and festivals in Chicago. I am also on the auxiliary board at Lincoln Park Zoo and spend quite a bit of my free time there.

### Anything else we should know about you?

Go 'Cats!

Connect with Elizabeth on [LinkedIn](#).

Follow Northwestern Simulation on [Twitter](#).

# Research in the News

## **Chicago Tribune, March 6**

[Advice for new parents: It's hard to mess up](#)  
Scott Goldstein was quoted.

## **The Washington Post, March 7**

[Arthritis afflicts about 1 in 4 adults in the U.S., CDC report finds](#)  
Rowland Chang was quoted.

► This research was also featured in *Fox News* and *Yahoo!*

## **Crain's Chicago Business, March 9**

[\\$15 million gift will boost Northwestern biomedical research](#)  
Feinberg School of Medicine was mentioned.

## **TIME Magazine, March 9**

[The Sounds of 'pink noise' improves sleep and memory](#)  
Phyllis Zee was quoted.

► This research was also featured in *TODAY*

## **U.S. News & World Report, March 10**

[Heart disease kicks in earlier for obese people](#)  
Sadiya Khan was quoted.

► This research was also featured in *HealthDay*, *The New York Times*

## **Associated Press, March 10**

[Rookie docs can work longer, 24-hour shifts under new rules](#)  
Karl Bilimoria was quoted.

► This research was also featured in *The New York Times*, *The Washington Post*, *ABC News* and *The Chicago Tribune*

## **Chicago Tribune, March 14**

[A playbook for managing problems in the last chapter of your life](#)  
Lee Lindquist was quoted.

## **Chicago Tribune, March 14**

[A positive outlook may be good for your health](#)  
Judith Moskowitz was quoted.

## **Reuters, March 22**

[Prostate, hair loss drugs tied to mental health risk, but not suicide](#)  
Tina Kiguradze and William Temps were quoted.

## **Crain's Chicago Business, March 23**

[Lurie CEO: Race to replace Obamacare putting children at 'grave risk'](#)  
Patrick Magoon was quoted.

Northwestern University

# NUCATS

Clinical and Translational Sciences Institute

## NUCATS Corner

### Learn Latest Trends in Clinical Research

The Enhancing Quality in the Translational Research Workforce Conference provides clinical research professionals with the opportunity to gain knowledge on current trends in their field.

This year, the topics covered will include: e-consents, human subjects projection regulations, using a single IRB for multi-site research and how mobile devices are changing patient engagement.

The speakers are Kristina Borrer, Office of Human Research Protections, and Terri Hinkley, Association of Clinical Research Professionals.

**When:** May 4, 8 a.m. to 3 p.m.

**Where:** Prentice Women's Hospital  
250 E Superior St, Chicago, IL

Five continuing education contact hours are available to attendees. Regular registration closes on April 13. Register online.

## **Chicago Tribune, March 23**

[A third of black women in study of disadvantaged neighborhood have PTSD](#)  
Inger Burnett-Zeigler was quoted.

## **The New York Times, March 29**

[Top heart doctors warn proposed NIH cuts would be catastrophic](#)  
Clyde Yancy was quoted.

## **The New York Times, March 31**

[Meet Evatar: The Lab Model That Mimics the Female Reproductive System](#)  
Teresa Woodruff was quoted.

► This research was also featured in *NPR*, *PBS*, *Fox News* and *HealthDay*

[More media coverage available online.](#)



# Sponsored Research



**PI: James Griffith, PhD, research assistant professor of Medical Social Sciences**

**Sponsor: National Institute on Minority Health and Health Disparities**

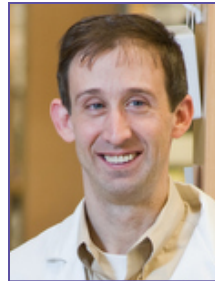
**Title: “Reducing Assessment Barriers for Patients with Low Literacy”**

Health literacy is the degree to which an individual can obtain, process and understand basic health information, which includes the ability to understand written questionnaires. Almost none of the survey instruments being used across the country have been validated for use with people who have low health literacy. This undermines the accuracy of a broad swath of data collected in research and clinical care. Griffith and his co-PI aim to remove health literacy barriers to accurate survey research by:

- Evaluating an important array of commonly used surveys
- Identifying and characterizing survey items that do not work properly for people with low health literacy
- Creating a guide for survey item development and evaluation for different modes of test administration that are most appropriate for people who have low health literacy

Griffith’s team will recruit a large sample of participants across two primary care networks at Northwestern Medicine and Boston University Medical Center.

[Read more about this project.](#)



**PI: John Crispino, PhD, Robert I. Lurie, MD, and Lora S. Lurie Professor of Medicine in the Division of Hematology and Oncology and professor of Biochemistry and Molecular Genetics**

**Sponsor: National Cancer Institute**

**Title: “Mechanisms of Leukemogenesis in Down Syndrome”**

Children with Down syndrome, who have three copies of human chromosome 21, are at a 500-fold increased risk of acute megakaryocytic leukemia and a 20-fold increased risk of B-cell acute lymphoblastic leukemia. In addition, trisomy 21 is associated with several more common class of hematologic malignancies, including hyperdiploid ALL.

Crispino’s team hypothesizes that overexpression of a small number of genes in the Down syndrome critical region directly lead to increased incidence of leukemia.

With a greater knowledge of these genes on human chromosome 21 and the specific events that occur in the evolution of these diseases, improved diagnostics and therapies can be discovered. During a previous funding period, his team made many important discoveries regarding the role of trisomy 21 and GATA1 mutations in these diseases.

In this renewal, they plan to use a combination of animal models and human patient samples to precisely determine the contributions of trisomy 21 to AMKL and ALL, and aid in the development of new, targeted therapies for these disorders.

[Read more about this project.](#)



## Welcome New Faculty

Hassan Ghomrawi, PhD, MPH, joins as associate professor of Surgery and Pediatrics. His area of expertise focuses on the appropriateness, effectiveness and cost-effectiveness of treatment for patients undergoing surgery with particular focus on musculoskeletal and pediatric conditions. Previously, he was an assistant professor of healthcare policy and research at Weill Cornell Medical College. Ghomrawi earned his PhD in Health Services Research, Policy and Administration from the University of Minnesota and his master’s in public health from the American University of Beirut in Lebanon. He is currently the principal investigator on a National Institutes of Health R21 grant looking at the appropriateness of knee replacement. He has published more than 40 peer-reviewed journal articles, some of which appeared in prominent medical journals such as the *New England Journal of Medicine*, *JAMA* and the *Journal of Bone and Joint Surgery*.



## Pioneering Precision Medicine in Cancer

(continued from page 2)

The agenda also features an overview of the OncoSET model by Platanias and Cristofanilli, as well as breakout sessions led by oncologists and investigators at leading cancer institutions across the country, including Feinberg faculty members [Jeffrey Sosman, MD](#), professor of Medicine in Hematology and Oncology; [Xinkun Wang, PhD](#), research associate professor of Biochemistry and Molecular Genetics; and [Dean Tsarwhas, MD](#), health system clinician of Medicine in Hematology and Oncology.

The intention is that the symposium will deepen enthusiasm for precision medicine, spark collaborations between physicians and scientists in the field, and kick off continued innovation in targeted cancer care.

"This process will continuously keep evolving, as the science and technology evolve," Platanias said.

As such, while OncoSET is currently centered on genomics and molecular diagnostics, in the future, new tools like epigenetic analysis, proteomic analysis and metabolomics may also play a role in helping to match patients with the individualized treatment plan that might benefit them most.

"The more we understand in science, the more we will be bringing it back to OncoSET to optimize our analysis," Platanias added. "We think this is the future, and we are moving fast."

## Potocsnak Family Gift



Chicago industrialist John Potocsnak made a transformative gift to Northwestern University Feinberg School of Medicine in support of the Louis A. Simpson and Kimberly K. Querrey Biomedical Research Center. The donation names the new building's lobby atrium the Potocsnak Family Lobby Atrium and a floor of research labs. [Read more.](#)

## Funding

### 2018 Howard Hughes Medical Institute Investigator Competition

[More information](#)

**Sponsor:** Howard Hughes Medical Institute

**Submission deadline:** June 27, 2017

**Upper Amount:** Varies

**Synopsis:** The Howard Hughes Medical Institute (HHMI) seeks to appoint up to 20 new biomedical researchers through a national open competition. HHMI recently increased the standard term for HHMI investigators from five to seven years, providing longer-term, flexible support as these scientists explore new research territory. The initiative represents an investment of approximately \$168 million in basic biomedical research over the next seven years.

### Doris Duke Sickle Cell Disease/Advancing Cures Award

[More information](#)

**Sponsor:** Doris Duke Charitable Foundation

**Submission deadline:** May 25, 2017, 2 p.m.

**Upper Amount:** \$300,000

**Synopsis:** This program aims to support clinical research that will advance gene therapies for sickle cell disease into the clinic, including gene addition and genome editing and build on globin regulatory mechanisms to restore red blood cell function.

### Integration and Validation of Emerging Technologies to Accelerate Cancer Research

[More information](#)

**Sponsor:** National Cancer Institute

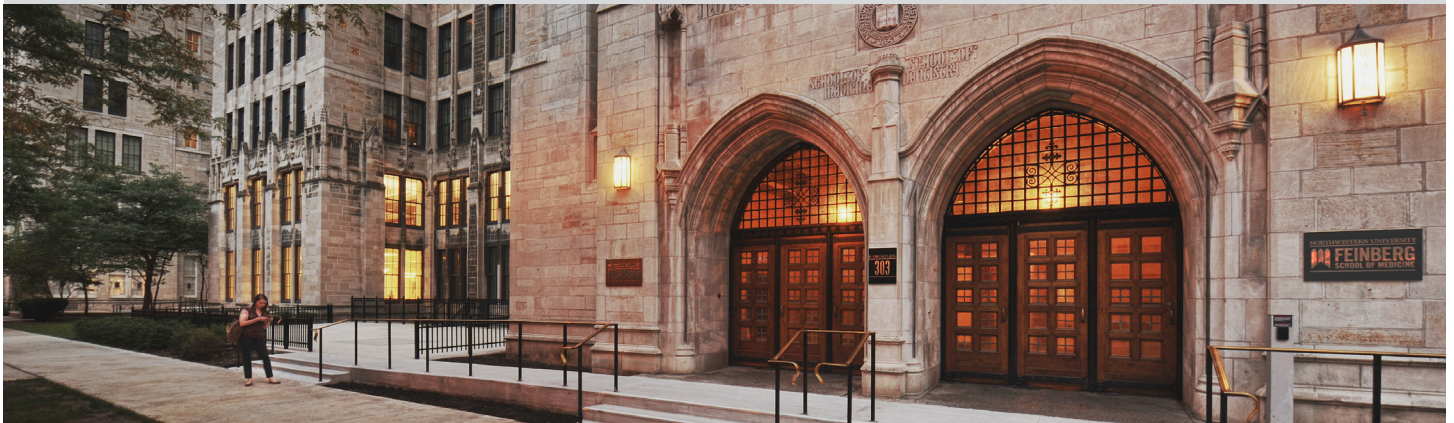
**Submission deadline:** April 10, 2017

**Upper Amount:** \$325,000 per year over a 3-year period

**Synopsis:** This funding opportunity is associated with the Beau Biden Cancer Moonshot Initiative that is intended to accelerate cancer research. The purpose of this opportunity is to promote research on the advanced development and rigorous validation of new enabling technologies/tools/capabilities with a transformative potential for cancer research and clinical oncology

[View more funding opportunities](#)

# Evaluating New Journals: Are They Legitimate or Predatory?



By Karen Gutzman

The mere presence of predatory journals preying on unsuspecting authors and not following best practices in scholarly publishing is enough to make any author cautious. In response, there are several resources to help authors separate legitimate journals from their predatory counterparts. Often these resources ask a series of questions about the journal to uncover any red flags of predatory publishing practices. They urge users to determine if they've ever heard of the journal, look for the journal to be indexed in established databases, search for the journal or publisher's membership in a recognized trade association and find important journal-level metrics such as the impact factor.

While this advice is incredibly helpful, it can unintentionally disadvantage new, legitimate journals. In order to understand why this is, it's important to recognize the timeframe needed for a new journal to be indexed in established databases, to accumulate journal-level metrics or gain membership in a trade association.

Inclusion in the exclusive [MEDLINE Journal](#) list, which makes up the backbone of PubMed, is controlled by the Literature Selection Technical Review Committee (LSTRC) which sets forth [stringent criteria for review](#). LSTRC requires new journals to demonstrate quality in content, editorial work and production. In addition, online journals need to be accessible for at least 12 months and have published at least 40 articles before a MEDLINE application can be submitted.

New journals applying for inclusion in PubMed Central, the full text partner to PubMed, [undergo review](#) by the Operations Division of the National Library of Medicine. This review generally requires new journals to have a two-year history of quality publications including at least 25 articles before an application can be submitted.

Elsevier's [Scopus](#) and Clarivate Analytics' [Web of Science](#) also have review processes for accepting new journals in their databases. Most importantly, new journals need to be indexed by these databases to receive legitimate journal-level metrics such as the [Impact Factor](#) and [CiteScore](#). Web of Science requires new journals to submit three consecutive

current issues. They review over 3,500 journal applications each year, accepting only 10 percent of those submitted.

Trade associations such as the [Committee on Publication Ethics](#) (COPE) or the [Association of American Publishers](#) (AAP) have rigorous membership application processes and usually require that new journals or publishers have been publishing for at least a year before they can apply to become members.

These processes aren't quick or easy, but new journals should take these steps seriously. Getting indexed in one or more of the literature databases means increasing the visibility and dissemination of their publications. Gaining membership in a trade association means increasing confidence in the quality of their content.

If you're interested in publishing in a newly established journal, there are still plenty of options for a conscientious review. The website [Think. Check. Submit.](#) suggests answering the following questions:

- Is the publisher's name, telephone, email and mailing address clearly displayed on the journal website?
- Is the journal clear about the type of peer review it uses?
- Is it clear which types of fees are charged and what those fees are for?
- Do you recognize the editorial board and do the members mention their work on the board on personal websites or online profile systems (such as VIVO, LinkedIn)?
- If the publisher has been in operation for more than a year, does it have membership in a recognized industry initiative such as COPE, AAP or other trade association, or are they listed in the [Directory of Open Access Journals](#)?

For more information on this topic, read the World Association of Medical Editors' recent post on "[Identifying Predatory or Pseudo-journals](#)." And if you need more assistance, contact the [Metrics and Impact Core](#) at Galter Library to learn more about the metrics available for evaluating the quality of journals.

# High Impact Factor Research

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



# Calendar

## Tuesday, April 11

### The Pyromaniac Inside You

**Andreas J. Baumler, PhD, University of California Davis, will present in this Microbiology-Immunology Seminar Series.**

**Time:** Noon to 1:00 p.m.

**Location:** Robert H. Lurie Medical Research Center  
Baldwin Auditorium  
303 E. Superior, Chicago

**Contact:** [h-seifert@northwestern.edu](mailto:h-seifert@northwestern.edu)  
[More information](#)

## Friday, April 14

### Developing Mismatch Repair Deficiency as a Predictive Biomarker of Immunotherapy

**Dung Le, MD, associate professor, Medical Oncology, Sidney Kimmel Cancer Center, Johns Hopkins University, will present.**

**Time:** 8 a.m. to 9 a.m.

**Location:** Robert H. Lurie Medical Research Center  
Searle Conference Room  
303 E. Superior, Chicago

**Contact:** [cancer@northwestern.edu](mailto:cancer@northwestern.edu)  
[More information](#)

## Friday, April 21

### Re-establishing Coordinated Cell Fate Decision-Making in Disease Using Small Molecules

**Lawrence Lum, PhD, associate professor and director of basic science, Harold C Simmons Comprehensive Cancer Center, University of Texas Southwestern Medical Center, will present.**

**Time:** 10 a.m. to 11:00 a.m.

**Location:** Robert H Lurie Medical Research Center  
Searle Conference Room  
303 E. Superior, Chicago

**Contact:** [kmsbarnes@northwestern.edu](mailto:kmsbarnes@northwestern.edu)  
[More information](#)

## NIH News

### NIH Regional Seminars

More than 65 National Institutes of Health and Health and Human Services review, program, grants and policy officials will be sharing their expertise during this year's NIH Regional Seminars on Program Funding and Grants Administration.

If you are new to the NIH grants process and related policies, or train those who are at your institution, don't miss your opportunity to participate in one of these unique and informative seminars.

New Orleans, Louisiana  
May 3 to 5

[Registration is open](#)

Baltimore, Maryland  
October 25 to 27  
Save the date, registration will open later this spring

### NIH Director Meets EVATAR



EVATAR is a female reproductive tract that fits in the palm of one's hand, created in the lab of [Teresa Woodruff, PhD](#), director of the Women's Health Research Institute and chief of [Reproductive Science in Medicine](#) in the Department of [Obstetrics and Gynecology](#).

Woodruff gave NIH Director Francis Collins an up-close look at the new 3-D technology. [Read more](#) about the project.

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