

Breakthroughs

Feinberg School of Medicine Research Office

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Two new findings made in Northwestern labs are the basis of clinical trials at Northwestern Medicine and the Lurie Cancer Center.



Making a Mark in Translational Medicine

For the scientists, physicians and research staff at Northwestern, breakthroughs made in the laboratory are only just the beginning. Feinberg — and the University more broadly — is increasingly focused on ensuring that exciting discoveries made by basic scientists are also soon turned into treatments that impact human health.

“At every level, you want to see that the fundamental research that is being done in the University is having an impact on society,” said [Jay Walsh, PhD](#), vice president for Research at Northwestern. “In particular within the biomedical sphere, the goal is to have research translate out of the laboratory and improve the quality of life for patients.”

Translational medicine, as the discipline is called, is not a new idea. But the current emphasis on expediting scientific discoveries from bench to bedside has become increasingly important to research institutions, policymakers and healthcare systems across the country. Today, Northwestern is at the forefront of that movement.

“Translational research has always been present. What’s different now is the speed with which discoveries are being made in the laboratory and the ability to translate those discoveries into actual treatments, especially at Northwestern,”

said [Lewis Smith, MD](#), associate vice president for Research as well as a professor of [Medicine](#) in the Division of [Pulmonary and Critical Care](#). “There are outstanding people, terrific facilities and a variety of resources here that are instrumental in enabling investigators to do this translation work that is so important to those of us who take care of patients. It’s an exciting time.”

Bridging the Gap Between Bench and Bedside

From drugs to medical devices, diagnostics and materials, there are more than 100 novel discoveries made across the University that are currently in various stages of translation to the public.

But at Feinberg in particular, two clinical drug trials are now underway that stand out as unique examples of Northwestern’s commitment to translational research.

Earlier this year, Northwestern Medicine and the [Robert H. Lurie Comprehensive Cancer Center of Northwestern University](#) launched an [early-stage clinical trial](#) for a novel spherical nucleic acid drug that targets glioblastoma, a deadly brain cancer with no cure and a median survival of just 15 months.

It is the first time in the history of the University that a drug that began as an initial concept in the lab was carried through pre-clinical research, FDA approval and into clinical trials, all within Northwestern.

Translational Medicine

(continued from cover page)

(Richard Silverman, PhD, the John Evans Professor of Chemistry in the Weinberg College of Arts and Sciences, discovered a chemical compound, pregabalin, that was developed into the best-selling drug, Lyrica by Pfizer, Inc. Northwestern University had the rights to a portion of the royalties on the sale of the drug. The University ultimately sold most of those rights, realizing a gain of hundreds of millions of dollars in the process.)

“This is very rare, to say the least,” Walsh said. “In most cases, you need to go outside the university for the expertise that is needed to do this. In this case, we had the necessary components here, and had the vision and expertise to relatively rapidly move this drug forward.”

The drug, NU-0129, is the result of a collaboration between the laboratories of [Alexander Stegh, PhD](#), assistant professor of [Neurology](#) in the Division of [Neuro-oncology](#) and of [Medicine](#), and [Chad Mirkin, PhD](#), the George B. Rathmann Professor of Chemistry in the Weinberg College of Arts and Sciences, a professor of [Medicine](#) in the Division of [Hematology and Oncology](#) and director of Northwestern’s International Institute for Nanotechnology ([IIN](#)).

The drug leverages spherical nucleic acids — a novel drug platform invented by Mirkin that’s capable of crossing the blood-brain barrier in animals — to target the gene BCL2L12, which Stegh and colleagues first discovered in 2007 to be overexpressed in glioblastoma.

The phase 0 trial for NU-0129, led by [Priya Kumthekar, MD, ’11, ’12 GME](#), assistant professor of [Neurology](#) in the Division of [Neuro-oncology](#) and of [Medicine](#) in the Division of [Hematology and Oncology](#), will investigate whether the drug is also capable of reaching brain tumors in humans.

A multidisciplinary team of more than 40 people and 25 different offices across the University was instrumental in submitting the Investigational New Drug (IND) application to the FDA.

“Building the infrastructure to do this is not inconsequential — it’s significant resources and time — which is why this is so unusual for a university to do,” said [Ann Adams, JD](#), associate vice president of Research, who oversaw the regulatory process. “But we believed that if we were going to improve lives, then we needed to step in and support this phase 0 trial. Because if we didn’t, there would be no opportunity to ever see if this could be a potential cure, or at least increase survival rates of people suffering with glioblastoma. And that’s really the highest example of how a university can contribute to society.”

The Future of Translational Research

With the infrastructure in place after NU-0129, the opportunity opened up to take a similar route with a second discovery at Northwestern.

This spring, a novel [neural stem cell therapy](#) to treat malignant glioma became only the second time the University has supported and filed an investigator new drug as a sponsor. The drug, which works with a common cold virus to seek out and attack cancerous cells in the brain, was developed by [Maciej \(Matt\) Lesniak, MD](#), the Michael J. Marchese Professor and chair of [Neurological Surgery](#). The pre-clinical research began while Lesniak was at the University of Chicago and was completed here at Northwestern. The drug is now in phase I clinical trials at Northwestern Medicine and the Lurie Cancer Center, of which Lesniak, Kumthekar, Mirkin and Stegh are also members.



Maciej (Matt) Lesniak, MD

While the drugs are in very early testing — and there is no guarantee that either brain tumor therapy will be clinically effective — both trials are exciting advancements for research at Northwestern.

“The reality is that this route did not exist before, and we took it as an opportunity to further build out the suite of things that Northwestern can do,” said Walsh, adding that translational research in itself is often advantageous to overall discovery. “One of the things about translation is that you learn basic science as well — and that allows you to feed that information back into the research operation and further refine research, which eventually will lead to translation again.”

Staff around the University are now assessing putting more infrastructure in place around the pipeline of potential drug discovery projects, in the event that similar opportunities arise to shuttle much-needed therapies from bench to bedside.

“It’s overwhelming when you think of the years and years of research that occurred, and all the work that we’ve done,” Adams said. “But to be able to change somebody’s life, either now or in the future, for a patient population that does not currently have a lot of options — that’s incredible. That’s why we are here. It really makes you proud to be part of a world-class research institution.”

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Advancing Discovery Through Cutting-Edge Genomic Technologies

Xinkun Wang, PhD, director of the NUSeq Core Facility at the Center for Genetic Medicine



[Xinkun Wang, PhD](#), serves as director of the [NUSeq Core Facility](#), where he supports the research of scientists throughout the medical school with the latest genomic technologies, including next-generation sequencing. Along with his leadership role at the Core, he is also an investigator, with a personal research focus on neurodegenerative diseases, especially Alzheimer's Disease.

Wang, also a research associate professor of [Biochemistry and Molecular Genetics](#), joined Northwestern in the fall of 2015.

Q&A

What are your research interests?

As director of the NUSeq Core Facility, my research and technological interests are in the implementation of state-of-the-art genome technologies to unravel the complexity of biological systems.

Life science research and biomedical practice are becoming increasingly driven by high-throughput DNA technologies that enable us to examine the entire blueprint of life. Next-generation sequencing (NGS) has the most profound impact among these technologies so far, and it is the major technology driving precision medicine. Since its first appearance a decade ago, NGS has generated oceans of data that collectively challenge even the most advanced computer system available.

Besides implementing NGS and other genome technologies, my interest is also in extracting biological knowledge from genome data to contribute to the understanding of biological systems and human diseases. Specifically, my research interest over the last decade is in neurogenomics, i.e., applying NGS and other technologies to study the human brain in terms of how brain gene networks change in the aging process, and how that change might underlie the development of degenerative diseases such as Alzheimer's disease.

What is the ultimate goal of the NUSeq Core?

My goal as director is to grow NUSeq into a state-of-the-art research facility that brings world-class genome research infrastructure to Northwestern investigators, and thereby support the mission of producing innovative, pioneering research as a leading university.

The ultimate goal of NUSeq is to serve as a launchpad to catapult Northwestern into an international leader in genome research and technology development. Since its establishment less than two years ago, NUSeq has quickly grown into a major provider of genomics technologies to investigators at Northwestern and other institutions in the Chicago area, as well as across the country. We actively pursue the most recent and emerging technologies to ensure the investigators we support have the best technology possible.

How does NUSeq Core advance medical science and knowledge?

The medical field is moving in the direction of personalized and preventive medicine. NGS and sequencing data mining play a central role in this endeavor. Situated at the technology forefront of genome sequencing, including data analysis, NUSeq advances medical science by providing expert support and high-end instrumentation to genetic/genomic research conducted at the medical school, the university and other institutions. These advancements span the entire spectrum of medical research, from cancer, cardiovascular disease, diabetes, infectious diseases, to neurodegenerative diseases.

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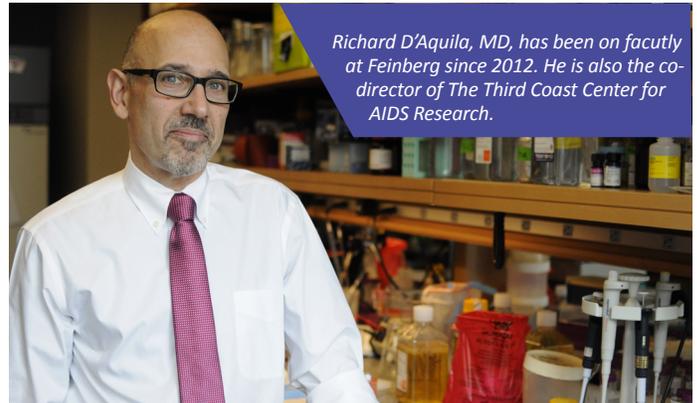
New Associate Director of NUCATS Named

[Richard D'Aquila, MD](#), professor of Medicine in the Division of Infectious Diseases, has been named Associate Director of NUCATS and leader of NUCATS' Center for Clinical Research (CCR). D'Aquila will continue to grow and build CCR, which last year served more than 200 investigators and provided support to approximately 800 studies. He will be taking over for [Lewis Smith, MD](#), who has been the director of CCR since it was organized in 2012. Smith is retiring this year.

"We are extremely excited to have Dr. D'Aquila join the NUCATS team, as director of the Center for Clinical Research," said [Donald Lloyd-Jones, MD](#), director of NUCATS. "His long experience in clinical trials and leadership in the Third Coast Center for AIDS Research will be critical as we position our clinical research enterprise for the future, when we will need to perform clinical studies much more rapidly and efficiently, and with the highest quality. He will be filling huge shoes following the incredible leadership of Dr. Lew Smith."

D'Aquila has worked for more than 25 years on improving therapy for HIV and has extensive experience with clinical trials and translational research.

"I am so impressed with the world-class research infrastructure that Lew and his great team in the Center for Clinical Research have built," said D'Aquila. "The dynamic growth of CCR in recent years speaks volumes about Lew's team and also about our vibrant community at Feinberg. I am privileged to pick up the ball from Lew and excited about helping our investigators translate discoveries into practice that will benefit patients throughout Chicagoland."



Richard D'Aquila, MD, has been on faculty at Feinberg since 2012. He is also the co-director of The Third Coast Center for AIDS Research.

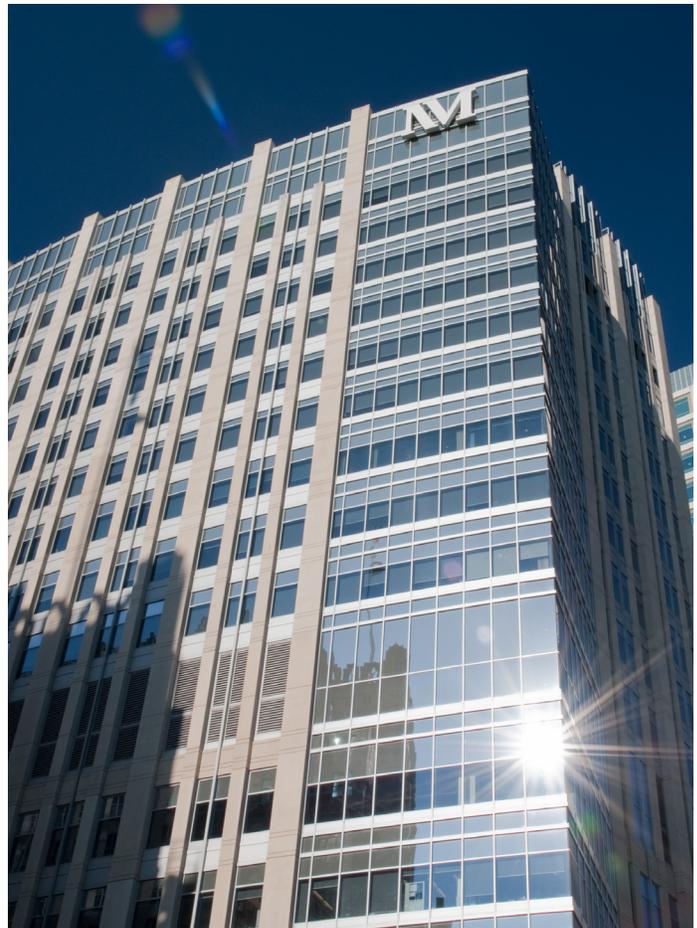
Partner Hospitals Rank High

Three [Northwestern Medicine](#) hospitals have been recognized by *U.S. News & World Report* in its 2017-18 [Best Hospitals](#) rankings.

[Northwestern Memorial Hospital](#) was once again recognized as one of the top hospitals in the country, ranking 13th on the prestigious [Best Hospitals Honor Roll](#). Northwestern Memorial remains ranked 1st in both the Chicago Metro Region and Illinois for the sixth consecutive year. [Northwestern Medicine Central DuPage Hospital](#) was ranked 5th in both the Chicago Metro Region and Illinois. [Northwestern Medicine Lake Forest Hospital](#) was ranked 18th in the Chicago Metro Region and 23rd in Illinois.

Meanwhile, the [Shirley Ryan AbilityLab](#) (previously known as the Rehabilitation Institute of Chicago) continues to be recognized as the national leader in physical medicine and rehabilitation, topping the *U.S. News* list for 27 consecutive years. The AbilityLab is the only hospital of its kind to hold this distinction.

Earlier this summer, *U.S. News* ranked [Ann & Robert H. Lurie Children's Hospital of Chicago](#) the top children's hospital in Illinois and the 7th best children's hospital in the country. Lurie Children's is also the only Illinois children's hospital named to the Honor Roll, which recognizes children's hospitals with exceptional performance in at least three specialties.



Patterns of Depression and Cardiovascular Health Outcomes

Allison Carroll, Clinical Psychology PhD Program



Allison Carroll, a sixth-year student in the Clinical Psychology PhD Program, studies the association between smoking and depressive symptoms in relation to cardiovascular health in the laboratory of [Brian Hitsman, PhD](#), associate professor of [Preventive Medicine](#) and [Psychiatry and Behavioral Sciences](#).

Carroll earned her undergraduate degrees in biopsychology and Spanish from Monmouth College in Monmouth, Ill. and completed a post-baccalaureate program at the National Institute on Drug Abuse in Baltimore, MD.

She is currently completing her clinical internship at Medical University of South Carolina in Charleston, SC.

Q&A

Where is your hometown?

I was born and raised in Iowa City, Iowa.

What are your research interests?

Throughout graduate school, I have worked on a range of clinical and public health projects related to tobacco use in high-risk populations. I've become particularly interested in how comorbid health conditions and risk factors may synergistically (rather than additively) cause poor cardiovascular outcomes.

For example, we see synergistic associations between concurrent cigarette smoking and depressive symptoms with increased risk for cardiovascular disease. Although these single, bidirectional relationships are well established, few studies have looked at the synergistic effects of multiple risk conditions with cardiovascular outcomes.

What exciting projects are you working on?

I am using the Coronary Artery Risk Development in Young Adults (CARDIA) dataset to examine the relationship between patterns of depression over time and longitudinal cardiovascular health outcomes and how that relationship

is influenced by different patterns of smoking. I am also using a clinical trial of smoking cessation among adults with lifetime major depression to determine whether cardiovascular health can be improved by a short-term, targeted intervention for these two prominent risk factors for cardiovascular disease. Understanding these complex relationships will provide insight into the timing and content of interventions for high-risk individuals.

What attracted you to the PhD program?

I was really drawn to the program at Feinberg because it is housed in an academic medical center, which is really unique for a clinical psychology program. This setting offered me myriad research and clinical opportunities that I would not have had access to in another program. But I also have to admit that another large draw was Feinberg's location in Chicago and being back in the Midwest.

What has been your best experience at Feinberg?

More than a singular best experience, my overall experience at Feinberg has been great because of the variety of exposures and opportunities I have had for both research and clinical experiences.

For example, I took a trip to England to visit another research lab, I have learned a number of useful data analytic techniques for large, longitudinal datasets, and I have worked on clinical trials from start to finish. Clinically, I have had opportunities to work in both inpatient and outpatient settings, I have worked as a therapist on clinical research studies, and I have been exposed to and trained in a variety of evidence-based treatments.

What are your plans after graduation?

After graduation, I hope to obtain a research post-doctoral fellowship that will prepare me to be a health psychologist in an academic medical center. I would like to continue my line of research developing and evaluating treatments for psychological and behavioral conditions among patients with medical illnesses.

I hope to have a clinic within the hospital as well, most likely in either oncology or cardiology. In addition, I plan to mentor and teach psychology and train up-and-coming health professionals.

Connect with Allison on [LinkedIn](#).

Providing Financial Support for Research Awards

Brent Smith, Senior Financial Administrator, Research Administration Services



Brent Smith is a senior financial administrator in the Office for Research Administration Services. Smith is responsible for managing a team of financial administrators and managing the financial process once a scientist receives a grant or award.

Tell us about your professional background.

Prior to working for Northwestern, I worked at a large financial services company that brought me to Chicago. After years of working in the corporate world, I was looking for a place that valued more than just the bottom line. It is rewarding working with a world-class institution that highly values education and research. Great things happen at Northwestern. and I am excited to be part of it.

How do you help scientists at the medical school?

We provide post-award financial administration to principle investigators. We assist them with financial planning on their projects with the goal of reducing administrative burden, so they can focus on their research.

What is your favorite part of the job?

My favorite part of the job is collaborating with colleagues and faculty. The structure of Research Administration Services allows me to interact with many different departments, so I am always meeting new people. I also enjoy leading a great team of financial administrators. I could not ask for a better team!

What do you like to do in your spare time?

I love just about any outdoor activity such as hiking, biking and swimming. I also recently started playing tennis.

Connect with Brent on [LinkedIn](#).

Q&A

Where are you originally from?

I grew up in Pittsburgh and have lived in Chicago for about six years.

What is your educational background?

I studied finance with minors in economics and French at the University of Pittsburgh.



Welcome New Faculty

Kristen Knutson, PhD, joins as an associate professor of Neurology in the Division of Sleep Medicine and associate professor of Preventive Medicine. Her area of expertise focuses on the association between sleep, circadian rhythms and cardio metabolic diseases such as hypertension and diabetes. Previously, she was an assistant professor of Pulmonary/Critical Care in the Department of Medicine at the University of Chicago. Knutson earned her PhD from the University at Albany, SUNY, and completed her post-doctoral training in Endocrinology at the University of Chicago. She has published more than 40 journal articles and is currently a co-investigator on a number of National Institutes of Health grants.

Research in the News

USA Today, July 11

[Eating placenta pills could harm your baby](#)

Crystal Tennille Clark was quoted.

U.S. News & World Report, July 11

[Health Buzz: Purpose in Life Associated with a Better Night's Sleep, Study Says](#)

Jason Ong was quoted.

Reuters, July 12

[Panel backs heart counseling for some healthy people](#)

Phillip Greenland was quoted.

U.S. News & World Report, July 17

[Do You Really Need to Exercise to Lose Weight?](#)

Micah Eimer was quoted.

Reuters, July 19

[Drop in repeat hospitalizations not linked to higher death rates](#)

Karl Bilimoria was quoted.

Reuters, July 24

[Many treatment options, most experimental, available to John McCain](#)

Maciej Lesniak was quoted.

► This research was also featured in *U.S. News & World Report* and *The New York Times*.

The New York Times, July 24

[A Sensor on Your Skin That Looks and Feels Like a Temporary Tattoo](#)

John Rogers was quoted.

Associated Press, July 24

[No dye: Cancer patients' gray hair darkened on immune drugs](#)

June Robinson was quoted.

► This research was also featured in *The New York Times* and *The Washington Post*.

HealthDay, July 25

[Is the 'Anti-Statins' Trend Threatening Lives?](#)

Donald Lloyd-Jones was quoted.

[More media coverage available online.](#)

Northwestern University

NUCATS

Clinical and Translational Sciences Institute

NUCATS Corner

Help Get Your Research to Market

[The Center for Translational Innovation \(CTI\)](#), a NUCATS and [INVO](#) partnership, can foster your biomedical innovation and entrepreneurial activity with cross-campus collaborations, funding opportunities and services to help evaluate the commercial potential of your research. In addition to commercialization support and intellectual property procurement, CTI offers the following new services to accelerate commercialization:

INVOHu: a new incubator initiative spearheaded by INVO that builds on the University's mission of achieving excellence in research-driven innovation by accelerating translation of its rich research portfolio to the public.

INVOForward: a new Northwestern mentorship program to accelerate biomedical commercialization, such as medical devices, therapeutics and health IT.

NewCures: a Northwestern initiative that focuses on accelerating biomedical research from early discovery stages to more advanced clinical stages or commercialization for the benefit of the patients.

N.XT: a gap fund designed to promote early stage technologies to the next stages of commercialization.

INVOReach: an INVO initiative that focuses on developing resources to help improve the diversity of inventors and entrepreneurship at Northwestern. To receive updates on INVOReach, join the [email list](#).

Help Feinberg Track Journals

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

Sponsored Research



PI: David Mohr, PhD, Director, Center for Behavioral Intervention Technologies and professor of Preventive Medicine, Medical Social Sciences and Psychiatry and Behavioral Sciences

Sponsor: National Institute of Mental Health

Title: “LifeSense: Transforming Behavioral Assessment of Depression Using Personal Sensing Technology”

Mohr’s project proposes to develop a sensing platform that uses mobile phone sensor data to detect a broad range of behaviors related to depression, as well as detect and predict depressive states that require treatment. This system will be able to run unobtrusively and continuously on people’s phones. This sensing platform will provide a fundamentally new method of obtaining continuous, objective markers of behavior that are relevant to depression, as well as many other psychiatric and medical disorders.

His team plans to enroll 1,200 representative participants, in six four-month waves of data collection. Following each wave, Mohr’s team will develop algorithms for a subset of behavioral targets. Each algorithm will then be validated in the subsequent wave. After five waves (1,000 participants), the set of all markers of behavioral targets and features will be combined using machine learning to detect and predict depression.

[Read more about this project.](#)

Topping-Off Ceremony

Earlier this summer, a ceremonial steel support beam was set in place atop the Louis A. Simpson and Kimberly K. Querrey Biomedical Research Center during a “topping-off” ceremony on campus. The ceremony marked a major milestone in the construction of the 14-story, 600,000-square-foot building, which will significantly expand the medical school’s research enterprise.

At the event, Northwestern benefactors, medical school faculty and staff, and leaders from Northwestern Memorial Healthcare and Ann & Robert H. Lurie Children’s Hospital of Chicago signed the steel beam before it was hoisted above Superior Street. After the beam was raised, a lunch followed for both event attendees and more than 200 construction team members on the project. The building is on track to be completed in late 2018.



PI: Melissa Brown, PhD, professor of Microbiology-Immunology

Sponsor: National Institute of Allergy and Infectious Diseases

Title: “Distinct Mast Cell Responses in Male and Female SJL Mice Underlie Sex Dimorphic EAE Susceptibility”

Women are three to four times more likely to develop autoimmune disease, but the basis of this sex-bias is not known. Brown’s previous studies using a mouse model of multiple sclerosis, an autoimmune disease that results from immune destruction of nerve insulating structures, show differences in the activity of Group 2 innate lymphoid cells (ILC2s), cells that suppress immune destruction in males but not females. This application will determine the basis of this sex-determined action of ILC2s.

Brown’s team proposes that mast cell activation in immunized male mice elicits production of ILC2 activating factors such as IL-33 that promote ILC2 functionality. The inability to generate a robust IL-33 response in females leads to a functional deficit in ILC2 activity. Mast cells (c-kit+ FcεR1+) are one important source of IL-33 in vivo and testosterone directly induces IL33 exclusively in male-derived cells, despite equivalent androgen receptor expression by female-derived mast cells. These data suggest a cellular and molecular target of testosterone and identify a potential mechanism of action for testosterone-mediated protection in CNS autoimmune disease.

[Read more about this project.](#)



View a [slideshow of photos from the topping-off celebration.](#)

Cutting-Edge Genomic Technologies

(continued from page 3)

How is NUSeq funded?

NUSeq is largely funded through cost recovery from technologies we provide to research groups who are supported by external funds, such as those from the National Institutes of Health. Institutional support is also essential for NUSeq's operation. This comes from the [Center for Genetic Medicine](#), the medical school and Northwestern's Office for Research. Moreover, philanthropic donations are an integral part of our support system, as acquiring, maintaining and updating high-end genome research instrumentation require heavy investment and a multifaceted funding model.

Who makes up your research team and what role does each individual play in your research?

NUSeq has two major components: data production and bioinformatics. Data production is conducted by a group of highly skilled, committed genome technology specialists: Alan Aalsburg, Ibrahim Musaitif, Kara Pivarski and Shuangni Yang. Bioinformatics is carried out by [Matthew Schipma, PhD](#), associate director of NUSeq, and Ryan Embry, who are experienced informaticians with a great understanding of biology. In addition, Ashley Limón handles finance, researcher/vendor communications and team logistics. Undergraduate and graduate students are also part of the team as interns or part-time employees. This summer, we have two Northwestern undergraduate interns, Keldon Lin and Kevin Yu.

What resources at Northwestern have been helpful for NUSeq?

NUSeq relies on resources provided by multiple units inside Northwestern. NUSeq was established by the Center for Genetic Medicine under the directorship of [Elizabeth McNally, MD, PhD](#). The Center for Genetic Medicine provides account management, personnel hiring and communications support for the Core. Feinberg's Research Core Planning Office, directed by [Jeff Weiss, PhD](#), provides operation subsidies and support on multiple fronts. The University's Office for Research Core Facilities Administration, under the leadership of [Phil Hockberger, PhD](#), and Andrew Ott, has provided internal resources for equipment acquisition, organized core manager group mentoring and the core management certificate program. Last but not least, the [Robert H. Lurie Comprehensive Cancer Center of Northwestern University](#) provides access to the Center's [OncoSET](#) Precision Medicine Program, which is a great resource for NUSeq to obtain CLIA (Clinical Laboratory Improvement Amendments) accreditation for clinical sequencing in the future.

Funding

Collaborative Computational Tools for the Human Cell Atlas

[More information](#)

Sponsors: The Chan Zuckerberg Initiative

Submission deadline: August 28

Upper Amount: To be determined

Synopsis: The Chan Zuckerberg Initiative invites applications to develop computational tools, algorithms, visualizations, and benchmark datasets in support of the Human Cell Atlas. Participants in this project will collaborate with each other and with Chan Zuckerberg Initiative scientists and engineers to accelerate progress, facilitate communication, and maximize open dissemination of the resulting tools.

Pharmacogenomics of Anti-retroviral Therapy in People Who Inject Drugs (R01)

[More information](#)

Sponsor: National Institute on Drug Abuse

Submission deadline: December 14

Upper Amount: \$2M

Synopsis: This initiative will use genome sequencing strategies and genome wide association methods to identify genetic variants affecting the pharmacokinetics, pharmacodynamics and HIV treatment toxicities in people who inject drugs.

Specialized Center of Research Program

[More information](#)

Sponsor: Leukemia & Lymphoma Society

Submission deadline: September 22

Upper Amount: \$1M per year for five years

Synopsis: This program is intended to bring together established investigators from one or several institutions to develop a focused research program, foster new interactions and cooperation, and enhance interdisciplinary research among the participants. The overall goal of this mechanism is to enhance the development of innovative strategies for the treatment, diagnosis or prevention of hematological malignancies.

[View more funding opportunities](#)

Four Ways DigitalHub Can Work For Your Lab



[DigitalHub](#), Northwestern Medicine's institutional repository, can help open your work to larger audiences, archive important milestones in your research and monitor interest in your work. Find out more below.

Archive your milestones

Keeping track of your achievements, reviewing past and present laboratory protocols and quickly making items available to colleagues at other institutions is as easy as creating a collection of items in DigitalHub. Laboratory websites work well for currently used materials, but for long-term archiving, the DigitalHub is a great solution. Also consider archiving materials from seminars, workshops, conferences and other events that lab members have participated in to create custom collections for your lab.

Increase the discoverability of your work with

Every item uploaded to DigitalHub is ripe for description; there are more than 25 metadata fields available to better define and describe your items. Google tracks this metadata for purposes of discoverability, so that items in DigitalHub show up in Google searches. If you are concerned about applying the best metadata to your items, our metadata librarian can help.

NIH progress reports made easier

Non-journal articles will find a good home in DigitalHub, where they are assigned a DOI, or digital object identifier: unique codes to better identify and retrieve documents online. These DOIs are necessary for creating "interim" products in your NCBI MyBibliography, which can then be linked to your NIH progress report.

Housing research data

Whether you want to share your data openly or your publisher requires you to find a host for your supplementary materials, DigitalHub is a great option. Your data will receive a DOI and a usable citation, so your work can be properly cited. If you plan to upload data files greater than two gigabytes, please contact the Galter Health Sciences Library & Learning Center for assistance. Data that includes Protected Health Information will not be accepted.

If you have any questions about [DigitalHub](#) and how it can work for your lab, please contact your Galter Library [Liaison Librarian](#) or [email DigitalHub](#).

High Impact Factor Research

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Calendar

Thursday, August 17

CLP Core Expo

The expo features 8 core facilities and 3 centers of excellence and is hosted by the Chemistry of Life Processes Institute.

Time: 11:00 a.m. to 1:00 p.m.

Location: Robert H Lurie Medical Research Center, Atrium, 303 E. Superior

Contact: tiffany.ozmina@northwestern.edu

[More information](#)

Monday, August 21

Walking toward better hip osteoarthritis outcomes

Kharma Foucher, MD, PhD, assistant professor, Kinesiology and Nutrition, University of Illinois-Chicago will speak as part of the Shirley Ryan AbilityLab Research Seminar Series.

Time: Noon to 1 p.m.

Location: Shirley Ryan AbilityLab, Sky Lobby Auditorium, 10th floor, 355 E. Erie, Chicago

[More information](#)

Friday, August 25

Friday Research Conference

Michiko Oyoshi, PhD, Harvard Boston Children's Hospital, will present.

Time: Noon to 1 p.m.

Location: Prentice Women's Hospital, 3rd Floor, Canning Auditorium, 250 E. Superior, Chicago

Contact: justin.phillips@northwestern.edu

[More information](#)

NIH News

Video: Evidence-Based Funding Keynote

How can the NIH further the impact of its research funding? That was the topic of a keynote talk given by Michael Lauer, MD, NIH Deputy Director for Extramural Research, this spring at the NIH Regional Seminar in New Orleans Louisiana.

[Watch a video](#) to find out how Lauer sees the role of NIH in encouraging and supporting biomedical and behavioral research across the globe.

TV Series Goes Inside the NIH Clinical Center

First in Human, a three-part docuseries, is airing on the Discovery Channel this month. It provides an unprecedented look inside the NIH Clinical Center, the world's largest hospital dedicated to clinical research.

The series follows four of the many brave patients who've volunteered to take part in the clinical trials that are so essential to medical breakthroughs.

NIH director Francis Collins hopes the series will inspire more patients to take part in clinical research. [Watch a preview.](#)

Mobile Recruiting Effort for All of Us

The All of Us research program, supported by the NIH, has embarked on a 37-week national tour, with a mobile traveling exhibit, which will actively engage community members to join this landmark research project.

The mobile education unit is scheduled to stop in Chicago Sept. 11 to Sept. 24. [Philip Greenland, MD](#), the Harry W. Dingman Professor of Cardiology and director of the Center for Population Health Sciences, is the principal investigator of the Illinois Precision Medicine Consortium, one of a number of consortiums across the country that aims to enroll All of Us study participants.

[Read more](#) about the upcoming tour and [recruiting process](#) at Northwestern.

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