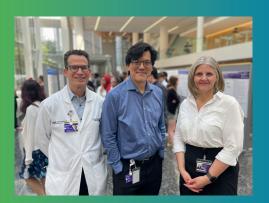


Clinical and Translational Sciences Institute













### **IMPACT REPORT** 2025-26

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## TRANSLATIONAL SCIENCE IN FOCUS: IMPROVING, INNOVATING, IMPLEMENTING

As we embark on the latest chapter of our journey as a Clinical and Translational Science Award (CTSA) Hub, the NUCATS Institute is poised to advance translational science through a renewed focus on continual Improvement, Innovation, and Implementation.

**Improvement** fuels our commitment to reimagine how we catalyze and accelerate translational science. Through dynamic clinical partnerships across disciplines, NUCATS is leveraging the expertise of clinical and translational researchers, data scientists, engineers, academic clinicians, and community collaborators to develop the translational workforce of the next generation. These efforts ensure that novel insights from multiple perspectives are efficiently translated into real-world solutions that improve health and healthcare outcomes for all.

Innovation drives us to harness cutting-edge methods to transform ideas into impactful interventions. By supporting entrepreneurial investigators and expanding regulatory, recruitment and retention, research ethics, implementation science, data science, and other resources/expertise, NUCATS continues to bridge discovery to bold and rigorous translational research. Our inventive approaches are designed to accelerate new, generalizable solutions and interventions for the most pressing health challenges.

Implementation ensures those innovations reach everyone who could benefit. NUCATS is infusing implementation science throughout the translational continuum, transforming evidence-based research into sustainable improvements in clinical practice to improve population health. Our nationally leading expertise in dissemination and implementation science allows us to optimize scaling up at every stage of translation — from early discovery to clinical and community impact — maximizing impact for all.

Our team has also matured and grown synergies across our components and constituencies over the prior year, demonstrating resilience. As we reflect on our accomplishments and look ahead, NUCATS remains dedicated to evaluating and optimizing our efforts to keep pace with an ever-evolving scientific landscape. The improvements, innovation, and implementation that define our work will continue to shape a healthier future for all.

On the cover, clockwise from top left:

Kristi Holmes, PhD, David Liebovitz, MD, left, and Allan Wu, MD, welcomed an audience of more than 100 to the launch of a new campus-wide initiative that will continue to bring together experts and highlight the broad range of scientific efforts underway at Northwestern. The inaugural informatics and data science event, co-hosted by NUCATS and the Institute for Artificial Intelligence in Medicine, featured a dynamic poster session that fostered dialogue and created space for learning and new collaborations.

K12 Scholar Kevin McNerney, MD, delivered a TED-style Eureka Talk in Downtown Chicago. The annual event is a collaboration of Chicago's three Clinical and Translational Science Award hubs — The NUCATS Institute, ITM, and CCTS. Participants are equipped with the skills and knowledge to effectively and confidently present their science to nonexpert audiences in various settings, such as a formal public lecture.

Co-led by Lesli Skolarus, MD, and community principal investigator Tonya Roberson, ACROSS is a successful research project comprised of community and academic partners that sought to develop simple, personalized interventions so stroke outcomes could be optimized in the context of people's life situations.

Priya Kumthekar, MD, joined our Science in Translation podcast to discuss how she is helping to streamline the commercialization process with the Chicago Biomedical Consortium Hub for Innovative Technology and Entrepreneurship in the Sciences.

Pediatric cancer research is met with significant challenges: they are rare and remain among the most difficult to treat, with survival rates for high-risk cases largely unchanged for decades. Thanks to the 2025 Joseph & Dorothy Giddan Child Health Research Award, Kyle MacQuarrie, MD, PhD, will work to change that.

The 2025 Community-Engaged Research Conference — held every summer as an opportunity for those working in Chicago communities to meet and discuss ongoing research — welcomed keynote speaker Joel Rodriguez, center, pictured with Tarneka Manning, left, and Remi Love.



Richard D'Aquila NUCATS Institute MPI Sara Becker NUCATS Institute MPI Clyde Yancy NUCATS Institute MPI

Roger Anderson Director, Marketing & Communications Nicole Woitowich Executive Director

Amelia Bucek
Director of Evaluation
Mao Soulakis
Galter Research Impact Specialist

Photo Attributions Eileen Molony, Roger Anderson, Cory Cooper

## 520K

SINCE LAUNCHING IN 2008, NUCATS HAS SUPPORTED **RESEARCH PAPERS**, WHICH HAVE BEEN CITED 520,801 TIMES



SAMUEL VOLCHENBOUM, ITM

9,048

SINCE LAUNCHING IN 2008, NUCATS HAS SUPPORTED MORE THAN 9,000 RESEARCH PAPERS



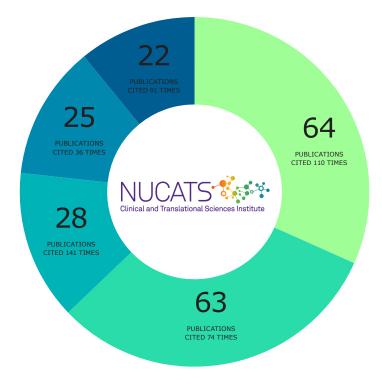
K12 SCHOLARS VIDHI DALAL, TIMOTHY JANETOS, AND KEITH SUMMA

500+

MORE THAN 500
PUBLICATIONS
WERE SUPPORTED
BY NUCATS IN
FISCAL YEAR 2025

44%

44% OF NUCATS
PUBLICATIONS IN
FY25 RANKED IN THE
50TH PERCENTILE OR
ABOVE FOR CITATION
IMPACT IN THEIR
SUBJECT AREA



NEUROSCIENCE, CLINICAL NEUROLOGY,
MOLECULAR BIOLOGY, PEDIATRICS, AND
CELL BIOLOGY WERE THE MOST-POPULAR
SUBJECT AREAS PUBLISHED BY
NUCATS-SUPPORTED INVESTIGATORS IN FY25.
THESE 200-PLUS PUBLICATIONS WERE CITED
MORE THAN 450 TIMES

86

NUCATS SUPPORTED
RESEARCH WAS
CITED IN 86
DIFFERENT NATIONS,
INCLUDING CHINA,
AUSTRALIA, BRAZIL,
ENGLAND, AND
FRANCE

1,567

IN THE PAST YEAR, NUCATS SUPPORTED 538 RESEARCH PAPERS, WHICH HAVE BEEN CITED 1,567 TIMES BY ACADEMIC

1,567 TIMES BY ACADEMIC
AND POLICY EXPERTS
AROUND THE WORLD



### CHANGING THE WAY WE TALK ABOUT SCIENCE

"Traditional scientific communication often relies on rigid formats — introduction, methods, results, discussion — that don't resonate outside of our scientific disciplines. As a result, many scientists struggle to engage effectively with broader audiences," says Nicole Woitowich, PhD, executive director of the NUCATS Institute and a research associate professor in the Department of Medical Social Sciences who specializes in science communications. "This lack of bidirectional communication creates space for misinformation to thrive. By improving how we share our work, we can help bridge that gap."

Rodrigo Braga, PhD, pictured above, credits the Art of Science Communication instruction with helping him better understand how using lay language can help to better promote his research.



"I now realize how helpful it is to take the time to carefully select understandable terms, phrases, and analogies to describe a research project in an engaging way before communicating with the press and public," says Braga, assistant professor of Neurology.

The Art of Science Communication is an eight-week online course that provides scientists at all career stages with fundamental training in science communication. The goal of the course is to equip participants with the skills and knowledge to effectively and confidently present their science to nonexpert audiences in various settings.

### RECRUITMENT, RETENTION, ETHICS CONSULTS LAUNCH

The Institute launched new programs to increase the capacity of investigators and study teams to conduct and communicate clinical and

translational science that is ethical, generalizable, innovative, and rigorous through expert consultation and trainings. A Recruitment and Retention consultation service co-led by Kathryn Macapagal,



PhD, and Andrés Alvarado Avila, launched in June, and conducted nearly five consultations per month.

Recognizing the importance of the ethical conduct of research, and the centrality of

the principle of justice in research ethics, NUCATS enhanced its dedicated Clinical Research Ethics Consultation service co-directed by Seema Shah, JD, and Irene Blanco, MD.



### INAUGURAL COMMUNITY RESEARCH FELLOWS NAMED

The Alliance for Research with Chicagoland Communities (ARCC) announced the first cohort of Chicagoland Community Research Fellows — a transformative program designed to deepen community leaders' ability to engage in community-driven research partnerships.

This 18-month fellowship supports community-based leaders and their organizations in building capacity to shape research that reflects their lived experiences and drives meaningful change in the communities they serve. Each member of the inaugural cohort brings a powerful vision and deep community roots. The fellows are: Edith Freeze, founder/director of the Pachacamak Foundation; Ann Jackson founder/executive director of the Center for Food Equity in Medicine; Maryam Muhammad, founder/executive director of the Heal Thy Life Center; and Reyna Ortiz, program director of the Taskforce Prevention and Community Services.

858

NEARLY 900 PEOPLE SUBMITTED A SERVICE REQUEST VIA OUR MASTER INTAKE FORM

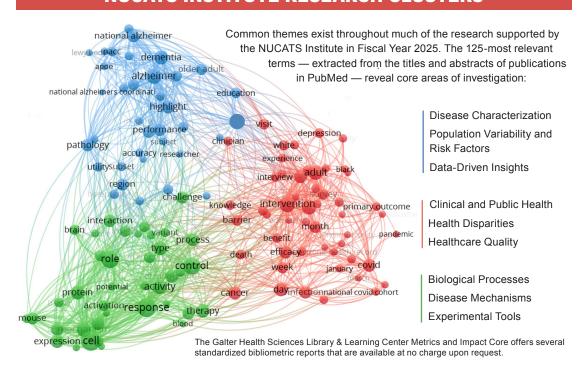


**ARCC LEARNING EXCHANGE** 

40

NUCATS LEADERS
SERVE ON MORE THAN
40 NCATS SPECIAL
INTEREST GROUPS
AND COMMITTEES

### NUCATS INSTITUTE RESEARCH CLUSTERS



### **NUCATS INSTITUTE CONTINUES TO IMPROVE, INNOVATE, IMPLEMENT TRANSLATIONAL SCIENCE INITIATIVES**

A new mandate for all CTSA hubs now requires improving "translational science," an often difficult to understand concept for many in the CTSA hub workforce and their constituents across the university and its clinical affiliates.

During a one-day summit marking the start of the NUCATS Institute's second year of UM1 funding, the ongoing challenges facing all CTSA hubs took center stage during a dynamic keynote presentation. The day-long event accomplished many things.

"As we head into the second year of our seven-year grant, it's important that we take the time to come together — in person, as a team,"

says Nicole Woitowich, PhD, NUCATS executive director and research associate professor of Medical Social Sciences. "Gathering at the start of the year gave us the space to reflect, align on priorities, and ensure we remain responsive to the evolving nature of our work."

Following opening remarks from NUCATS multiple principal Sara Becker, PhD, and Clyde Yancy, MD, MSc, the annual meeting revisited successes from the past year, while also looking ahead at how the institute will improve, innovate, and implement translational science initiatives at Northwestern over the next 12 months



"The value of the Hub Liaison Team is tremendous, especially from the perspective of making connections with aspiring individuals in Northwestern Medicine who aren't downtown."

Michael Ellis, PT, DPT

Professor of Physical Therapy and Human Movement Sciences





Gathering at the start of the year gives us the space to reflect, align on priorities, and ensure we remain responsive to the evolving nature of our work."

Nicole Woitowich, PhD **NUCATS Executive Director** 



**SHARON ROSENBERG** 

# ILLUMINATING THE COMPLEXITIES OF RESEARCH

With nearly 200 professionals in clinical and translational research in attendance, this year's annual Enhancing Quality in the Translational Research Workforce Conference created space to discuss the oftencomplex environments where research takes place.

The conference is a longstanding collaboration between NUCATS, ITM, and CCTS, and is led by Northwestern University Feinberg School of Medicine's Sharon Rosenberg, MD. Rosenberg works alongside an advisory board tasked with developing an annual conference agenda that aims to engage the larger medical community while simultaneously providing breakout sessions to connect in smaller settings.

"Unique challenges and a changing landscape created a more intense focus on building and maintaining our research community this year," says Rosenberg. "The EQuaTR Conference thrives because it appeals to the robust Chicagoland community with targeted goals to enhance knowledge, network, and foster discussion among research professionals."

372K

MORE THAN 372,000
PEOPLE PARTICIPATED IN
RESEARCH STUDIES AT
FEINBERG LAST YEAR

### IMPROVING INFORMED CONSENT COMPREHENSION IN VISUAL WAYS

Mohammad Hosseini, PhD; Anju Peters, MD; Brady Daitch, an MPH student; and a team of Northwestern Medicine investigators recently began developing a library of visual icons to support research participant comprehension of informed consent forms (ICFs).

"Informed consent is a fundamental ethical process that provides individuals with comprehensive information about a study before they agree to participate," says Peters. "In talking with colleagues, we felt that some study participants did not fully comprehend the informed consent process and research has shown that sometimes key terms and used methods are not well understood."



MOHAMMAD HOSSEINI

The team's initial pilot was launched to assist research teams in designing more comprehensible ICFs to promote participants' understanding of their rights, roles, and responsibilities. By addressing communication barriers in ICFs, the project promotes research participation, fosters the principle of autonomy in clinical research, and enhances trust in science.

"Our focus on enhancing ICFs aims at improving the accessibility and ethics in clinical research," says Hosseini. "Efforts will be made to expand the library for various contexts, create more awareness among research teams, and focus on innovative strategies to improve consent comprehension."

### NITRO OFFICE HOURS LAUNCHED TO SUPPORT ACADEMIC INNOVATORS

The NUCATS Institute and Innovation and New Ventures Office (INVO) launched NUCATS & INVO Translational Research Office Hour (NITRO) Talks to support academic innovators across the Northwestern ecosystem. Held in a hybrid format, eight monthly sessions were held in 2025.

"We've been pleasantly surprised that the NITRO hours have attracted scientists from

numerous departments, across all levels (faculty, staff, trainees) at the University," says INVO Director Lisa Dhar. "The sessions provide an open forum for anyone to bring their questions and learn about topics related to entrepreneurship in an informal setting. We've been able to increase awareness, interact with new researchers thinking about commercializing their science, and provide additional resources and support to those who ask."



**BRANDON APPLEWHITE, T32** 

7,000

MORE THAN 7,000
CLINICAL TRIALS
TOOK PLACE AT
FEINBERG IN FY2025

### WORKFORCE DEVELOPMENT BUILDS ON STRENGTHS

The NUCATS institute continues to create new workforce development initiatives to train and cultivate clinical research professionals (CRP). Our Academy for Workforce Education launched with in-person events and an online community. A pair of new Communities of Practice now help support cross-disciplinary collaboration and best practices. The Clinical Research Professional Community of Practice added more than 225 members in year one. The Health Informatics and Data Science Collaborative kicked off with a poster session in July that was attended by more than 100 scientists.

"The event was a great opportunity to break down some of the silos that exist between departments and disciplines, and I met so many people who practice informatics or data science that I had not interacted with before," says Luke Rasmussen, a



**LUKE RASMUSSEN** 

senior clinical research associate at NUCATS and the Institute for Artificial Intelligence in Medicine.



To help early-stage investigators (ESI) navigate the clinical research landscape, NUCATS launched the ESI Academy. All early-career faculty and postdoctoral fellows are welcome and registration is free and includes

access to monthly 1-hour virtual presentations by prestigious investigators.

## REAL-TIME INSIGHTS IN DATA MANAGEMENT

Last fiscal year, the Northwestern Medicine Clinical Research Unit received more than 2,500 visits across approximately 250 studies within eight service lines. Gaining a comprehensive understanding of workflows required careful planning and collaboration to enact changes without disrupting services.

Enterprise Data Warehouse Analyst Diogo Costa conducted a data management project to improve: standardization by implementing uniform data collection for all eight service lines; automation by reducing manual labor with data extraction from EPIC into key reports; and accessibility by creating live visual dashboards available at all times for key data metrics.

"Streamlining data management minimizes manual labor and ensures timely reporting," says Costa. "These enhancements enable better analysis of data and trends, leading to informed decision-making and optimized resource allocation."



Led by senior study author and KL2 alumnus **Sadiya Khan, MD, MSc**, a first-of-its-kind online calculator uses percentiles to help younger adults forecast and understand their risk of a heart event over 30 years.

### SCHOLARS, TRAINEES CONTINUE TO THRIVE

The NUCATS Institute takes great pride in the remarkable achievements of its career development award alumni — a community of scholars and trainees whose dedication to advancing clinical and translational science continues to shape the future of human health. Over the past year, many of our career award alumni have published in peer-reviewed journals, achieved funding success, and attained academic promotions.

Monica Bianco, MD, assistant professor of Pediatrics in the Division of Endocrinology, was recently awarded a

nearly \$1-million NIH K23 to continue developing an early life prediction risk score for impaired glucose tolerance/youth onset type 2 diabetes.

Carol Haywood, PhD, OTR/L, is exploring Disability-Competent Diabetes Care with a new American Diabetes Association Pilot Award.

Among other achievements in 2025, Colleen Peyton, DPT, MSCI, was named associate professor; Anna Pfenniger, MD, PhD,



**MONICA BIANCO** 



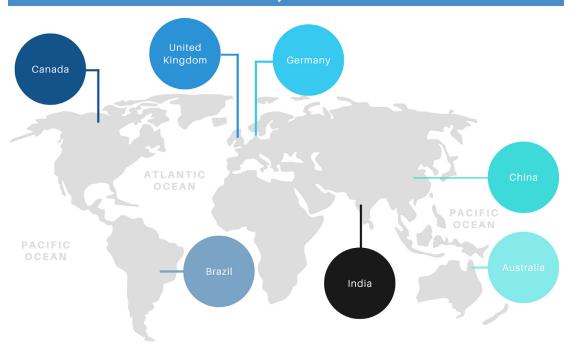
**CAROL HAYWOOD** 

received significant industry-sponsored funding; Allison Letkiewicz, PhD, received a Ken and Ruth Davee Award for Innovative Investigations; Lisa Van Wagner, MD, was appointed director of the internal medicine clinical scientist training program at UTSW; Muriel Jean Jaques, MD, MPP, is now division chief for Academic Internal Medicine and Geriatrics at the UIC College of Medicine; James Elliott, PT, PhD, published his first book, "(dis)Connected;" and Alan Zhou, MD, is to become Chief of Medical Dermatology.



NUCATS Institute Arthur J. Rubloff Building 750 North Lake Shore Drive, 11th Floor Chicago, IL 60611

### **NUCATS MEMBERS CITED 1,567 TIMES IN 86 COUNTRIES**



NUCATS members continue to make a global impact, collaborating with investigators from 44 countries in FY 2025. During the past year, institute-supported research discoveries received 1,567 citations. Those citations occurred in 10 different languages by individuals residing in 86 nations.

### **BAUTISTA NAMED CRU MANAGER**

In fall 2025, the NUCATS Institute named Angelyque Bautista as the new Northwestern Medicine Clinical

Research Unit Manager.
Bautista is a seasoned clinical trials leader and current PhD candidate with more than a decade of experience in pediatrics, neurology, neurosurgery, ophthalmology, and epilepsy research.



ANGELYQUE BAUTISTA

"I'm absolutely thrilled at the opportunity to join the CRU at Northwestern University," says Bautista. "This role feels especially meaningful as it marks a wonderful

homecoming to Chicago after being

away for the past five years. I'm eager to contribute my experience to such a respected hospital and research

enterprise in my hometown "

Bautista holds a master's degree in clinical psychology with a family and children concentration from Roosevelt University and serves on the board of directors for the Pediatric

Epilepsy Research Consortium. Her professional background includes leadership in research administration, regulatory compliance, and program development across major academic and healthcare institutions

## SCIENCE IN TRANSLATION

NUCATS hosts Science in Translation, a podcast featuring scientists who are dedicated to accelerating how fast they can move a transformational finding in a lab into a treatment, cure, or solution to improve human health.

