OFFICE OF TECHNOLOGY COMMERCIALIZATION

Transfer *to* Transform

Guiding Ideas to Solutions | 2026

NATIONWIDE CHILDREN'S®

INTRODUCING NEIL VELOSO, VICE PRESIDENT FOR INNOVATION AND TECHNOLOGY COMMERCIALIZATION

Neil Veloso has been named the new vice president for Innovation and Technology Commercialization, overseeing the Office of Technology Commercialization and the Innovation Center at Nationwide Children's Hospital.

As an accomplished technology commercialization executive with more than 20 years of experience, Neil has a remarkable track record in startup creation, strategic partnerships and intellectual property licensing. He has guided significant inventions in life sciences, pharmaceuticals, diagnostics and medical devices at some of the nation's most renowned research institutions, including Johns Hopkins University and the Cleveland Clinic.

Neil will oversee enterprise-wide activities that support innovation and commercialization, collaborating with other institutional leaders, industry partners, local and state political and economic development resources and the venture capital community to identify and develop opportunities for a broad range of advancements in pediatric health care and research.

MESSAGE FROM LEADERSHIP: MAKING OUR MARK

At Nationwide Children's Hospital, we are deeply committed to translating cutting-edge research into real-world solutions that benefit children and families. Over the years, we have fostered a vibrant ecosystem where our clinicians, researchers and industry partners work together to bring breakthrough technologies from the laboratory, and bedside, to the marketplace. This collaboration accelerates the development of novel treatments, devices and therapies, ensuring that they reach the patients who need them the most.

Our technology commercialization activities are a key pillar of this mission. By identifying high-potential innovations and forging strategic partnerships with industry leaders, we aim to make Nationwide Children's Hospital the partner of choice for investors, entrepreneurs and executives. Through our dedicated Office of Technology Commercialization team, we manage intellectual property, drive commercialization efforts and support entrepreneurs and startups through the complex journey of bringing their innovations to fruition.

We believe that the future of pediatric care hinges on fostering a strong culture of innovation, collaboration and shared purpose. In the evolving health care landscape, we are excited about the opportunities ahead and are eager to expand our impact through commercialization. As you read the following pages of this report, our hope is to convey the commitment that Nationwide Children's Hospital has made to impact the lives of children everywhere through its innovation efforts. I am truly honored to be a part of this team and humbled daily by the amazing individuals that drive our commercialization engine.

Neil Veloso

Vice President of Innovation and Technology Commercialization
Nationwide Children's Hospital

LEADERSHIP

Learn more about our team:

Margaret Barkett, PhD, *Director of Licensing of the Office of Technology Commercialization*

Margaret.Barkett@NationwideChildrens.org | (614) 355-2957

Margaret Barkett, PhD, became part of Nationwide Children's in 2010. She played a key role in negotiating the agreements that paved the way for the hospital's first gene therapy startups. Today, Dr. Barkett leads the OTC's licensing operations, guiding a cohesive team of licensing professionals, agreements specialists and an alliance manager. In addition to these duties, she served as Interim Director from March 2025-February 2026.

Susannah Wolman, *Operations and Business Manager*

Susannah.Wolman@NationwideChildrens.org | (614) 355-2818

Susannah Wolman joined Nationwide Children's in 2016. She manages the team of professionals who handle disclosures, federal reporting and other reporting efforts, intellectual property, marketing efforts, events, internal and external gap funding and the financial transactions of the office.

OFFICE OF TECHNOLOGY COMMERCIALIZATION TEAM

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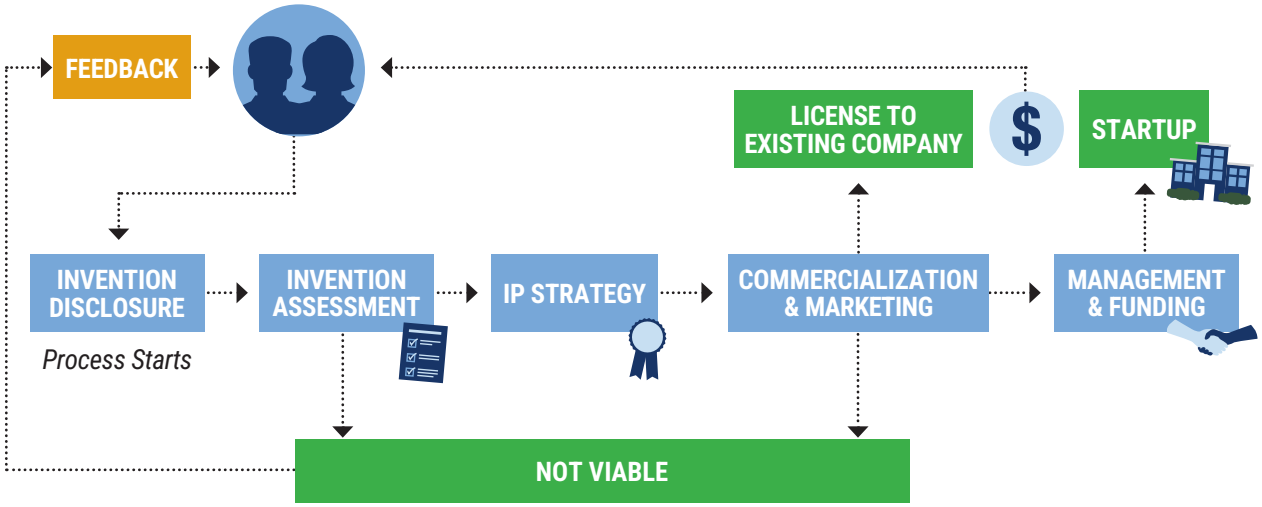
OUR MISSION: GUIDING IDEAS TO SOLUTIONS

The Office of Technology Commercialization at Nationwide Children's facilitates the partnering of innovative technology and translational infrastructure with industry to benefit patient care, our community and the general public.

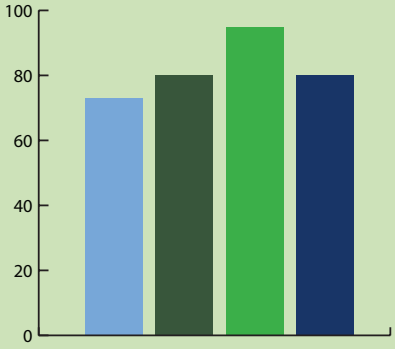
OUR PROCESS



The Nationwide Children's Office of Technology Commercialization offers expertise in technology transfer, facilitating partnerships between inventors and industry to bring discoveries to patients, clinicians and scientists around the world. Our resourceful team guides inventors and partners through complex processes with creative solutions.

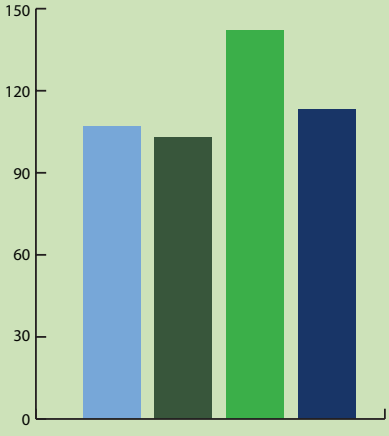
OUR OUTPUT DATA

DISCLOSURES

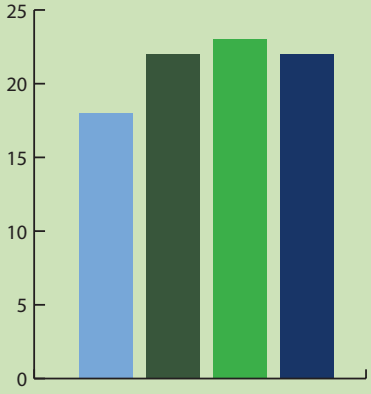


CONTRIBUTORS

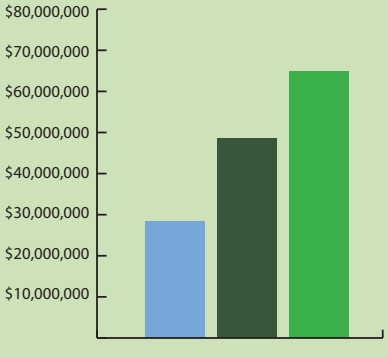
A contributor is any Nationwide Children's faculty or staff member who submitted one or more invention disclosures.



NEW DEALS

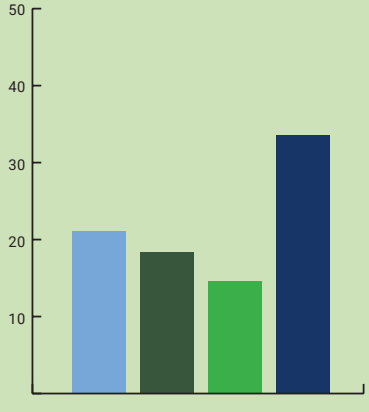


TOTAL REVENUE*

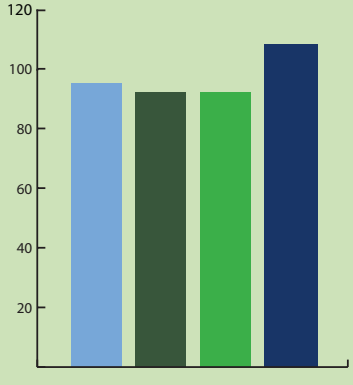


**2025 revenue unavailable at time of print.*

U.S. PATENTS ISSUED



U.S. PATENT APPLICATIONS FILED*



**Per AUTM definitions, Patent Cooperation Treaties are included in these metrics.*

2025 INNOVATOR OF THE YEAR

Timothy P. Cripe, MD, PhD

The innovator of the year is selected for their social impact, imagination and partnership. This year's awardee is a principal investigator in the Center for Childhood Cancer Research. The Center's mission is to expand the understanding of the pathogenesis of childhood cancer and to improve strategies for diagnosis and treatment.

Timothy Cripe, MD, PhD, is a nationally recognized leader in pediatric cancer research, known for his relentless pursuit of innovative therapies that improve outcomes for children with cancer. As chief of the Division of Hematology, Oncology and Blood and Marrow Transplant at Nationwide Children's Hospital, Dr. Cripe also holds the Gordon Teter Endowed Chair in Pediatric Cancer and serves as professor of Pediatrics at The Ohio State University College of Medicine.

Over his career, Dr. Cripe has focused on the development and testing of virus-based cancer immunotherapeutics. His work has been supported by numerous National Institutes of Health (NIH) grants, including R-, U- and P-level awards, and he has authored more than 180 peer-reviewed publications. Dr. Cripe has delivered over 230 invited lectures and currently serves as editor-in-chief of *Molecular Therapy – Oncolytics.* His leadership in regulatory science includes serving as the former chair of the FDA's Cellular, Tissue and Gene Therapy Advisory Committee.

Dr. Cripe's contributions to innovation are equally impressive. He has been involved in 12 technologies at Nationwide Children's and is listed on 69 patent applications, resulting in six issued patents. His entrepreneurial spirit led to the co-founding of Vironexis Biotherapeutics, a Nationwide Children's startup focused on clinical-stage cancer gene therapies. Vironexis developed TransJoin™, a scalable platform for producing targeted T-cell treatments. The company's single-dose therapy offers a safer, more efficient and patient-friendly alternative to current immunotherapies, demonstrating long-term cancer cell eradication with fewer side effects, even in metastatic cases.

Dr. Cripe's work exemplifies the mission of the Abigail Wexner Research Institute: to advance children's health through high-impact, ethically grounded research. His dedication to translational science and mentorship has shaped the careers of countless researchers and clinicians, while his innovations continue to redefine what is possible in pediatric cancer care.

Timothy Cripe and Andrew Corris (Senior Licensing Associate)

Left to right: Margarett Barkett (Previous Interim Director of the Office of Technology Commercialization), Dennis Durbin (President of the Abigail Wexner Research Institute), Timothy Cripe and Tim Robinson (CEO of Nationwide Children's Hospital).

Notable Issued U.S. Patents from Nationwide Children's Innovators, September 2024-September 2025:

Lauren Bakaletz, PhD
Issued Patent No.: 12,221,472; 12,116,614; 12,209,118; 12,161,701; 12,152,068; 12,098,188; 12,365,710

Gail Besner, MD
Issued Patent No.: 12,383,656

Christopher Breuer, MD
Issued Patent No.: 12,186,455; 12,115,282

Charles Elmaraghy, MD
Issued Patent No.: 12,245,910

Steven Goodman, PhD
Issued Patent No.: 12,116,614; 12,209,118; 12,161,701; 12,152,068; 12,098,188; 12,365,710

Scott Harper, PhD
Issued Patent No.: 12,275,941; 12,325,856

Kris Jatana, MD
Issued Patent No.: 12,245,910

Bryce Kerlin, MD
Issued Patent No.: 12,216,130

Paul Martin, PhD
Issued Patent No.: 12,121,595

Jerry Mendell, MD
Issued Patent No.: 12,285,497; 12,258,572; 12,377,170; 12,257,317

Mark Peeples, PhD
Issued Patent No.: 12,227,769

Will Ray, PhD
Issued Patent No.: 12,080,138

Zarife Sahenk, MD, PhD
Issued Patent No.: 12,391,928

Amanda Waller, PhD
Issued Patent No.: 12,216,130

Katelyn Wolfgang
Issued Patent No.: 12,216,130

Chack-Yung Yu, PhD
Issued Patent No.: 12,130,288

OHIO ECOSYSTEM PARTNERS

Nationwide Children's is a sustaining member of Rev1 Ventures, an organization created to accelerate innovation, business growth, job creation and prosperity in the 15-county region of central Ohio. Rev1 Ventures works to create new companies, strengthen existing businesses, open doors to technology resources and support the attraction and retention of technology-based businesses.

Ohio Life Sciences

As Ohio's bioscience, health and life sciences membership and development organization, Ohio Life Sciences (formerly BioOhio) is focused on convening the state's outstanding assets to accelerate the growth of its globally competitive bioscience ecosystem. High on this list of assets is pediatric research, in which Nationwide Children's exhibits excellence every day.

OhioX is Ohio's statewide technology and innovation partnership dedicated to helping make Ohio a leading tech hub. OhioX powers connections, tells impactful stories and advocates for growth on behalf of Ohio technology and innovation.

CincyTech is a venture capital firm that invests in innovative founders tackling the world's complex challenges, while transforming ideas into world-class companies.

The Innovation Center at Nationwide Children's Hospital

The Innovation Center at Nationwide Children's Hospital is a team of clinicians, researchers, and engineers dedicated to advancing patient care through medical device innovation, design and commercialization. Our collaborative approach brings together diverse expertise to solve health care's most pressing challenges.

OHIO ECOSYSTEM PARTNERS

Ohio Department of Development

The Ohio Department of Development, through its Ohio Third Frontier initiative and the Technology Validation and Start-up Fund (TVSF), aims to create greater economic growth in Ohio by supporting startup companies that commercialize technologies developed by Ohio institutions of high education and other Ohio not-for-profit research institutions.

JobsOhio

JobsOhio exists to empower world-class corporations, entrepreneuers and talented individuals to build their businesses and careers in Ohio. Their advocacy and investment in partnership with the state enable sustainable growth and a better quality of life for all Ohioans.

JUMPSTART

As a nationally recognized entrepreneur support organization, JumpStart equips tech startups and small businesses with the skills, services and support they need to grow and thrive. They work to ensure every entrepreneur has the resources needed to succeed. Since 2010, more than $13 billion in economic impact has been generated by startups and small business assisted by JumpStart and their partners.

TechGrowth

TechGrowth Ohio is a public-private partnershop composed of the TVSF, Ohio University and the private investment community. TechGrowth Ohio is part of an entrepreneurial ecosystem that includes programs supporting university and regional technology commercialization and small business incubation.

Ohio Discovery Corridor
POWERED BY JobsOhio

The Ohio Discovery Corridor is an ecosystem that connects the vital innovation districts from Columbus, Cincinnati and Cleveland into a high-powered network of top-notch medical and research facilities, academic institutions and private companies. The district fosters discoveries, patents and startups while attracting STEM talent and providing businesses with essential growth capital.

HELPING TODAY'S DISCOVERIES BECOME TOMORROW'S INNOVATIONS

Our portfolio of over 200 available technologies developed by our innovative researchers and clinicians is diverse and ever-growing. The technologies span a wide array of research fields and categories of market applications and range from early-stage innovations to market-ready products.

TYPES OF INNOVATIONS

- **Biomarkers:** Detect and measure normal biological processes, pathogenic processes or responses to interventions.
- **End User Innovations:** Improve clinical or business practices and patient outcomes with improved/novel medical devices and software.
- **Gene Therapies:** Deliver new genetic material to replace impaired or harmful genetic material to treat various conditions.
- **Therapeutics:** Prevent or treat diseases.
- **Tissue Engineering Innovations:** Combine scaffolding, seeded cells and biologically active molecules into functional tissues, allowing a patient's own cells to be used to grow new tissue or organs for repair.
- **Research and Clinical Tools:** Enhance therapeutic or research activities.

TECHNOLOGY SHOWCASE

Each March, the OTC highlights new inventions and startup companies generated through innovation at Nationwide Children's Hospital through its flagship Technology Showcase event.

The 2026 event featured six presentations that highlighted impactful innovations generated from the Abigail Wexner Research Institute at Nationwide Children's and a keynote by Jonathan Carlson, PhD, Vice President and Managing Director of the Health Futures Lab at Microsoft Research, addressing the intersection of AI, biotechnology and digital health.

View the recording and register for the next event to learn more about our new technologies that are available to license and the inventions already transforming care: **NationwideChildrens.org/OTC-Events**

To learn more and find the right licensing opportunity for you, visit **NationwideChildrens.org/AvailableTechnologies** and access our highlighted technologies database.

CAYUSE INVENTIONS

- Search our entire catalog of licensable technologies by disease, disorder or technology type.
- Learn more about the technologies available in each category and the inventors behind them.
- Connect with the licensing associates who manage our technologies.

To license a technology or get assistance with your search, please call (614) 355-1850 or email Tech.Commercialization@NationwideChildrens.org.

Not ready to begin the licensing process? Our team can help you stay informed about all new and available technologies developed at Nationwide Children's.

DNA Methylation-Based Diagnostics: Refining Diagnosis for the Most Complex Pediatric Brain Tumors

Developed at Nationwide Children's, the MACDADI classifier is compatible with next-generation methylation arrays and quickly delivers more accurate tumor diagnoses, offering a clinically validated alternative to outdated and unregulated methylation classifiers.

Diagnosing central nervous system (CNS) tumors in children is among the most challenging problems in pediatric oncology. Many tumor types share overlapping microscopic features, and genetic testing alone cannot always determine their precise subtype. Yet accurate classification is critical because treatment protocols and prognoses can differ dramatically depending on the molecular identity of a tumor.

"Two children can present with tumors that look nearly identical under the microscope but behave differently in response to therapy," explains Ke Qin, PhD, bioinformatics scientist in the Steve and Cindy Rasmussen Institute for Genomic Medicine (IGM) at Nationwide Children's Hospital. "Relying solely on morphology and genetic markers may not be enough. That's where DNA methylation profiling can make a difference."

DNA methylation is a chemical modification that helps regulate which genes are turned on or off and can create a distinctive epigenetic "fingerprint" for each tumor type. By analyzing methylation patterns across hundreds of thousands of sites in the genome, scientists can identify subtle biological differences that distinguish even closely related cancers. Over the past decade, methylation-based classifiers have become integral to CNS tumor diagnostics and are increasingly shaping precision medicine efforts.

A Need for a New Classifier

The most widely adopted classifier, developed by scientists at the German Cancer Research Center or Deutsches Krebsforschungszentrum (DKFZ), demonstrated that machine-learning analysis of methylation data could reclassify up to 12% of tumors previously misdiagnosed by standard pathology. To use it, hospitals needed to upload patient data to an external server overseas, raising privacy and regulatory concerns, and the algorithm was trained on older Illumina methylation arrays that are now being phased out.

When Illumina released its latest methylation arrays, the MethylationEPIC v2 BeadChip, most existing classifiers, including DKFZ's, were no longer compatible. That limitation, combined with the need for faster turn-around and full control over data handling, prompted Dr. Qin and colleagues to build a new solution in-house.

"We wanted something we could run locally, validate clinically and adapt as technology evolves,"says Dr. Qin. "Sending patient data abroad and waiting a full day for results is often not practical. We needed a

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– *Ke Qin, PhD, bioinformatics scientist in the Institute for Genomic Medicine at Nationwide Children's Hospital*

classifier that could meet clinical standards and process the newest array data."

Building a Better, Faster Classifier

Dr. Qin, a senior bioinformatician with 10 years of experience, began development of the Methylation Array Classification Diagnostic and Data Integration (MACDADI) platform in 2022. With help from IGM and the Nationwide Children's Information Services department, the new classifier combines machine learning, cloud computing and automated reporting to streamline CNS tumor classification from start to finish. MACDADI was trained on nearly 4,000 publicly available cases spanning 167 CNS tumor subtypes across 22 data repositories. By selecting CpG sites shared across all Illumina platforms (450K, EPIC v1 and EPIC v2), the team ensured that the model remains compatible with past and current chips.

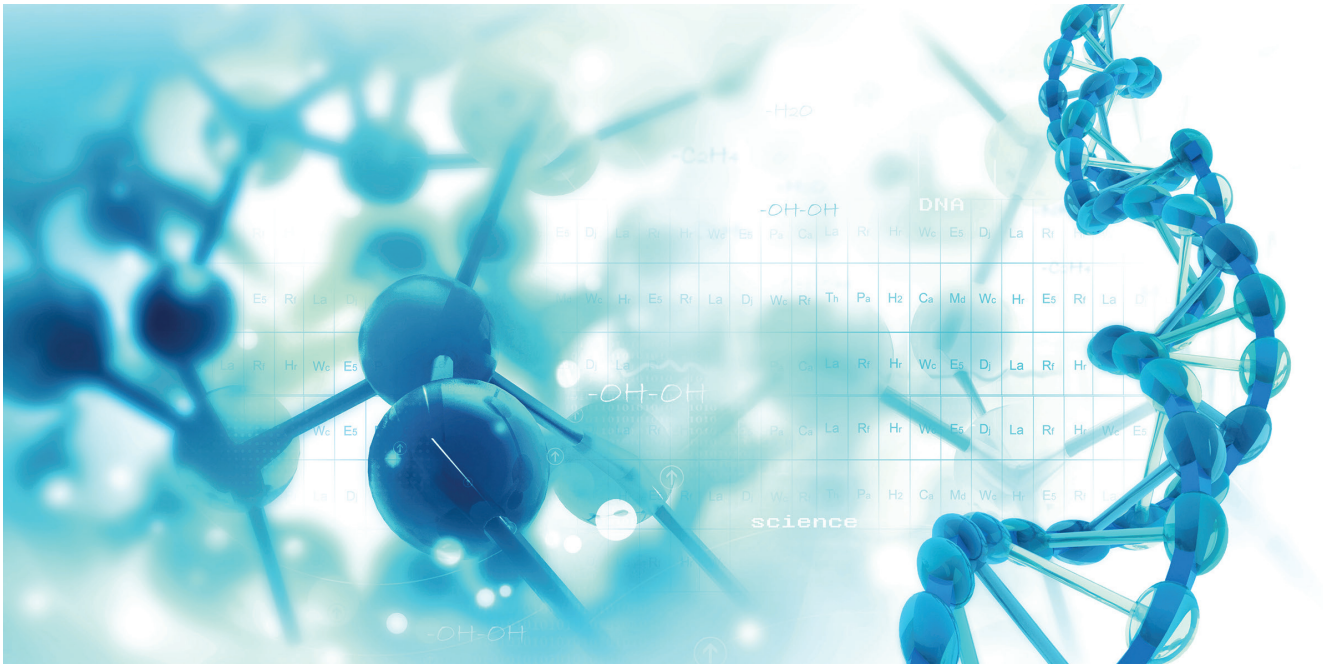
Instead of the random-forest algorithm used by DKFZ, MACDADI employs a regularized generalized linear model (RGLM), a classic but highly efficient approach well suited to imbalanced datasets in which some tumor types are extremely rare. This method eliminates the need to down-sample common subtypes, preserving statistical power and improving reproducibility.

The training process that took more than 24 hours with the DKFZ model took about three hours for MACDADI Model 1, with zero cross-validation errors reported internally, and 15 minutes for Model 2. Results are reproducible with fixed random seeds, an important feature for regulatory compliance, contributing to MACDADI's clinical-grade engineering.

Once a run is initiated, an automated AWS pipeline detects new cases and processes the entire workflow. The data upload, model execution and report generation takes less than an hour for a batch of eight samples. For a single case, results are available in under 10 minutes.

MACDADI was developed within the research group led by Elaine R. Mardis, PhD, co-executive director of the IGM at Nationwide Children's Hospital and holder of the Nationwide Foundation Endowed Chair in Genomic Medicine. Dr. Mardis's group has a long history of pioneering advances in cancer genomics; it was among the first to apply next-generation sequencing to compare tumor DNA with matched normal tissue to identify the mutations driving cancer growth. This environment of innovation and deep technical expertise provided the foundation for Dr. Qin's work in building this clinically sustainable methylation-based classifier.

"An important component of MACDADI's clinical impact is its role within the Molecular Characterization Initiative (MCI), a large-scale study I lead as principal investigator. The MCI has now profiled more than



6,600 pediatric and AYA cancer patients across the U.S., Canada, Australia and New Zealand through Children's Oncology Group-affiliated institutions, and MACDADI has been used to provide clinical diagnostic information for most of the MCI CNS cases," says Dr. Mardis.

The MCI is executed entirely at Nationwide Children's Hospital, where tumor and matched normal specimens from patients are processed at the Biopathology Center and transferred to the IGM's clinical laboratory for comprehensive molecular profiling, including methylation array data analysis supported by the MACDADI classifier. The project is funded by a contract with the National Cancer Institute.

"Without MACDADI, continuation of high-throughput methylation array testing at this scale would not have been feasible."

Generating Actionable Clinical Reports

Each clinical MACDADI report provides a multi-level tumor classification (superfamily, family, class and subclass) along with confidence scores, interactive t-SNE visualizations (2-D maps showing how cases cluster by tumor type) and genome-wide copy-number variation plots. MACDADI generates confidence scores for each classification level, providing clinicians with a transparent measure of how strongly a case matches a given tumor classification. This allows providers to integrate methylation insights with histologic and molecular findings.

In clinical validation using 230 CNS cases profiled on the Illumina EPIC v2 array, MACDADI outperformed the DKFZ classifier on accuracy and confidence scoring. To demonstrate clinical utility, in routine use at Nationwide Children's, methylation profiling with MACDADI refined the diagnosis in one-third of patients and changed the diagnosis entirely in 5%.

"Even a small improvement in diagnostic precision can have life-changing implications for a child's therapy," notes Dr. Qin. "MACDADI helps us reach those answers faster, with higher confidence and fully within our regulatory environment."

Meeting the Demand for Licensable Solutions

Interest in the platform has quickly expanded beyond Nationwide Children's. Several major medical centers, including leading U.S. academic hospitals, are now exploring partnerships to implement MACDADI within their own programs. Negotiations are at various stages through the hospital's Office of Technology Commercialization (OTC).

"Institutions across the country found themselves in the same position, needing a clinically validated methylation classifier once the old systems became unusable," said Andrew Corris, PharmD, JD, senior licensing associate in the OTC. "Nationwide Children's classifier meets that need and offers a validated workflow that's ready for real-world deployment."

Dr. Corris explained that many competing algorithms remain constrained by regional datasets or uncertain regulatory status. By contrast, MACDADI's high-throughput genomics infrastructure and integration with cloud-based automation make it a strong candidate for multi-institutional licensing.

"What differentiates Nationwide Children's methylation classifier is that it's not just another research tool—it has demonstrated clinical utility and delivers the speed, reproducibility and security that hospital laboratories need," added Dr. Corris.

Powering Precision Medicine Through Partnership

The OTC plays a central role in bridging laboratory innovation and clinical translation at Nationwide Children's. For Dr. Qin's team, collaborating with

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– Andrew Corris, PharmD, JD, senior licensing associate in the Office of Technology Commercialization at Nationwide Children's Hospital

> "Our goal is to continue improving the classifier and expanding its coverage to rare tumor types. Every incremental gain in accuracy means another child gets an improved diagnosis and the best possible treatment plan."
>
> – *Ke Qin, PhD, bioinformatics scientist in the Institute for Genomic Medicine at Nationwide Children's Hospital*

the OTC provided essential support in transforming MACDADI from a research concept into a regulated, sharable diagnostic tool.

"This was my first experience working with the technology commercialization office," Dr. Qin said. "We discussed data sharing, licensing and the technical aspects that would make it possible for other hospitals to adopt the platform."

As methylation profiling continues to expand beyond CNS tumors into sarcomas and other solid tumors, Dr. Qin's team is already adapting the MACDADI framework for additional disease areas. They have developed a research-only sarcoma classifier using the same architecture, with plans for clinical validation underway.

Looking Ahead

Beyond its performance, MACDADI is strengthened by the depth and diversity of the data behind it. As Dr. Corris explains, the team leveraged thousands of cases with methylation data collected over many years and from institutions around the world to build what is essentially a universal reference database for CNS tumors.

"We've accumulated methylation profiles from thousands of children globally, giving us a resource that captures even the rarest tumor subtypes," said Dr. Corris. "As new data come in, the model will continue to evolve, allowing it to support diagnosis in cases that are often the hardest to classify."

"Our goal is to continue improving the classifier and expanding its coverage to rare tumor types," added Dr. Qin. "Every incremental gain in accuracy means another child gets an improved diagnosis and the best possible treatment plan."

> "Without MACDADI, continuation of high-throughput methylation array testing at this scale would not have been feasible."
>
> – *Elaine R. Mardis, PhD, co-executive director of the Institute for Genomic Medicine at Nationwide Children's Hospital and holder of the Nationwide Foundation Endowed Chair in Genomic Medicine*

Startups Update: Where Are They Now?

From cutting-edge gene therapies to transformative medical devices, startups are redefining what's possible in patient care and technology. Born from pioneering research and nurtured through strategic collaborations, startups are tackling critical challenges—from neonatal care to oncology and rare genetic disorders—while advancing toward commercialization. Supported by the Office of Technology Commercialization, which facilitates the transfer of breakthrough innovations to industry partners, these companies exemplify how bold ideas become real-world solutions.

CLARAMETYX biosciences

Clarametyx is pioneering a novel anti-biofilm therapeutic platform aimed at disrupting the protective biofilm structures that shield bacteria from treatment. This technology targets biofilm formation at its source, offering a promising approach for chronic and recurrent infections. With its lead candidate, CMTX-101, advancing into Phase 2 clinical trials, Clarametyx is positioned to deliver a breakthrough solution for patients affected by persistent respiratory diseases and other biofilm related conditions.

"Clarametyx is championing a novel anti-biofilm technology discovered by experts at Nationwide Children's Hospital. Since the company was launched in 2020 to move the invention into development, our close collaboration with the OTC has been crucial to our progress. Our lead program, CMTX-101, has now advanced into a Phase 2 clinical trial and we continue to progress with additional potential applications for the technology. We are grateful for the continued support of the entire OTC team that continues to champion this innovative approach, which could benefit many populations affected by chronic respiratory diseases." - David V. Richards, Chief Executive Officer, Clarametyx

- **Principal Investigator:** Lauren Bakaletz, PhD, principal investigator in the Center for Microbe and Immunity Research; Steve Goodman, PhD, principal investigator in the Center for Microbe and Immunity Research
- **Technology Type:** Therapeutic; Vaccine approach is in the pipeline
- **Development Stage:** Currently in Phase 2 clinical trials.
- **Disease Indication:** Cystic Fibrosis (CF)-associated pulmonary biofilm infections.

GENOSERA™
GENE THERAPY

Genosera has secured a license from Nationwide Children's for a platform technology designed to treat muscle disease. This approach is distinctive in that it delivers a gene therapy vector containing two components: one to replace the defective gene responsible for the disease and another to promote muscle growth. This dual-gene strategy represents a novel therapeutic modality for muscle disorders. In addition, Genosera plans to license a second platform technology based on a conventional gene-replacement approach. This program delivers the functional lipase A gene and has the potential to address multiple indications. Genosera is also pursuing a third licensing opportunity for a technology targeting limb-girdle muscular dystrophy (LGMD) type 2I and congenital muscular dystrophy type 1D (MDC1D), further expanding its portfolio of genetic therapies for severe inherited disorders.

- **Principal Investigator:** Paul Martin, PhD, Jerry R. Mendell Center for Gene Therapy
- **Technology Type:** Gene Therapy/Therapuetic
- **Development Stage:** Ranges from proof of concept in cells to proof of concept in animal models; Principal investigator is generating preclinical IND enabling studies for all programs lipase A license executed.
- **Disease Indication:** Muscular Dystrophies, lipase A Deficiency, Non-alcoholic Fatty Liver Disease and Non-alcoholic Steatohepatitis


smallTalk

SmallTalk® is advancing neonatal care with its Active Egg, a pacifier-integrated medical device that delivers suck-contingent maternal voice to preterm infants, supporting speech-sound processing and neurodevelopment. Complementing this regulated device is the NICU Egg™, a non-regulated speaker and recording app designed to generate early revenue and enable hospital-based trials. Together, these innovations aim to improve developmental outcomes for vulnerable infants while paving the way for broader clinical adoption.

"SmallTalk is proud to collaborate with Nationwide Children's Hospital and the Office of Technology Commercialization to translate research on brain development in preterm infants into real-world impact for NICU families. With licensed technology and continued support from OTC, we have successfully completed product development of our first product, launching the NICU Egg System into hospital settings. Our next product, the Active Egg, creates a new category of NICU technology designed to actively improve brain development and outcomes in hospitalized preterm infants."
- Dean Koch, Chief Executive Officer, Founder, smallTalk

- **Principal Investigator:** Nathalie Maitre, MD, PhD, Emory University School of Medicine
- **Technology Type:** Medical Device
- **Development Stage:** Active Egg: Pivotal clinical study enrolling; seeking FDA clearance in 2026. NICU Egg: Commercially available as a non-regulated product; used for early revenue and evidence generation.
- **Disease Indication:** Preterm infants (≥32 weeks PMA) in NICU at risk for impaired speech-sound processing and poor long-term neurodevelopment.

Storilly, the flagship platform created by the Nexa Institute, supports early speech-language development through a clinician- and parent-built digital platform created in collaboration with Nationwide Children's Hospital. Its therapist-guided storybook tools help families reinforce practice between sessions, offering real-time tracking and tailored activities that turn everyday reading into effective at-home therapy. Designed to complement in-clinic care, Storilly's tools aim to improve child outcomes while supporting speech-language pathologists with streamlined family engagement and progress monitoring.

"Nexa Institute's collaboration with the OTC has been foundational in translating cutting-edge clinical expertise into a commercially scalable digital health coaching platform for families. Together, we have launched Storilly into the market to support children's speech and language development, grown our user base and built the infrastructure to expand into literacy, hearing loss and neurodivergent support. Looking ahead, we are focused on deepening our clinical partnerships and scaling access so that every family can get timely, evidence-based developmental support at home." - Bill Locker, Chief Executive Officer, Storilly

- **Principal Investigator:** Prashant S. Malhotra, MD, FAAP, Department of Otolarygology and the Hearing Program
- **Technology Type:** Medical Device
- **Development Stage:** Beta testing the software and finishing up pilot studies.
- **Disease Indication:** Initial testing was children with hearing loss, but technology is designed for all children in speech language therapy.

Vironexis is developing a next-generation AAV-based immuno-oncology platform that enables durable, systemic T-cell-mediated tumor killing. Using low-dose AAV to "vectorize" T-cell engagers, the liver becomes a continuous source of bispecific antibodies targeting hematologic solid tumors. This innovative approach aims to provide long-lasting targeted cancer therapy with fewer doses.

"We have been fortunate to be a multiple time licensee working with the OTC. In just a few short years, we have taken an initial research concept to two FDA approved clinical trials treating several patients with the first gene therapy directed at cancer. Our team has grown into three separate labs with a national, soon to be global, footprint. We truly believe that with the OTC working together with us, we are going to make one of the biggest patient impacts in oncology that we have seen in decades." - Samit Varma, Chief Executive Officer and Board Member, Vironexis

- **Principal Investigator:** Timothy P. Cripe, MD, Division Chief of Hematology/Oncology & BMT, Center for Childhood Cancer Research
- **Technology Type:** Gene Therapy/Therapeutic
- **Development Stage:** Company is in early clinical stage. VNX-101 received FDA IND approval; Fast Track + Rare Pediatric Disease designations; Phase 1/2 first-in-human trial starting. Other programs are in pre-IND, IND-enabling or preclinical development.
- **Disease Indication:** Blood cancers: ALL (lead program VNX-101), multiple myeloma (VNX-102), B-cell lymphoma (VNX-103; Solid tumors: HER2+ breast/gastric cancers (VNX-202), GD2+ neuroblastoma (VNX-201), plus ongoing expansion to prostate, pancreatic, osteosarcoma, nasopharyngeal, NSCLC, etc.

zotarix

Zotarix LLC, a Columbus-based startup from Nationwide Children's, develops innovations to improve surgical safety. Its lead product, ApollOSTM, is a single-use silicone lip gaurd designed to prevent thermal and mechanical injuries during transoral procedures like tonsillectomy and adeniodectomy. Parterning with Grace Medical for manufacturing and distribution, Zotarix is advancing regulatory efforts and sponsoring an IRB-approved clinical trial to validate this first-of-its-kind device.

"Zotarix LLC is committed to the development of surgical safety device solutions to redefine the standard of care by reducing preventable harm for patients." - Kris Jatana, MD, FAAP, FACS, Professor in the Department of Otolaryngology-Head and Neck Surgery at Wexner Medical Center at The Ohio State University and Nationwide Children's Hospital; Chief Executive Officer, Zotarix

- **Principal Investigator:** Kris Jatana, MD, FAAP, FACS and Charles Elmaraghy, FAAP, FACS, Chief, Department of Otolaryngology - Head and Neck Surgery
- **Technology Type:** Medical Device
- **Development Stage:** Clinical trials in progress.
- **Disease Indication:** Intended for use with any oral surgery involving an electrocautery device.

One Gene, Big Impact: The Science Behind a New Therapy for Brain and Muscle Health

A promising new gene therapy developed at Nationwide Children's is offering hope for new patients with neurodegenerative and muscle disorders. Led by Zarife Sahenk, MD, PhD, a neurologist, principal investigator in the Jerry R. Mendell Center for Gene Therapy and director of Clinical and Experimental Neuromuscular Pathology at the Abigail Wexner Research Institute, the AAV.BAG3 gene therapy targets disease caused by toxic protein aggregation—a hallmark of many currently untreatable conditions.

The therapy uses AAV9 and AAVrh74 viral vectors to deliver the BAG3 gene directly to neuronal and muscle cells. BAG3 is a chaperone protein that plays a vital role in autophagy, the body's natural process for clearing out damaged proteins. By enhancing autophagy, AAV.BAG3 helps reduce the accumulation of toxic protein aggregates that contribute to disease progression.

In preclinical mouse models, a single administration of AAV.BAG3 has shown significant improvements in neurological and motor function, along with a marked reduction in protein aggregation. This one-time treatment approach is designed to be scalable across a wide range of diseases, making it a versatile platform for future therapies.

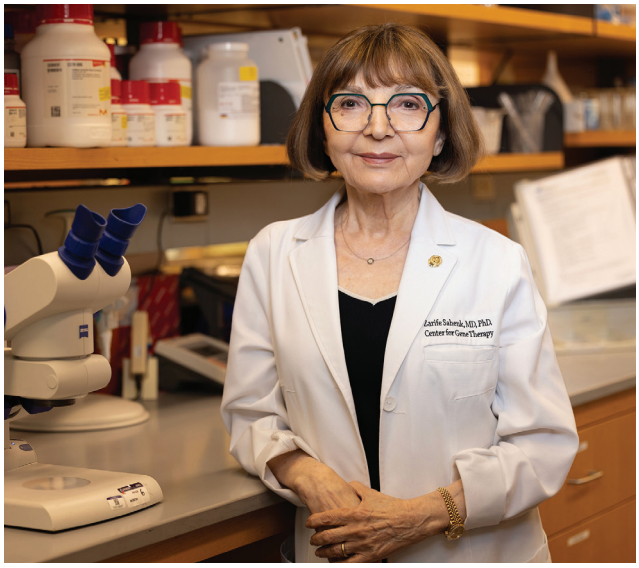
"It is a necessity to develop mechanistic therapeutic approaches correcting impaired cellular events, which could make 'cure one, cure all' possible," says Dr. Sahenk. "Considering the time and expense involved in developing specific gene or mutation-directed therapies in each disease, this approach will be more realistic and inclusive for a much larger patient population sharing similar disease mechanisms."

AAV.BAG3 is being explored as a platform therapy for a broad range of protein misfolding diseases, including:

- Myofibrillar myopathies (MFM1-13)
- Hereditary and sporadic inclusion body myositis (hIBM, sIBM)
- Parkinson's disease
- Huntington's disease
- ALS
- Prion diseases
- Dementia with Lewy bodies
- Multiple system atrophy
- Tauopathies
- Frontotemporal dementia
- Spinocerebellar ataxias (SCA1, SCA2, SCA3, SCA6, SCA7, SCA17)

This therapy reflects Nationwide Children's commitment to advancing research that leads to the best possible outcomes for children. AAV.BAG3 represents a platform technology with the potential to transform treatment for a wide range of neurodegenerative and protein aggregation disorders. It addresses a critical unmet need in pediatric medicine, offering a path forward where few options currently exist.

"We're thrilled about the potential of AAV.BAG3 as a transformative platform therapy," says Kyle Murrah, PhD, senior licensing associate in the Office of Technology Commercialization. "Its ability to target shared disease mechanisms across multiple neurodegenerative and muscle disorders opens exciting opportunities for both scientific innovation and broad commercial impact."



Zarife Sahenk, MD, PhD, principal investigator in the Jerry R. Mendell Center for Gene Therapy and director of Clinical and Experimental Neuromuscular Pathology at the Abigail Wexner Research Institute at Nationwide Children's


RB4
LAB
3G
biohazard

Norms, Needs and New Frontiers in Pediatric Mental Health

At Nationwide Children's Hospital, the Institute for Mental and Behavioral Health Research (IMBHR) is driving discovery through improved assessments, effective treatments and digging deep to answer the 'why' behind clinical challenges. Specializing in areas such as mood disorders, autism, sleep, substance misuse and self-injurious thoughts and behavior, this team is dedicated to advancing the best care in an ever-evolving specialty.

An interview with Eric Youngstrom, PhD, director of the Institute for Mental and Behavioral Health Research at the Abigail Wexner Research Institute at Nationwide Children's Hospital.

What are opportunities for technology commercialization to drive better outcomes for mental health?

The real opportunity in technology commercialization is not simply launching a single app or assessment tool—it's building an ecosystem that brings discovery science, data analytics and clinical workflow into alignment. Commercial partnerships allow academic innovations to evolve into interoperable, sustainable solutions that can be used across many types of care settings. For pediatric mental health, this means moving beyond small pilot studies toward products that can learn from clinical data, integrate with telehealth and school-based services and reach families wherever they already receive support. When developed thoughtfully, commercialization accelerates the path from research insight to measurable improvements in youth mental health outcomes.

What is included in IMBHR's first strategic plan, and how will it shape future research?

The strategic plan prioritizes research areas based on unmet needs and opportunities for impact. It identifies high-need conditions—such as attention problems, aggression, anxiety and sleep disturbances—that interfere with learning and development. The plan also highlights where families are asking for help and where funders are investing. It's a roadmap for where to grow the team and focus resources; it's interdisciplinary, bridging service lines across the hospital and connecting research to clinical care.

What does improved asessment look like at Nationwide Children's, and which IMBHR innovations excite you most?

We've built a comprehensive map of assessments currently available to clinicians and identified tools that need upgrading. A lot of the assessment tools we're using are excellent choices with great research behind them, but they lack normative data; no one has invested in figuring out what's typical for a child or teenager in the U.S. today. No one knows the answer to the first question parents have when they visit the clinic: is this normal?

We're investing in building those norms, which will allow us to give families clearer, more meaningful feedback. For example, instead of asking if a teen feels perfect, we can now say "Here's what an average amount of worry looks like." That's powerful. It helps normalize experiences and guide care more effectively.

Personally, I'm excited about the work we're doing in mood disorders, an area I've focused on throughout my career, but the broader investment across conditions is what makes this initiative so impactful.

What challenges do you foresee in translating research-based tools into scalable, commercially viable products for clinical use?

A key challenge lies in moving from rigorously tested research instruments to tools that function smoothly in the complex realities of clinical practice. Products must retain their scientific validity while accommodating diverse patient populations, languages, workflows and resource levels. Regulatory requirements, data privacy considerations and the need for compatibility with electronic health record systems add further hurdles. In addition, commercialization requires sustained investment, technical infrastructure and business planning—elements that extend beyond traditional academic environments. Balancing scientific precision with usability and feasibility is essential to successful translation.

How is IMBHR working with the Office of Technology Commercialization (OTC) to translate its assessment innovations into tools that can be widely adopted in clinical settings?

IMBHR works closely with the OTC to identify innovations with clear potential for real-world impact, such as digital versions of validated assessment scales, predictive algorithms and tools that support measurement-based care. Once an innovation is ready for broader dissemination, the partnership helps secure intellectual property, evaluate market needs and connect investigators with industry, software and implementation partners. This collaboration ensures that IMBHR's research is not confined to publications but is transformed into practical, scalable tools that clinicians and families can use directly to promote children's mental health and well-being.

How do you envision the future of mental and behavioral health assessments evolving in clinical practice?

I think the future lies in shifting our focus from process to outcomes. I recently read a book on AI that made a point of changing our thinking around outcomes, and it directly applies to the work we're doing. It's not about increasing the number of visits or diagnoses, it's about improving health, providing solutions that help patients feel better and live healthier lives. Families don't want more time in clinics; they want solutions. The goal should be less despair and more resilience, more light instead of looking at what's dark. That means rethinking what success looks like—not just eliminating symptoms, but helping kids thrive. I think we'll see these [our processes] evolve to support resilience, emotional wellbeing and developmental growth. IMBHR is embracing this vision by redefining the finish line: not just treating illness but promoting wellness. It's a radical but necessary shift, and it's one I believe will transform how we care for children and families.

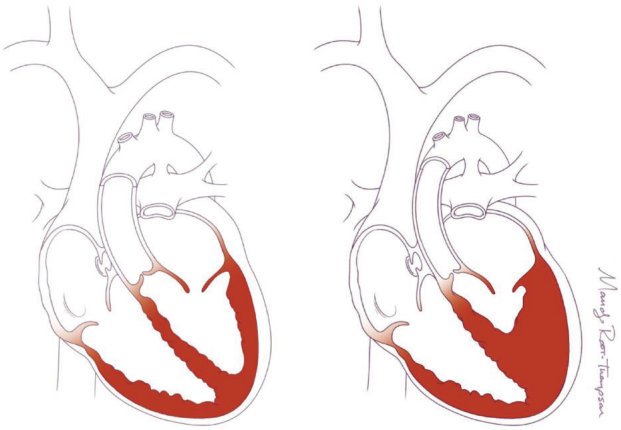
How do you anticipate the commercialization of these tools will impact accessibility and equity in pediatric mental health care?

When guided by a commitment to equity, commercialization has the potential to greatly expand access to high-quality mental health assessment. Families live in a rapidly shifting technological landscape, and commercialization makes it possible for the tools to adapt and evolve to stay relevant. Embedding validated screeners and risk tools into digital platforms allows them to be used not only in specialty mental health clinics, but also in primary care, schools and community organizations. The goal is to create tools that travel with families—not the other way around—so that early identification and support are available regardless of geography, socioeconomic status or clinic resources. Thoughtful commercialization can help ensure that every child has access to timely, appropriate mental health care, closing gaps rather than widening them.

Tissue Engineered Vascular Grafts: A Breakthrough for Children With Heart Defects

An innovation 30 years in the making is poised to change the way children with single ventricle disease experience life after a Fontan procedure.

Children with single ventricle disease are often described as having "half a heart." What this really means is that one of their ventricles (either the right or left lower chamber of the heart) is under-developed, making it challenging for the heart to effectively pump blood through the body.



Surgical Advances Require Synthetic Vessels

Advances in surgery enabled many children with single ventricle disease to live into adulthood, with life expectancies growing with advances in care and follow up. When babies are born with single ventricle disease, the standard surgical approach involved three procedures to help the blood flow more efficiently. The third procedure, called the Fontan, is typically performed between the ages of 2 and 5 years old.

In the Fontan, surgeons use a synthetic graft to extend the inferior vena cava (the vessel that brings blood back to the heart from the body) to the pulmonary artery (the vessel that takes blood from the heart to the lungs). Currently, surgeons use a synthetic vessel made from poly(tetrafluoroethylene) (PTFE).

However, this vessel does not grow with the child. Considering the average age for the Fontan procedure is 4 years, these children have a lot of growing to do. To keep up with the growing child, additional surgeries to place longer grafts will be needed.

Additionally, these grafts don't behave like native tissue— that is they don't stretch or constrict like regular vessels which can lead to problems including clots and stenosis, which is a narrowing of the vessel that restricts blood flow. Treating these complications from synthetic grafts may eventually require stent placement or additional surgeries.

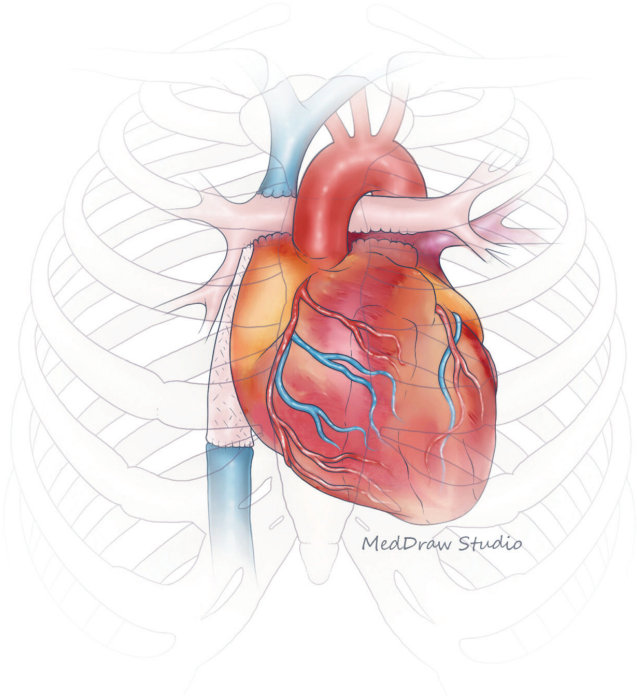
Tissue Engineering a Better Vessel

Christopher Breuer, MD, and Toshiharu Shinoka, MD, PhD, co-directors for the Center for Regenerative Medicine at Nationwide Children's, are co-inventors of a tissue engineered vascular graft (TEVG) that could be the answer to the problem of synthetic vessels. Their innovation is nearly 30 years in the making.

The Breuer and Shinoka TEVG uses a biodegradable scaffold seeded with the patient's own cells. After the TEVG is implanted, the scaffold degrades as it is replaced with the child's own cells, resulting in a neovessel that functions just like a native blood vessel.

"Tissue engineered vascular grafts are superior to other options for pediatric congenital heart patients for several reasons, the most important of which is the graft's growth capacity," Dr. Shinoka says. "Our grafts don't require immunosuppression or anti-rejection medications because they are made up of the patient's own cells. And they grow with the child, decreasing the number of follow-up surgeries needed with conventional grafts."

Through a series of preclinical, computational and clinical studies, the team has refined their TEVG and its production.



TEVGs Resist Calcification and Improve Hemodynamics

Calcification is one of the biggest reasons for biomaterial graft failure. In a study published in 2024 in *Nature Communications*, Dr. Breuer and team showed that compared to expanded PTFE grafts, TEVGs exhibited superior durability, including reduced late-term calcification.

"All of the biomaterials we routinely use for cardiovascular surgery are susceptible to dystrophic calcification," says Dr. Breuer. "This biomineralization reduces the function of the material, whether it is functioning as a vessel or valve, and can ultimately lead to the need for replacement of the prosthetic."

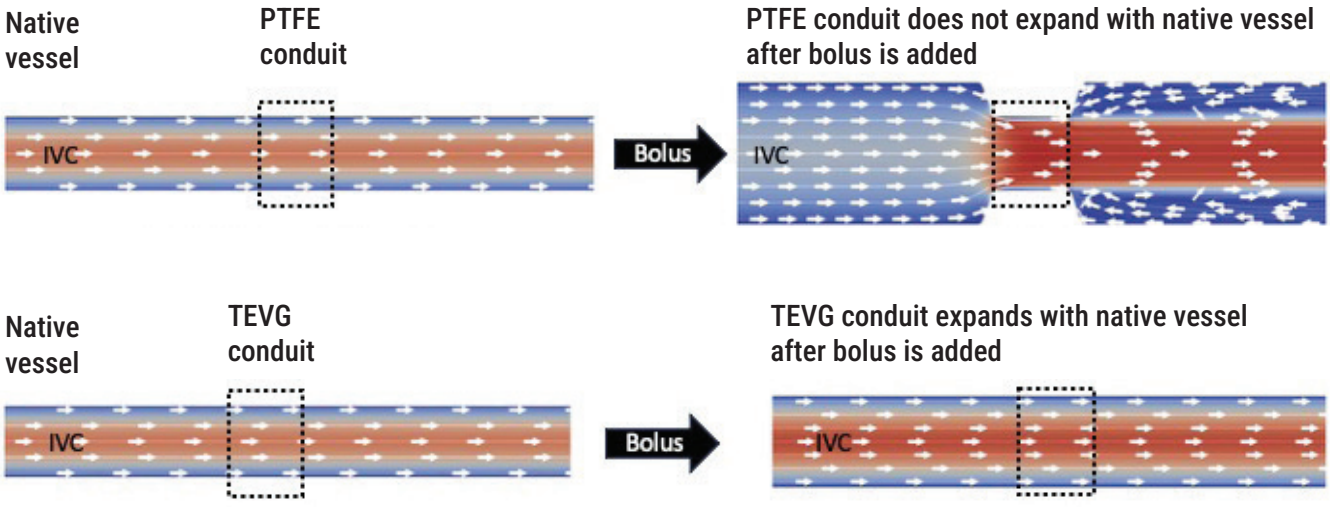
Additionally, TEVGs better matched the native vessels in terms of elasticity and responsiveness, which is measured as "compliance." This better compliance matching allowed the graft to act more like the native vessel in response to changes in blood pressure and flow. This better compliance matching also prevented the formation of stenosis.

Preventing Stenosis With Surgical Technique

A study published in 2025 in *JACC: Basic to Translational Science* outlines changes in surgical techniques that would be needed with a future adoption of the tissue engineered vascular graft.

In a large animal study to assess surgical factors that could contribute to stenosis formation, Dr. Breuer and his team implanted and evaluated 50 ovine TEVGs, collecting angiography at 1 and 6 weeks after implantation.

Results indicated that hemodynamics and surgical sizing of the graft were potential driving factors. Regression analysis showed that narrowing at the inflow anastomosis and graft oversizing were significantly correlated with stenosis development. Computational fluid dynamics simulations showed that these factors influenced wall



Computational fluid dynamics models show how TEVG respond to changes in hemodynamics compared to the traditionally used PTFE conduit.

"The idea here is to make the technology safer by eliminating the manual parts of graft production and make it more readily available by eliminating the need for a clean room. Hopefully this would also make the product more accessible for patients."

– Christopher Breuer, MD, co-director for the Center for Regenerative Medicine at Nationwide Children's

Christopher Breuer, MD, co-director for the Center for Regenerative Medicine at Nationwide Children's

shear stress and flow patterns, contributing to neovessel narrowing. Additionally, clinical trial data supported these findings, emphasizing the importance of matching graft size to the native inflow vessel when using TEVGs.

"This current study demonstrates that, within TEVGs, graft oversizing as well as greater narrowing of the inflow anastomosis at the time of surgery worsen the degree of stenosis," says Dr. Breuer. "Considering that the current clinical practice is for surgeons to oversize the graft – for good reason, with synthetic grafts you need to give extra room for the child to grow to reduce reoperations – we need to be prepared to incorporate education and behavior change support as we advance the translation and implementation of TEVGs."

As the TEVGs move closer toward commercialization, Dr. Breuer and his team are thinking about the need to educate surgeons on the best way to use the new materials.

"Our team has been refining our implantation approach for decades, guided by animal studies, clinical trial experience and computational modeling," says Dr. Breuer. "Sharing what we've learned will be an important part of expanding the use of TEVGs if the data continues to support moving forward with the FDA."

Manufacturing the Grafts: Clean Room vs. Closed System

Just as Drs. Breuer and Shinoka have continued to innovate the graft and the surgical procedures, they have evolved the process to produce the graft.

Currently, the process involves collecting mononuclear cells from the patient's bone marrow via filtration. Those mononuclear cells are then vacuum seeded onto the biodegradable scaffold.

Once the graft is seeded with cells, the technicians test the graft to ensure all the criteria are met. Once approved, the seeded graft is brought to the operating room for implantation.

"When patients come to the hospital for their operation, they have their bone marrow harvested," says Dr. Breuer. "Then, we take that bone marrow to a clean room to make the graft. This is a logical and safe way to make the graft, but it presents challenges. Not all hospitals have clean rooms. They're expensive to build and super expensive to maintain."

Dr. Breuer and team acknowledge the need for a clean room will ultimately increase the cost of the product and may limit the utility of the technology. So they came up with an alternate option.

"In the next generation version of the graft, one of the things we are working on is making a disposable, closed system, where the whole process could be performed not in a clean room, but in the operating

room or in the blood bank where the cells are collected," explains Dr. Breuer.

The technician injects the bone marrow cells and the process happens in an automated fashion. The cells are filtered and vacuum seeded onto the scaffold in one closed system, eliminating the need for clean room conditions and reducing the number of opportunities for errors in the process.

"The idea here is to make the technology safer by eliminating the manual parts of graft production and make it more readily available by eliminating the need for a clean room," says Dr. Breuer. "Hopefully this would also make the product more accessible for patients."

Regardless of whether the graft is made in the clean room or a disposable closed system, the product is the same — a biodegradable scaffold that has been seeded with the patient's own cells, ready for implantation.

Breaking Through to Commercialization

Dr. Breuer and Dr. Shinoka's TEVG is currently the only one in clinical trials in the United States evaluating their technology in children and has recently been granted Breakthrough designation by the U.S. Food and Drug Administration (FDA). The designation helps speed up the development and review of the device, which could lead to faster access for patients who need it.

The latest clinical trial enrolled their 10th patient in July 2025.

"After we follow the 10th patient for 6 months, we'll review the data. And if it merits, we hope to submit an application to the FDA for clinical approval," says Dr. Breuer.

In preparation, Dr. Breuer and his team are working with the Office of Technology Commercialization at Nationwide Children's Hospital. Their goal is to build a startup around the technology to help bring it to market pending FDA approval.

"We're thrilled to see TEVGs moving from the research labs toward real-world impact through a new startup company, hopefully launching in 2026," says Kyle Murrah, PhD, senior licensing associate in the Office of Technology Commercialization. "This technology has the potential to transform care for people with complex cardiovascular disease by providing living, growing grafts that can improve outcomes over a lifetime. It's a powerful example of how innovation at Nationwide Children's Hospital, combined with the right industry partners, can accelerate life-changing therapies to patients who need them most."

"I am excited about the prospect of having our first startup in the regenerative medicine space," adds Margaret Barkett, PhD. "This is an important area of science, and we're looking forward to bringing this and future regenerative medicine innovations to the marketplace."

Clean room

Closed system

IN GOOD COMPANY

Dozens of startups, which have been critical to advancing new, early-stage therapies to the point of FDA approval, commercial viability and even global distribution, have launched since the Office of Technology Commercialization was formed in 2008. One such startup, Andelyn Biosciences, an affiliate company dedicated to the manufacture of gene therapy products for biotechnology and pharmaceutical industries, has enabled Nationwide Children's to be one of the only pediatric hospitals in the world that can offer gene therapy clinical trials for infants and children.

As Nationwide Children's innovators connect with entrepreneurial partners to launch new ventures, the OTC seamlessly guides them every step of the way.

Learn more about our startups.

GENE THERAPIES

Abeona THERAPEUTICS
Working together to find a cure.

Andelyn BIOSCIENCES
Reliably Expert. Purposefully Driven.

ARMATUSBIO

Cellula
MRCAR-T for solid tumor

JAGUAR GENE THERAPY

VIRONEXIS BIOTHERAPEUTICS

GENOSERA GENE THERAPY

OTHER THERAPEUTICS

CartX therapeutics

CLARAMETYX biosciences

Cypress BIOPHARMA

Scioto Biosciences

neovessel BIOSCIENCES

"Each new startup built on Nationwide Children's discoveries reflects our commitment to turning breakthrough science into real-world impact. Our expanding portfolio showcases the strength of our innovation ecosystem, where pioneering research in gene and cell therapy, therapeutics, medical devices and digital health grows into companies shaping the future of care."

– **Margaret Barkett, PhD, Director of Licensing**

MEDICAL DEVICES

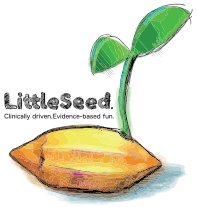
Storilly

smallTalk

zotarix

OTHER

HYPERPATH SOLUTIONS
BELIEVE THE HYPE



RxGames

CMAI

Nationwide Children's is a preeminent leader in innovative pediatric health care — trailblazing ahead to improve the lives of children everywhere.

In 2026, Nationwide Children's introduced its 2026–2030 strategic plan: Leading the Transformation of Child Health to Achieve Best Outcomes. The 2026-2030 strategic plan is not a revolution, but an evolution of the 2021-2026 plan. As we continue to press forward, we are committed to expanding, accelerating and leading the work that is already happening.

Cultivating an organization where research drives clinical care and clinical care drives research ensures children receive the most advanced therapies possible for their conditions. It also brings together bright minds from every corner of the organization dedicated to solving the problems affecting pediatric health.

More than 1,800 faculty work in over 100 subspecialties and 15 research centers. Researchers make discoveries about disease processes and potential therapeutic agents. Clinicians invent devices to address challenges they face in everyday practice. Many doctors, nurses, surgeons and scientists didn't begin their careers expecting to be inventors, but they're all driven by the desire to improve delivery and outcomes, and they all have a hand in innovation.

Luckily, there's no business experience needed. The Office of Technology Commercialization helps creative employees translate novel discoveries to the bedside and bring new ideas to fruition and to market by walking them through every step of the process — from patent searches and prototypes to licensing or launching startups.

More than ever, Nationwide Children's innovators are driving the future of pediatric care.

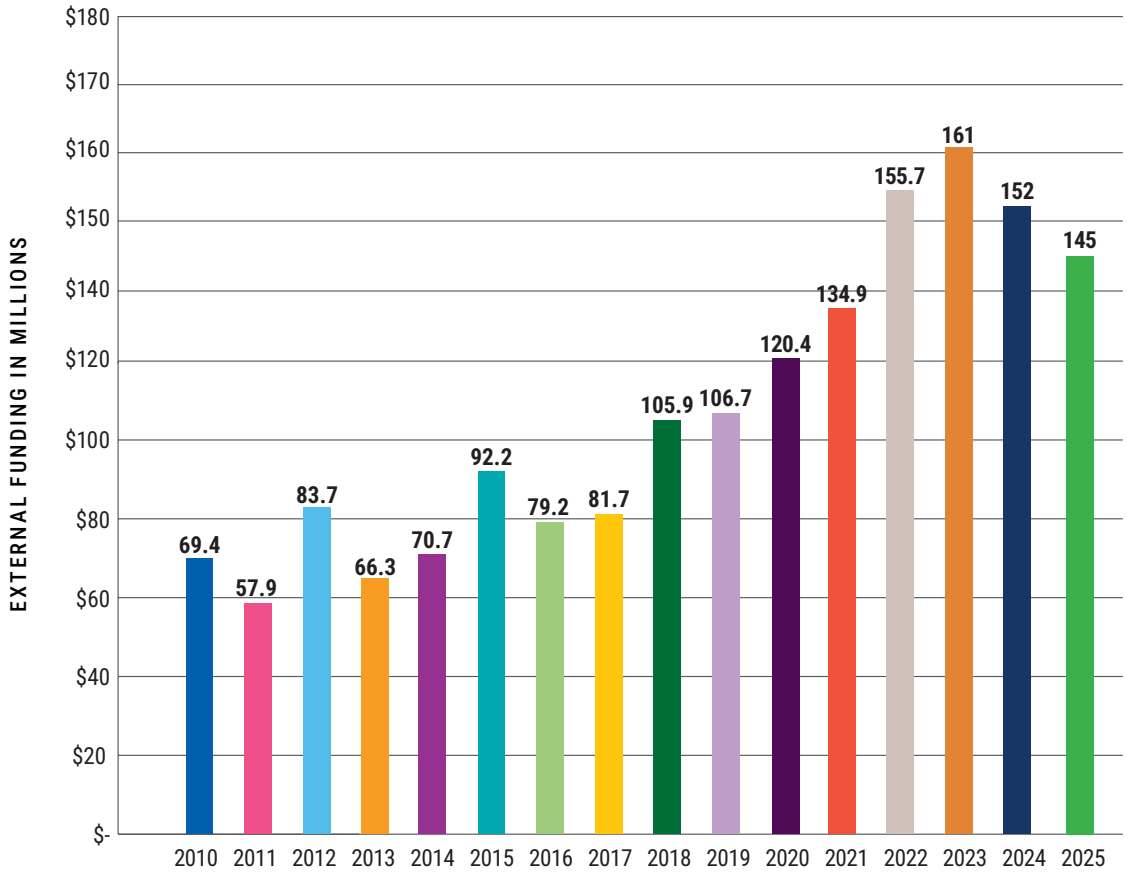
Learn more about the innovative clinical and research programs across Nationwide Children's and the unique ways they're working together in the 2024-2025 Annual Report.

RESEARCH INSTITUTES AND CENTERS OF EMPHASIS

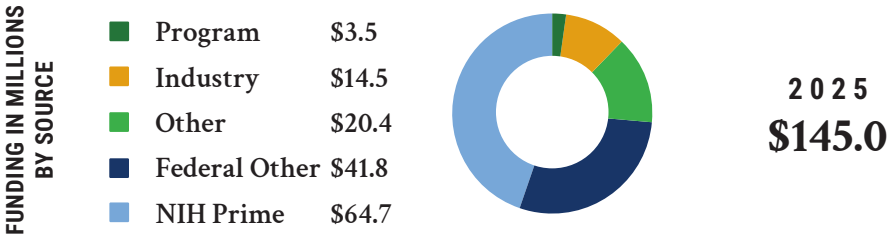
Areas of research in the Abigail Wexner Research Institute at Nationwide Children's transcend traditional academic boundaries, which facilitates interdisciplinary team science and catalyzes discovery.

- Biopathology Center
- Center for Biobehavioral Health
- Center for Cardiovascular Research
- Center for Child Health Equity and Outcomes Research
- Center for Childhood Cancer Research
- Center for Clinical and Translational Research
- Jerry R. Mendell Center for Gene Therapy
- Center for Injury Research and Policy
- Center for Microbe and Immunity Research
- Center for Perinatal Research
- Center for Regenerative Medicine
- Center for Suicide Prevention and Research
- Institute for Mental and Behavioral Health Research
- Kidney and Urinary Tract Center
- Steve and Cindy Rasmussen Institute for Genomic Medicine

RESEARCH GROWTH AT NATIONWIDE CHILDREN'S



2025 EXTERNAL AWARDS



RESEARCH BY THE NUMBERS

	2023	2024	2025
Principal Investigators*	264	268	278
Research Fellows	93	110	108
Graduate Students	68	76	74
Employees	1815	1956	2262
Publications	1820	1867	1964

**Includes faculty from the Abigail Wexner Research Institute and faculty from Nationwide Children's Hospital with $50,000 or more in research funding support.*

OUR SPACE: WORLD-CLASS FACILITIES FOR LIFE-CHANGING DISCOVERY

RESEARCH FACILITY HIGHLIGHTS

The Research Institute at Nationwide Children's Hospital is ranked among the top 10 NIH-funded freestanding pediatric research facilities in the U.S. The amount of child health research space on our campus tripled. The Wexner Institute for Pediatric Research (Research Building I) opened in 1987 with 136,580 square feet of dedicated research space. In the years since, we opened three additional research buildings. Nationwide Children's has more than 840,000 sq ft of research and innovation space, including research buildings and offices across campus and the off-site Biopathology Center.

MAIN CAMPUS HIGHLIGHTS

- 1,563,577 square feet of inpatient space.
- 681,415 square feet of outpatient space.
- 756,916 square feet of education and support areas.
- Largest neonatal network and provider of inpatient pediatric surgeries in the United States.*

**Most recent data from CHA-member pediatric hospitals, based on highest number of ICU beds and inpatients surgeries.*

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NationwideChildrens.org

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NATIONWIDE CHILDREN'S®

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