2025 Activity Report

Sinai Health Foundation

See what care can do.

A note of gratitude

This past year marked a defining moment for research at Sinai Health. With the launch of our first-ever Research Strategic Plan and, at its heart, the creation of Sinai Health Research, we are now united under one bold vision. Bringing together all of our institutes, centres and research programs — including the renowned Lunenfeld-Tanenbaum Research Institute (LTRI) — strengthens the full continuum of our scientific enterprise, opening new pathways for collaboration across discovery and translational science, clinical and disease-focused research, and population health and health-systems innovation. It marks the beginning of a future where research and care are more deeply connected than ever before (learn more on page 2).

This new chapter feels especially timely as we celebrate the 40th anniversary of LTRI. For four decades, LTRI has been a global leader in discovery and impact, progress made possible through the extraordinary generosity of our donors. As we look ahead to the next 40 years, that same spirit of philanthropy will continue to propel us forward. Your support sustains essential research positions, fuels bold, high-risk ideas, accelerates breakthroughs to patients and ensures our science is shaped in partnership with the communities we serve.

I am deeply honoured to serve as the Dr. Louis Siminovitch Mount Sinai 100 Chair in Research, made possible entirely through philanthropy. It enables one of the most meaningful parts of my work: mentoring the next generation of scientists. Recently, postdoctoral fellows in my lab reached remarkable milestones: Dr. Ugo Dionne, recognized nationally for his pioneering cancer research, and Dr. Rasha Al Mismar, whose first-author discovery is opening new frontiers in cancer biology.

Their success is your impact in action.

Before diving into this report, I invite you to **watch this short video message**, a heartfelt thank you for your partnership.

With warmest appreciation,

Dr. Anne-Claude Gingras
Director, Lunenfeld-Tanenbaum Research Institute
Vice President, Research, Sinai Health

A bold new era for research at Sinai Health

Sinai Health has always been a place where innovative science and compassionate care thrive side by side. But this year marks a truly historic turning point: the launch of **Sinai Health's first-ever Research Strategic Plan (2026–2031)**, a visionary roadmap that reimagines how discovery and care will work together to improve lives.

At the heart of our new research strategy is a commitment to seamlessly integrate discovery with care, creating an academic health-sciences powerhouse where insights from the bedside inform research — and bold ideas translate more rapidly into impact for patients.

We are achieving this through three transformative shifts:

One unified home for all research

Sinai Health Research brings together our research powerhouse, LTRI, with all other research centres and independent programs across Sinai Health into a single, coordinated structure — one that enhances collaboration, strengthens infrastructure and supports every researcher across the system.

Organizing our research activities into three interconnected domains

We are investing in the full continuum of science:

- Discovery and translational research
- Clinical and disease-focused research
- Population health, health systems and implementation science

This alignment will enable us to strategically attract specialized talent, form powerful partnerships and accelerate innovation from lab to bedside to community.

Defining three thematic focus areas

- Women's and infants' health
- Oncology
- Inflammatory conditions

These areas, where Sinai Health already leads nationally and internationally, will serve as launch pads for collaboration and large-scale, cross-domain research to strengthen Sinai Health's impact and identity.

Excellence at a glance

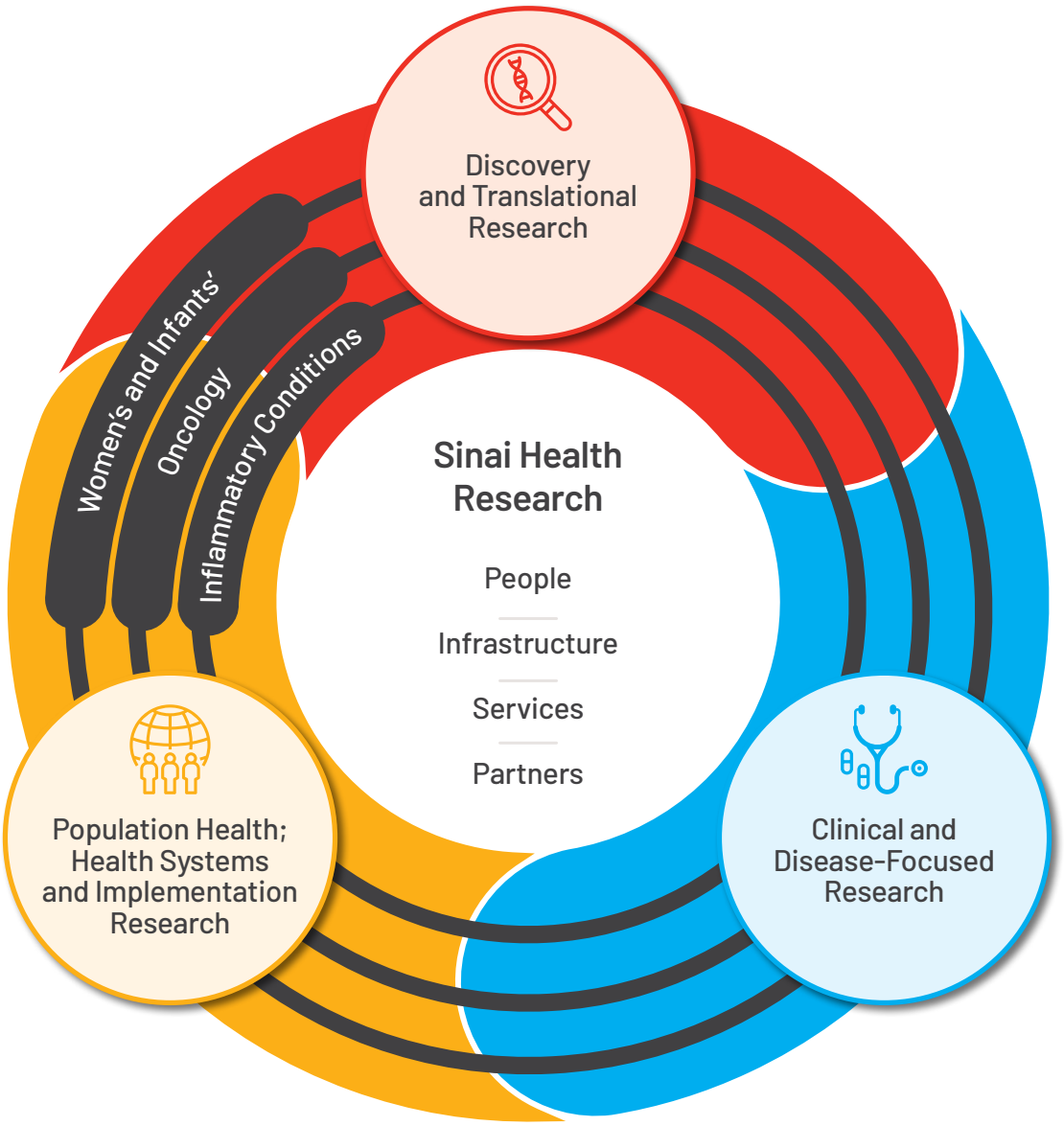
#1
in Canada in obstetrics and gynaecology research and innovation (Scimago Ranking)

#1
in Canada in diabetes research (Field-Normalized Citation Impact, CNCI)

52%
of LTRI principal investigators rank among the world's top scholars (Research.com)

700
scientific publications per year

300
clinical research projects annually



> “Sinai Health and its departments have done research for generations. They've done it independently — but we've never put it together as a story. The Research Strategic Plan, which is our very first, is going to let us elevate our research individually and as a system to levels we've never seen.”

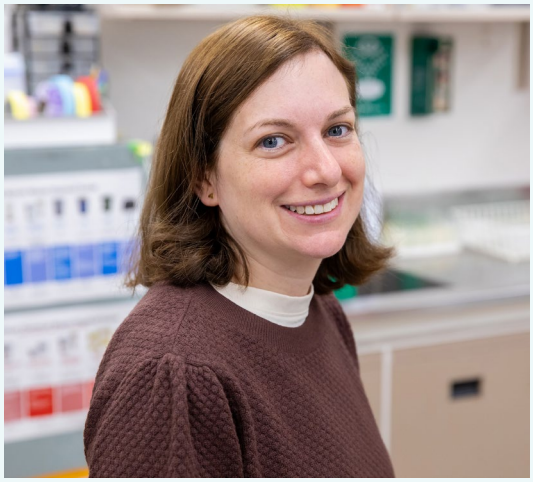
Dr. Gary Newton, President and CEO, Sinai Health

Meet LTRI's newest scientific experts

Donor generosity is enabling the most ambitious recruitment effort in LTRI's history: 10 new principal investigators over five years. Your philanthropy is more than an investment in science — it is an investment in people whose ideas will shape the future of human health.

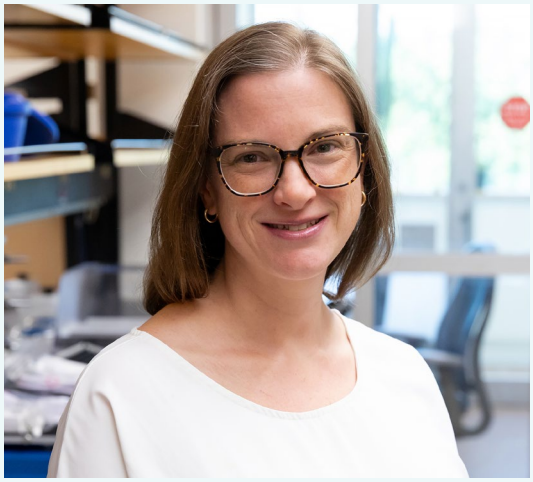
In 2025, we were thrilled to welcome two extraordinary scientists whose groundbreaking work embodies the future of discovery and translational research.

Dr. Alissa Greenwald



A rising leader in cancer biology and spatial genomics, Dr. Alissa Greenwald maps the hidden architecture of tumours to uncover new therapeutic possibilities. Her pioneering work revealed that even the most aggressive cancers follow structured organizational patterns — insights that may redefine how we diagnose and treat complex diseases. At LTRI, she will continue to push the boundaries of spatial biology, integrating experimental and computational tools to explore how cancer cells interact, adapt and resist therapy.

Dr. Katherine Stewart



A stem cell biologist uncovering how tissues maintain balance, and what happens when that balance breaks down, Dr. Katherine Stewart studies how stem cells clear dying cells to preserve tissue health. Her discoveries, including findings published in *Nature*, open new avenues for understanding inflammation, tissue regeneration and cancer progression. Now launching her first independent lab at LTRI, she will explore how these processes unfold in skin and breast tissues, offering insights with far-reaching clinical potential.

Breakthroughs your generosity makes possible

Thanks to donor support, Sinai Health researchers continue to push the boundaries of scientific understanding. Many of the following advances show how translational research, central to our new research strategy, is already connecting science directly to care.

Rewriting the future of metabolic disease

Your generosity fuels the groundbreaking work of **Dr. Daniel Drucker**, one of the most influential scientists in diabetes and metabolic research today. His discoveries laid the foundation for GLP-1–based medicines that are now transforming the treatment of diabetes, obesity and heart disease. In his most recent review in *Nature Medicine*, Dr. Drucker and collaborators explain how obesity triggers chronic inflammation and how GLP-1 medicines may directly reduce this inflammation, even beyond their effects on weight and blood sugar. This insight could unlock new treatments for chronic inflammatory diseases.

To see how donor-supported science can shape global health, **watch this video** on Dr. Drucker's journey from discovery to worldwide impact.

Why some cells become cancer — and others don't

A major breakthrough from **Dr. Rod Bremner's lab**, published in *Nature*, has uncovered a fundamental principle of cancer biology: the rate at which a mutated cell divides predicts whether it will turn cancerous. Fast-dividing cells are vulnerable; slow-dividing cells often resist cancer entirely — even when carrying the same mutation. This discovery suggests that gently slowing cell division could become a new way to prevent cancer in high-risk individuals. The Rankine Family Fellowship, made possible by Claire and Craig Rankine (learn more on page 9), was essential in powering this research.

Read full story.

A blood test that sees Crohn's coming

A simple blood test may predict Crohn's disease years before symptoms appear. Led by **Dr. Ken Croitoru**, Dr. Sun-Ho Lee and gastrointestinal medical resident Dr. Richard Wu — with research supported in part by the generosity of Lucie and Michael Andlauer — the team discovered that an early immune response to flagellin, a protein found on gut bacteria, can be detected long before disease develops. Using data from the Genetic, Environmental, Microbial (GEM) Project, they showed this response appears years ahead of diagnosis, pointing to earlier detection and the possibility of prevention.

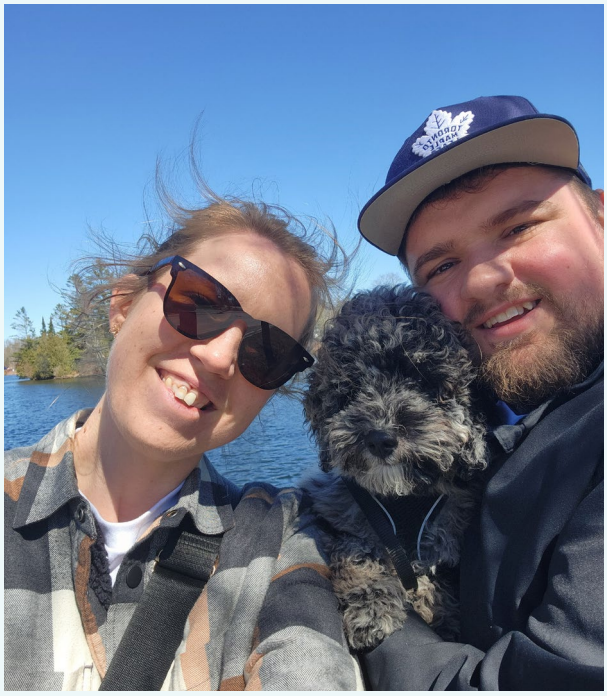
Read full story.

Catching diabetes risk in new mothers

In research led by **Dr. Ravi Retnakaran**, scientists discovered that a simple one-hour glucose test is a stronger and more practical predictor of future diabetes risk than the standard two-hour test for women who experienced gestational diabetes. Because the postpartum period is often hectic, many women never complete the longer test — missing a crucial opportunity for early intervention. By validating a faster, more sensitive approach, this research could dramatically improve screening rates worldwide, enabling earlier care, preventing disease and safeguarding long-term health for mothers.

Read full story.

Preserving the possibility of parenthood



Heather hopes that researchers like Dr. Jennia Michaeli will unlock more options for cancer patients, like herself, who want to start families one day.

Dr. Jennia Michaeli is opening new doors for young people facing cancer through her pioneering oncofertility research. The current focus of her clinical and research practice is ovarian tissue cryopreservation (OTC), a procedure in which the egg-producing portion of the ovary is removed and frozen for future use. OTC offers a vital option for patients who cannot delay urgent cancer treatment to preserve their fertility.

For Heather, a 32-year-old diagnosed with aggressive lymphoma, time was critical. Dr. Michaeli's expertise allowed Heather and her husband to protect the possibility of a future family, even as chemotherapy began.

"Cancer can hit a person at any age, and I think this work is so important to provide options for people in the future," says Heather. "Dr. Michaeli's specialty and research in OTC helps keep options open for patients, and we're really grateful that this was an option for us."

Read full story.

Preventing pain before it becomes lifelong

What if years of chronic pain could be prevented during surgery itself? **Dr. James Khan** is leading the international PLAN Trial to test whether a brief infusion of lidocaine — a low-cost, widely available medication — given during breast cancer surgery can prevent long-term pain. Enrolling more than 1,600 patients across 17 hospitals, this landmark study could change standard surgical care globally. If successful, this simple intervention would improve quality of life for countless patients at virtually no added cost.

Read full story.

Where compassion meets evidence: The Science of Care Institute

Thanks to donor generosity, including the visionary generosity of Jay and Barbara Hennick, the Science of Care Institute (SCI) was launched in 2022 as Canada's first and only research institute dedicated to improving health outcomes through fundamental care: the essential practices and environments that meet people's physical, psychosocial and relational needs. At its core, SCI is reimagining what care truly means, exploring the compassion, connection and humanity that define every healing experience, with much of this work being led by nurses at the forefront of patient care.

The Institute has supported more than 30 research and innovation projects to date — many showcased at the annual Science of Care Expo, where clinicians, scientists and patient partners share discoveries. Below are just a few of the recent innovative projects donor generosity has helped make possible.

Surveying hospitalized patients to improve patient-centred care

Through bedside interviews and surveys, this project explored what matters most to patients during hospitalization. Findings revealed ways to improve rest, mobility, meals and communication — often-overlooked aspects of care. These insights are now guiding hospital-wide initiatives to make care more responsive, personal and compassionate, giving patients a stronger voice in their recovery.

"Shall We Talk?" – bridging isolation

This hybrid program, designed for older patients from Chinese communities and their care partners, addressed the lasting effects of COVID-related isolation. Combining digital resources with in-person "Conversation Circles," participants built communication skills, restored confidence and rekindled joy. Co-designed with patients and caregivers, the program is a model for culturally inclusive, compassion-based care that is now inspiring similar initiatives for diverse communities across Sinai Health.

Dr. Carolyn Steele Gray is building digital bridges for compassionate care

A Senior Investigator at both the Science of Care Institute and LTRI, Dr. Carolyn Steele Gray is leading the implementation of Sinai Health's first in-house digital communications tool, Digital Bridge to Home. Designed with patients, families and clinicians, the tool connects everyone involved in care during the vulnerable transition from hospital to home.

By centralizing care plans and updates in one shared platform, it reduces complications, prevents readmissions and ensures continuity of care for patients with complex needs. Through her global leadership in implementation science, Dr. Steele Gray is transforming digital innovation into deeply human, compassionate care.

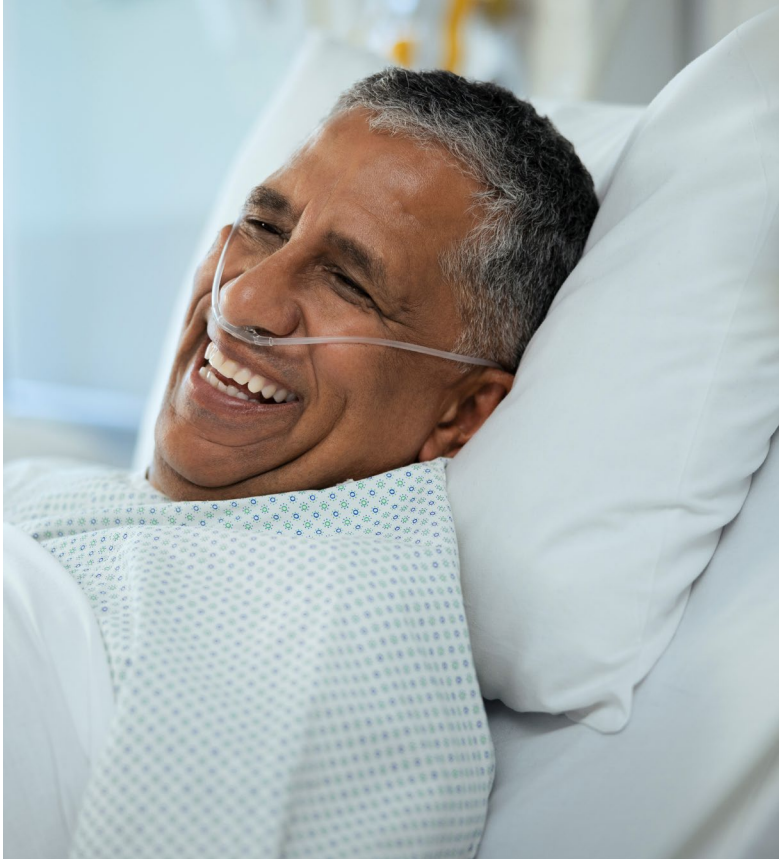
Read full story.

Emergency medicine research that reshapes systems

The Schwartz/Reisman Emergency Medicine Institute (SREMI) is Sinai Health's hub for advanced emergency medicine research, translating real-world data from the emergency department into changes in how care is delivered locally and globally. With more than 40 active studies, SREMI-supported models in pregnancy and cancer care have already been replicated nationally and internationally.

Recently, **Dr. Catherine Varner** received national recognition for two *CMAJ* editorials that challenge how the health system responds to vulnerability. One reframes so-called "social admissions" as policy failures rather than patient shortcomings, urging governments to address gaps in housing, home care and social supports instead of relying on hospitals as a safety net. The second editorial calls for urgent, compassionate alternatives to emergency department care for people experiencing early pregnancy loss, advocating for early pregnancy assessment clinics that can reduce suffering and improve outcomes. In her research, Dr. Varner and her co-authors found that four in five people in Ontario who experience pregnancy loss visit an emergency department — where care is too often suboptimal — underscoring the need for system-level change.

SREMI's impact was further demonstrated through **Dr. Keerat Grewal**, whose editorial was shortlisted at the 7th annual National Magazine Awards: B2B. She argues that the emergency department is no place to be told you have cancer. Her work underscores the human toll of fragmented systems and reinforces the need for research that designs safer, more humane diagnostic pathways.



Turning big data into better, more equitable health

The work of **Dr. Rayjean Hung**, Associate Director of Population Health and Head of the Prosserman Centre for Population Health Research, uses large, multidimensional datasets that span genetics, imaging, clinical records and environmental exposures to detect cancer earlier, refine screening and reduce inequities across diverse populations.

Her research has shown, for example, that chronic obstructive pulmonary disease increases lung cancer risk even in people who have never smoked — evidence that underpins more accurate, individualized risk-based screening models. By integrating tools such as liquid biopsy, artificial intelligence and global data collaborations, Dr. Hung's work is helping shift cancer care from late-stage treatment to earlier detection and prevention, ensuring risk models work for everyone, not just those historically represented in data.

Read full story.

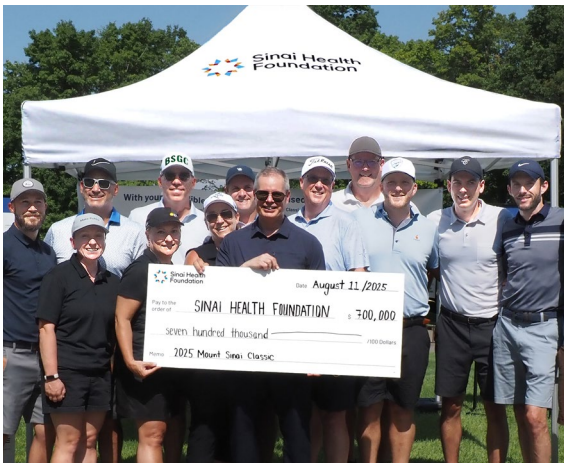
When community comes together, discovery moves forward

From golf courses to dodgeball courts, our community continues to power research that changes lives. The events below are just a few of the remarkable ways donors, volunteers and families came together last year to accelerate research at the LTRI.

Raptors for Research

May 25, 2025

Nearly 800 players, fundraisers and fans came together for Raptors for Research 2025, raising more than $800,000 in support of Sinai Health research. From buzzer-beating plays to extraordinary peer-to-peer fundraising, the day was a powerful reminder of what's possible when community and competition unite for science. Excitement is already building for 2026.



Mount Sinai Classic

August 11, 2025

The 31st annual Mount Sinai Classic raised more than $700,000 for LTRI, powered by a new generation of passionate volunteers building on a proud legacy. Under the leadership of Event Co-Chairs Shane Grosman, Jamie Grossman and Joshua Sonshine, this year's event struck a perfect balance of tradition and fresh energy. Hosted at Magna Golf Club, the day was capped off by the debut of an unforgettable Helicopter Ball Drop that added excitement (and altitude!) to a beloved fundraising tradition.

Duck & Dodge

January 27, 2026

Hosted by Claire and Craig Rankine, Duck & Dodge returned for its seventh year, bringing the dodgeball tournament's fundraising total to more than $752,000 in support of research into neurofibromatosis type 1 (NF1). NF1 is a genetic condition that can cause skeletal abnormalities, cognitive challenges and an increased risk of cancer — and one that affects the Rankines' son, Jonathan. This year's event marked a powerful milestone: Jonathan and his sister were finally old enough to step onto the court and participate themselves.

Thank you

From breakthrough discovery to real-world impact, Sinai Health Research is driving advances that improve care for patients today and shape health systems for the future. Across laboratories, clinics and communities, our scientists and clinicians are generating new knowledge, testing innovative solutions and training the next generation of research leaders.

This progress is only possible because of you.

On behalf of our researchers, patients and partners, thank you for making this work possible.

Sinai Health Foundation | *See what care can do.*

For more information, please contact:

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When you include Sinai Health Foundation in your estate plans, you are transforming health care for future generations. Each legacy gift helps us deliver and discover life-changing care to our community for years to come.

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