



*Your Impact
in Action*

DIVISION OF RHEUMATOLOGY



Message of thanks

I am delighted to connect with you through this report, my first as Head of the Division of Rheumatology at Sinai Health. Having joined the Sinai-UHN Division of Rheumatology over 15 years ago as a clinician-scientist, I now have a vision to lead this remarkable group to even greater heights, supported by the incredible generosity of donors like you.

This year, we're thrilled to share news of the new Chair in Rheumatoid Arthritis Excellence and Discovery — a key position we are actively recruiting for. Once filled, this chair will further amplify our division's leadership in pioneering treatments and research in rheumatoid arthritis, adding to our internationally recognized status.

Your support has enabled us to grow into one of Canada's largest and most impactful rheumatology divisions, with our team providing care to over 15,000 patients each year at the Rebecca MacDonald Centre for Arthritis and Autoimmune Disease. Here, we treat more than 115 forms of arthritis and some of the

most severe autoimmune diseases. As you'll see in this report, our experts are advancing studies that are redefining how we understand and treat these complex conditions.

Building on this foundation of excellence, we are expanding into critical new areas such as immuno-oncology, where we aim to become the first centre in Canada to establish this as a rheumatology subspecialty.

This is an exciting time for all of us, and I want to thank you from the bottom of my heart for your generosity, which makes all of this possible. Together, we're shaping the future of rheumatology.

With gratitude,

*Dr. Nigil Haroon
Head of the Division of Rheumatology
Sinai Health*



Introducing the Chair in Rheumatoid Arthritis Excellence and Discovery

We are thrilled to announce the establishment of the Chair in Rheumatoid Arthritis Excellence and Discovery at Sinai Health, made possible through generous philanthropic support.

A chair is a prestigious academic position supported by a dedicated fund that ensures stable, ongoing financial resources for a specific area. Endowed chairs provide stable, annual funding that is critical to researchers, especially as funding from granting agencies continues to decline. This drop in external funding forces researchers to spend more time applying for grants instead of focusing on their groundbreaking work. That's why donor support for chairs is so important: it allows us to accelerate the pace of medical discoveries, bringing innovative treatments to patients faster.

This pioneering position is set to transform the landscape of care, research, innovation and advocacy for rheumatoid arthritis (RA), reaffirming Sinai Health's esteemed reputation as a global leader in this essential field.

RA is a complex and often debilitating autoimmune disease that affects millions of people worldwide, leading to chronic pain, joint damage and a significantly reduced quality of life. The establishment of this chair reflects our unwavering commitment to understanding the underlying mechanisms of RA, developing new treatment strategies and advocating for patients facing the challenges of this condition. By prioritizing person-centered care, the chair will ensure that patient needs and experiences are at the forefront of both research and clinical practice.

As part of a vibrant and academically distinguished rheumatology unit, the chair will engage in both clinical practice and a robust research program, fostering a collaborative environment that inspires innovative approaches to RA management. The chair's work will be instrumental in bridging the gap between laboratory discoveries and clinical applications, ultimately leading to the development of more effective therapies and improved patient outcomes.

A global search for the chair holder is currently underway, and we eagerly anticipate welcoming a visionary leader who will drive this vital work forward.



Left to right:
Drs. Medha Soowamber
and Christian Pagnoux.

Dr. Christian Pagnoux is shining a light on vasculitis

The Toronto Vasculitis Clinic at Mount Sinai Hospital has made remarkable strides in advancing research and patient care for vasculitis, a group of more than 25 rare autoimmune diseases. This year, the clinic welcomed over 500 new referrals, leading to an expansion of services, including a pioneering fast-track clinic for Giant Cell Arteritis (GCA), led by Dr. Medha Soowamber (see sidebar on page 4).

The clinic's director, Dr. Christian Pagnoux, highlights the importance of donor support in facilitating these advancements:

“ Fundraising for rare diseases is challenging, yet donor support is essential for our research. Every contribution allows us to advance new treatment options and reminds patients facing these conditions that they are not alone on their journey. ”

Dr. Christian Pagnoux, MD, MSc, MPH

The clinic's commitment to collaborative international research has led to participation in two new studies and partnerships with European colleagues through the FAIRVASC registry. This collaboration will significantly increase our power to study vasculitis among larger patient populations.

One of the significant ongoing research projects is the Vitamin D Therapeutic Trial (PRAVDA Study), which investigates the potential benefits of vitamin D supplementation in managing symptoms and improving outcomes for patients with vasculitis. Preliminary findings have shown promising results, and these will soon be presented at major conferences, ensuring that the broader medical community is informed of new treatment possibilities.

In addition, the Skin Vasculitis ARAMIS Randomized Controlled Trial is making groundbreaking strides, enrolling participants across six sites in North America. This trial focuses on the effectiveness of new therapies for skin-related vasculitis, a condition that has not seen a major clinical trial since 1985. The aim is to provide robust data that could inform clinical practices and enhance treatment strategies for patients who have long been underserved in this area.

Fast-track care for GCA

With crucial donor support, the newly established GCA (Giant Cell Arteritis) Fast Track Clinic at Mount Sinai ensures that patients with suspected GCA – a serious vascular condition that can cause permanent vision loss – are seen within 48 hours. This pioneering clinic provides rapid assessments, including a comprehensive evaluation, diagnostic vascular ultrasound, and, if needed, a biopsy.

The use of vascular ultrasound is a key innovation here, allowing immediate, real-time imaging of inflamed blood vessels, which enables swift, informed treatment decisions. Dr. Medha Soowamber, who leads the clinic, received specialized training in the United Kingdom to maximize the technology's impact, setting a new standard in urgent care for this rare and critical condition.

Collaboration at the cutting edge

Drs. Kathy Siminovitch, Christian Pagnoux and Sindhu Johnson are advancing groundbreaking research on rare autoimmune diseases — Granulomatosis with Polyangiitis (GPA) and Systemic Sclerosis (SSc)

As part of her expansive research portfolio at the Lunenfeld-Tanenbaum Research Institute and Mount Sinai 100 Chair in Genomic Medicine, Dr. Kathy Siminovitch is focusing on granulomatosis with polyangiitis (GPA). This complex autoimmune disease causes inflammation of blood vessels, often resulting in severe complications.

Her team has uncovered specific immune cell patterns associated with disease flares, offering a path for early prediction and intervention. They believe immune cell changes not only drive GPA but also serve as markers for tracking disease progression and outcomes. Through long-term blood sample collection, the team has mapped how immune cells behave as GPA progresses.

“This study is truly unique, leveraging Mount Sinai’s clinical and immunologic expertise in vasculitis,” says Dr. Siminovitch. “We’ve identified immune cell patterns in GPA patients that correlate with flare-ups.” These insights advance understanding of GPA’s immune mechanisms, enabling the possibility to predict and prevent flares through early intervention, potentially transforming care for GPA patients.

Dr. Siminovitch is also collaborating with Dr. Sindhu Johnson on a pioneering study of systemic sclerosis (SSc), an autoimmune disease that affects the skin, lungs, kidneys and other organs. The disease’s diverse symptoms and unpredictable progression have made defining its causes and developing effective treatments challenging. Their research seeks to pinpoint molecular changes that lead to SSc onset and progression, addressing key gaps in understanding this complex condition.

Similar to the GPA study, this research investigates molecular changes within immune



Dr. Kathy Siminovitch

cells by collecting blood samples from SSc patients and healthy controls. Although still early, this study aims to identify the basic cell pathways tied to SSc, establishing a foundation for future work to discover biomarkers and targeted therapies.

Together, Drs. Siminovitch and Johnson’s research offers hope for personalized, predictive care in these challenging autoimmune conditions.



Dr. Sindhu Johnson

Advancing care for scleroderma and ILD

Dr. Sindhu Johnson's work extends beyond research into transformative clinical care for autoimmune diseases. As chair of the first American College of Rheumatology guidelines for managing Interstitial Lung Disease (ILD) in autoimmune diseases, she has set new standards for treating ILD in conditions like scleroderma and rheumatoid arthritis. This guideline, created in collaboration with the American College of Chest Physicians, represents a landmark in ILD care.

As Director of the Toronto Scleroderma Program, Dr. Johnson leads a team providing specialized care for scleroderma patients worldwide. Her research includes groundbreaking clinical trials, with two leading to the first FDA-approved therapies for scleroderma. Additionally, she established a Scleroderma Fellowship Program, training over 20 rheumatologists who now lead academic and clinical scleroderma initiatives globally, contributing significantly to advancements in patient care and research.



Innovating care: How the Rheumatology Immuno-Oncology Clinic is changing lives

Founded in 2019, the Rheumatology Immuno-Oncology Clinic at Mount Sinai Hospital is a groundbreaking space where the fields of rheumatology and oncology converge to offer specialized care for patients with complex, cancer-related rheumatic diseases. Established with the goal of providing expert, multidisciplinary care, the clinic has become a critical resource for cancer patients who develop rheumatic immune-related side effects from their treatments.

It's the only clinic of its kind in Ontario and one of just a few across Canada.

Leading this effort are Dr. Alexandra Saltman and Dr. Megan Himmel, two dedicated rheumatologists with specialized expertise that uniquely complements the clinic's mission. Dr. Saltman, with her dual training in palliative care, and Dr. Himmel, an immunology expert, combine their skills to deliver personalized treatment for patients facing debilitating joint pain, paraneoplastic syndromes and immune-related

side effects from cancer immunotherapies. The duo works collaboratively, not only in individual patient care but through a monthly combined clinic, where their distinct backgrounds drive innovative approaches to patient management.

A major milestone this past year was the launch of Canada's first Rheumatology Immuno-Oncology fellowship program, designed to train specialists who can expand this crucial care model beyond Ontario. Donor support of fellowship programs is vital to attract top talent, ensuring the next generation of experts advances innovative care models and benefits more patients. The inaugural fellow, who began their training this year, is acquiring vital skills that will enhance access to specialized care for oncologic patients with rheumatic diseases in his home of Quebec City.

"This fellowship program is groundbreaking for our patients," explains Dr. Saltman. "It not only addresses their immediate needs but also ensures that future practitioners are equipped to provide this essential care, ultimately improving the quality of life for those battling cancer and its complications."

Advancing access to life-changing rheumatology care



Dr. Amanda Steiman is reshaping rheumatology care through her leadership of the Project ECHO (Extension for Community Health Outcomes) and the Advanced Clinician Practitioner in Arthritis Care (ACPAC) programs.

Project ECHO connects primary care providers across Ontario with an expert rheumatology hub, fostering a collaborative space where anonymized patient cases are reviewed weekly.

Built on an “all teach, all learn” philosophy, these sessions equip providers with insights to improve patient care in their own practices.

Complementing ECHO, the ACPAC program trains allied health providers – including physiotherapists, occupational therapists, registered nurses and chiropractors – in advanced skills for managing rheumatologic and musculoskeletal diseases. Over a rigorous nine-month program, ACPAC has prepared more than 150 professionals who now work in extended roles across Canada and beyond, addressing a crucial gap in rheumatology expertise.

As Chair of Project ECHO Rheumatology and Medical Co-Director of ACPAC, Dr. Steiman is tackling the shortage of rheumatology specialists head-on, with a vision of an integrated practice community where primary care providers, ACPAC-trained clinicians and rheumatologists collaborate seamlessly.

“We recently published in the *Journal of Rheumatology* about an ACPAC-trained provider who worked remotely with a rheumatologist in Toronto,” shares Dr. Steiman. “Not only did this model deliver excellent clinical care, but it also generated significant savings for the provincial government, cutting hundreds of thousands

of dollars in travel costs associated with transporting patients to urban centers through the Northern Travel Grant Program.”

Dr. Steiman’s innovative programs are crucial to expanding access to rheumatology care, providing sustainable solutions that enhance patient outcomes across the province and beyond.

Enhancing education to improve arthritis care

With generous donor funding, Dr. Ahmed Omar is leading the charge to improve geriatric rheumatology care through an innovative educational project focused on older adults with arthritis. Understanding the unique health-care challenges faced by this growing population, Dr. Omar, in collaboration with residents, is developing an online module designed for rheumatology trainees and medical students. This pioneering initiative covers crucial aspects of caring for seniors with rheumatic diseases, including medication management, frailty assessment and polypharmacy (the simultaneous use of multiple drugs by a single patient) strategies.

A comprehensive nationwide needs assessment revealed a significant gap in formal training for geriatric rheumatology, prompting Dr. Omar to launch this essential project. **“There is a dire need for education in this area,” he emphasizes. “By equipping our trainees, we can ensure better outcomes for older adults with arthritis.”**

With a target for completion by the end of the academic year, Dr. Omar’s initiative is set to become a benchmark for future educational programs, ultimately improving geriatric rheumatology care.



For more information:

Emma Hendrie
Philanthropy Director
Sinai Health Foundation

647-241-8013
emma.hendrie@sinaihealthfoundation.ca

SupportSinai.ca

See what care can do.



Accredited
IMAGINE CANADA

Charitable No. 119048106-RR0001