

See what care can do.



ORTHOPAEDIC Sports Medicine

Spring 2024

Getting our patients back in the game



Physical activity is vital to health and well-being, its importance only growing in response to the challenges of recent years. During this critical time, your support of Sinai Health's orthopaedic sports medicine program has been instrumental in getting our patients back in the game and helping them stay healthy, active and strong.

We are thrilled to announce the unveiling of the newly renovated reception and waiting area at the Dovigi Orthopaedic Sports Medicine Clinic. This transformed space, made possible by philanthropy, not only fosters a welcoming environment for our patients but also improves efficiency and accessibility for our staff.

Meanwhile, our team was tapped to help establish the Tanenbaum Institute for Science in Sport a new global powerhouse for excellence in sports medicine based at the University of Toronto. The prominence of our expertise in the new Institute reflects our leadership and the excellence you've helped grow.

Sinai Health's Dovigi Orthopaedic Sports Medicine Clinic continues to raise the bar in reactivating people sidelined by injury — whether harnessing the healing power of stem cells and regenerative medicine to optimize patients' postoperative recovery, or personalizing clinical treatment and rehabilitation.

Thank you for championing our team. We are truly grateful for your continuing support.

With gratitude,

John Theodoropoulos, MD Dovigi Chair in Orthopaedic Sport Medicine, Sinai Health A fresh, new look for the Dovigi Orthopaedic Sports Medicine Clinic

DOVIGI Orthopaedic Secrets Medicine Clinic



⁶⁶ Thanks to philanthropy, the overall patient experience will be greatly enhanced.
This newly expanded space offers increased efficiency and functionality for our multidisciplinary teams. ,,

Dr. David Lawrence, Lead Primary Care Sports Medicine Physician for the Toronto Blue Jays and Toronto WolfPack RLFC The Dovigi Orthopaedic Sports Medicine Clinic is undergoing a profound transformation, with significant enhancements planned for its treatment spaces and patient rooms.

We are delighted to reveal the first phase of this metamorphosis: the newly-completed reception and waiting area. This large, light-filled space represents a substantial upgrade from its predecessor, boasting double the capacity for reception staff to expedite patient visits. Patients will benefit from increased comfort with additional seating and ample room, while multidisciplinary teams are afforded greater collaboration space. Strategically situated adjacent to elevators, the revitalized space is easily accessible for patients.

We are grateful to our generous donors whose unwavering philanthropy continues to elevate the standard of care, ensuring that our community receives the best possible treatment and support.





A game-changing investment in sports medicine

Sinai Health's orthopaedics sports medicine program has been boosted as part of a \$20 million gift from the Larry and Judy Tanenbaum Family Foundation, to establish a global centre of excellence for high-performance sports medicine and sport science in the heart of one of the world's most celebrated sporting cities.

Our experts will play a prominent role in the University of Toronto's new Tanenbaum Institute for Science in Sport. Through a new investment in sports medicine research, the Tanenbaum Institute will generate novel insights, innovative technologies and interventions that improve athlete performance, health, safety and well-being; reduce risk of injury; accelerate and optimize recovery and rehabilitation; and advance high-performance sport in a manner that is safe, welcoming, inclusive and accessible to all. We eagerly anticipate announcing the individual selected to hold the prestigious Tanenbaum Chair in Musculoskeletal Regenerative Medicine, an appointment which promises to further elevate our institution's contributions to sports medicine research and clinical practice.

"UofT's Tanenbaum Institute will enjoy a remarkable head start, thanks to the amazing research and clinical sports medicine leadership we have amassed through the Dovigi Orthopaedic Sports Medicine Clinic and the Lunenfeld-Tanenbaum Research Institute," says Dr. Gary Newton, President and CEO of Sinai Health. "We look forward to transforming high-performance sport together with our university colleagues and in collaboration with many industry, government, and community partners."

This latest gift builds on Larry and Judy Tanenbaum's incredible legacy of support for Sinai Health, including more than \$35 million to accelerate biomedical research. The Lunenfeld-Tanenbaum Research Institute was renamed in 2013, in tribute to Larry and Judy's visionary philanthropy.



Sport unites us, inspires us, and offers all people a path toward becoming their best selves. Judy and I are proud to support athlete health and well-being with this investment, to encourage athletic engagement, drive performance and accelerate recovery.

Dr. Larry M. Tanenbaum, O.C., Chairman, Maple Leaf Sports & Entertainment (MLSE)

Powering leading-edge treatment advances

Bolstered by the generous support of donors like you, the clinical and laboratory researchers of the Dovigi Orthopaedic Sports Medicine Clinic and the Lunenfeld-Tanenbaum Research Institute are leading the way in research and innovation to help keep top athletes and other active adults in peak form.



The science of soft-tissue repair

Cartilage is the body's 'shock absorber,' the rubbery tissue that caps and protects bone. When damaged, it can lead to swollen, stiff joints — most frequently the knee, but also the hip, elbow, shoulder and ankle. Tissue grafts are often required to repair these injuries, but as we grow older it becomes more difficult for the body to form the connective tissues that fuse the implant to existing cartilage.

Orthopaedic surgeon and clinician-scientist Dr. John Theodoropoulos has teamed up with Dr. Rita Kandel, Sinai Health's Chief of Pathology and Laboratory Medicine, to improve the success and results of cartilage grafts. Together, they've shown through a series of laboratory studies, that platelet-rich plasma (PRP) may facilitate a more robust bond between bioengineered implants and native cartilage. Their results, published in *The American Journal of Sports Medicine*, provide further evidence that could lead to improved treatments and help patients recover and regain their peak performance capacity.



Striking out shoulder arthritis

The ball-and-socket structure of the shoulder is especially prone to wear-and-tear, which can lead to a painful, progressive and debilitating form of arthritis in older adults and some younger athletes.

Currently, the most common surgical treatment is total shoulder joint replacement — a major operation that carries significant risks. Pain and symptom control is preferred in early cases, in order to prevent or postpone the need for joint replacement surgery. Corticosteroid injections are commonly used as part of the pain management plan, but surgeons continue to seek better treatment alternatives.

A recent randomized clinical trial led by Dr. Tim Dwyer, an orthopaedic surgeon with the Dovigi Sports Medicine Clinic, together with Dr. John Theodoropoulos and other University of Toronto colleagues, found that patients experienced greater pain and symptom relief from an injection of their own bone marrow, compared with a corticosteroid. While more research is needed, these early results suggest that this approach warrants further studies.

Introducing the Aplio i800 Ultrasound Machine



Thanks to the generous support of our donors, the Sports Medicine team is excited to introduce their latest diagnostic tool: the Aplio i800 ultrasound machine. This advanced equipment offers several features that make it particularly beneficial for orthopaedic sports medicine.

Firstly, its advanced imaging capabilities provide exceptional detail and clarity, allowing the team to accurately assess musculoskeletal injuries common in sports. Additionally, its Wide View function offers a broader field of view, enabling better visualization of larger areas, which is essential for assessing the extent of injuries or abnormalities in joints and muscles.

The Precision+ technology ensures smooth and detailed images, enhancing the ability to detect subtle changes or lesions in soft tissue structures. And, the machine's versatility and range of transducers make it suitable for a variety of orthopaedic examinations, from assessing tendon injuries to identifying stress fractures.

We are tremendously grateful to our donors for their support in bringing this valuable tool to our experts.

Elevating care: New faces at the Dovigi Orthopaedic Sports Medicine Clinic

The Dovigi Orthopaedic Sports Medicine Clinic, formerly the Rehab and Wellbeing Centre, provides leading-edge rehabilitation medicine by experts who span decades of clinical practice, research and education. Through the generosity of our dedicated supporters, the clinic continues to attract top clinical talent to provide assessment, treatment and rehabilitation services to active patients from the Greater Toronto Area. New faces and recent recruits you might meet at the clinic, include:



Mark Wong, Physiotherapist

Marguerite Mérey, Registered Massage Therapist

Mark graduated from the University of Toronto with a Master of Science in Physical Therapy, followed by a Master's degree in Advanced Health Care Practice - Comprehensive Musculoskeletal Physiotherapy from Western University. He is a Fellow of the Canadian Academy of Manipulative Physiotherapy (FCAMPT) and a member of the Orthopaedic and Sport Divisions of the Canadian Physiotherapy Association. Mark has extensive experience working with athletes and postsurgical patients of all competition levels. He employs a variety of treatment techniques, including: joint manipulation, manual myofascial release techniques, acupuncture and dry needling, taping, and personalized exercise prescription.

Practicing full-time since 2013, Marguerite is a Registered Massage Therapist with The College of Massage Therapists of Ontario. After finishing her degree in Physical Health and Education (BPHE) at the University of Toronto, she completed two years of college education in massage and holistic studies in Ireland, including training in sports massage, reflexology, aromatherapy and Reiki. Most recently, Marguerite completed a 120-hour course in manual lymphatic drainage (MLD) and is a certified Combined Decongestive Therapist (CDT). Through both MLD and CDT techniques, she can treat people who present with lymphedema, sinusitis, arthritis and repetitive strain injury. She also has experience treating patients with neurological conditions (poststroke, multiple sclerosis, Guillain-Barré syndrome) and those recovering from orthopaedic surgery.



Sam Keshen, MD, MEng, Orthopaedic Surgery Resident



Lawrence Wengle, MD, FRCSC, Upper Extremity Fellow, Division of Orthopaedic Surgery, University of Toronto

Dr. Sam Keshen's expertise extends to medical/ surgical devices, minimally invasive surgery and technologies for resource-constrained settings. As the 2022-2023 Surgery Innovation Fellow at Stanford University's Byers Center for Biodesign, he honed his skills in developing novel medical technologies and is dedicated to translating cutting-edge research into practical solutions.

Dr. Keshen's current research at Sinai Health focuses on injuries among professional ice hockey goaltenders in the National Hockey League. Goaltenders face unique biomechanical stressors and injury risks compared to other players, yet the understanding of these injuries remains limited. His study aims to understand the incidence, epidemiology and impact of injuries on goaltenders' return to play, filling crucial gaps in sports medicine research. Anticipated for completion by August 2024, data analysis is in progress and manuscript writing underway.

Throughout his orthopaedic surgery residency at University of Toronto, Dr. Lawrence Wengle has pioneered a randomized control trial to investigate the utility of Blood Flow Restriction (BFR) training in patients awaiting Anterior Cruciate Ligament (ACL) reconstruction. These patients often experience guadriceps weakness and atrophy while awaiting surgery. Although BFR has shown clinical efficacy in improving these outcomes post-surgery, its use in the preoperative setting remains underexplored. Over the past three years, patients have undergone more than 380 physiotherapy sessions at the Dovigi Orthopaedic Sports Medicine clinic, making this trial the largest of its kind in existing literature.

If successful, this trial could lead to the widespread adoption of BFR as a standard preoperative intervention, ultimately improving the quality of life for individuals awaiting ACL reconstruction. As the final results are prepared for publication, there is optimism that this research will validate BFR's role as a valuable tool across all phases of ACL reconstruction and recovery, providing patients with a more effective and comprehensive treatment approach.



For more information, please contact:

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