

HOLLAND MUSCULOSKELETAL PROGRAM TEAM NEWS

24th Edition, Fall Winter 2017



New Interim Holland Centre Medical Director, and a heartfelt thanks to Dr. Gollish



The Holland Musculoskeletal (MSK) Program thanks **Dr. Jeffrey Gollish** for his longstanding stewardship of the Holland Centre, as its medical director. During his tenure, the Centre has become a leader in hip and knee arthritis treatment, Dr. Gollish an orthopaedic surgeon, remains dedicated to patient care and has stepped down as director.

The Program welcomes **Dr. John Murnaghan**, the new, interim medical director who is also an orthopaedic surgeon, and a surgeon educator, University of Toronto Department of Surgery.

“Dr. Murnaghan will provide experienced perspectives relating to operational and educational activity at the Holland Centre, that

will be important in our efforts to share programmatic patient care expertise within emerging opportunities in Ontario’s health system,” says **Dr. Albert Yee**, chief, Holland Musculoskeletal Program, Sunnybrook.

“It is an exciting time in our evolution,” says Dr. Murnaghan about the Holland Centre, which is part of Sunnybrook’s Holland MSK Program. “I am looking forward to working with our teams towards common goals.”

“Our collaborative, central intake model of assessment and care delivery for patients with hip and knee arthritis is recognized for its innovative approach,” he adds. “It is our hope to play a key role to support this model for use in other healthcare institutions across the province, and to advise on adapting it to settings for other types of musculoskeletal care, beyond hips and knees.”

“Our Holland Centre is involved with research to improve patient care. In the clinics, we are committed to continuity of care for patients, as we renew and revitalize our surgeon workforce.”

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Holland Musculoskeletal Team News offers updates on clinical services, education and staff activities.

We welcome suggestions for content and your articles for future issues. Please send ideas and/or submissions to natalie.chung-sayers@sunnybrook.ca

Inaugural Susanne and William Holland Chair in Sports Medicine Research

Dr. Paul Marks, orthopaedic surgeon, Holland MSK Program and associate scientist, Holland Musculoskeletal Research Program, Sunnybrook Research Institute, has been named the inaugural Susanne and William Holland Chair in Sports Medicine Research at Sunnybrook.

“This is a good opportunity to enhance our sports medicine research activity and to build on collaborations among our teams of clinician-researchers and scientists, to benefit patients,” says Dr. Albert Yee, chief, Holland Musculoskeletal Program.

Sports medicine relates to physical fitness and the treatment and prevention of sports injuries.

Dr. Marks has a strong research interest in osteoarthritis risk factors and the progression of the disease especially as it relates to sports medicine, or after sports injury. “It is well understood that being overweight contributes to the development of osteoarthritis. The population is living longer and individuals should remain active. Lesser understood is how joint injury from risky sports activity may also contribute to the development of this disease,” says Dr. Marks, associate professor of surgery, University of Toronto.

He is part of the ProKnee study that is looking at osteoarthritis risk factors and disease progression after anterior cruciate ligament (ACL) injury. The ACL is a main ligament in the knee connecting the thighbone (femur)

and shinbone (tibia), or knee joint. It helps with the knee’s back and forth motion and with stability. Together with the Canadian Arthritis Network and Canadian Institutes of Health Research, he is also studying cytokine and biomarker imaging and outcomes in patients at risk for arthritis. Cytokines are proteins released by cells that have a specific effect on cell behaviour. These small proteins may have pro or anti-inflammatory roles. Cytokines with a pro-inflammatory role are linked with the breakdown of the cartilage that protects joints, or the degeneration

seen in osteoarthritis.

“Our goal is to translate our findings to identify specific cytokine biomarkers that may better predict who is at higher risk. Longer term, the goal is to incorporate all known risk factors with varying patient populations, to develop a risk equation for osteoarthritis.”

Thanks to Susanne and William Holland for their generosity and support of the Holland Musculoskeletal Program and excellence in musculoskeletal research.

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Holland Centre’s myHip&Knee app can help with recovery at home after joint replacement surgery, and provides pre surgery reminders, a daily check in to track progress and a resource of exercise videos.



- 1,132 app users to date
- 98% of app users found it useful for recovery
- 68% of app users say it prevented at least one phone call to the hospital
- 96% of app users found it easy to use

*based on April – June '17 data

Exercise Together! It's Good For The Knees!

After knee replacement surgery when Linda Veres, Ross Winter and Robert Morassutti happened to sign up for the same class, little did they know the difference it would make. Studies show patients in group-based physio achieve significant improvements in mobility and function.

After surgery at the Holland Centre, they participated in an exercise class led by physiotherapist, **Mark Anunciacion**. “In the class they connected through experiences of surgery, a goal to continue improving & move well again,” says **Suzanne Denis**, advanced practice physiotherapist, also of the Holland Centre, Holland Musculoskeletal Program.

Class is over but they continue to exercise together. Here are their reasons why it works:

Camaraderie – social + exercise: Ross says, “Doing physio alongside Linda and Robert who had a similar post-op sensibility, allowed us to share experiences, knowledge, advice.”

Context – “Doing therapy with others gives you context. Everyone is different even though we had the same surgery,” says Robert. “In some ways, it helped to ‘normalize’ things. We would ask each other: are you still using your cane? Being together gave you permission to either still be using the cane, or not.”

Commitment – “Sometimes, I’d be thinking to myself: I’d rather not do this [the exercises],” says Robert, “but as a group, we made a commitment:



(left to right) Robert, Linda and Ross continue to exercise together

to be there for each other.” “And keep ourselves motivated,” adds Linda.

Commiserate – “Misery loves company. It’s better to share the pain,” says Ross. “Group physio gave everyone the occasion to express frustration about lack of progress or the discomfort, but temper occasional complaints with humour,” says Linda. She recalls the generosity of the volunteers who would get ice for participants. One day, she was feeling low. As a volunteer approached with the ice, she joked, “Do you have gin with that?”

Surgery is a big deal even if some say it isn’t. They offer these tips:

- Connect with friends and family: “As you prepare for surgery, think about what you will need,

after surgery. It’s hard to ask for help, but do! Ask for specific help!” “Until you know the ‘new’ you, you need someone there to help you.”

- Careful: “Pace yourself, for yourself, and DO NOT FALL!”
- Consistency: “You have to keep at it! Keep moving, stretching and strengthening.” “Keep up the momentum even after formal physio.”

Celebrate! “Everyone has markers; milestones of progress, recovery.” “Enjoy being closer to what you used to do: getting on a streetcar, being able to put the rugs down at home, driving a car, taking the bus to see a movie ...”

Best Practice

At the 2nd annual Best Practice Showcase, Holland Centre teams



Falls: Pilar Ramirez, PT, Kimberley Tan, RN



Wound Care: Archana Saroye, RN



Choosing Wisely: Jan Flynn, RN

Remembering Barb Salmon



Earlier this year, the Holland Centre lost a treasured colleague and friend, Barbara Salmon. Barb began working as a Physiotherapist at the former Orthopaedic & Arthritic Hospital in January 1979. A world traveler, little did she know that she would remain loyal to our Centre for 38 years! Even after retiring in October 2009, she worked casually as a Team Lead for Rehab and the Working Condition Program until this past March. Although she was an excellent clinician, Barb progressed to holding key management positions over the years. Her contributions are many and too varied to list but they have resulted in significant advancements in our Working Condition Program, Inpatient and Outpatient Programs.

We will never forget Barb's resourceful, creative problem solving. No matter how big or small the problem, Barb would come up with a beneficial solution. Her wisdom and organizational skills were foundational to this success. However, what we all valued the most was her compassionate, calm demeanour – she always made time to listen even when she was too busy to do so.

As one staff commented, "she was our glue that held everyone together".

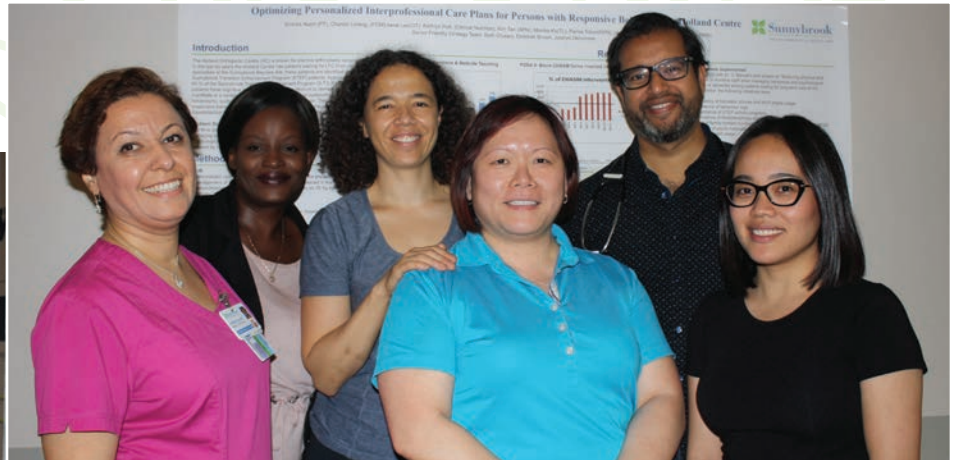
- by **Deborah Kennedy**

Benefits Patients

shared initiatives of continuous improvements to clinical care.



Early Mobility: Alina Chiu, RN



*Optimal Interprofessional Care re: Responsive Behaviours:
(left to right): Parisa Toloei, RPN, Chantal Letang, PCM, Andrea Nunn, PT, Irene Lee, OT,
Dr. Bansal, Kimberly Tan, RN.*

Supporting Patients in Recovery After Hip Fracture

Some may think it's unwise to be up and around right after surgery for a broken hip, but studies show it's important to start moving soon, especially for elderly patients. A delay of even a day says **Lynn Haslam**, means more chance of not regaining the mobility and independence they once had.

Haslam, a nurse practitioner with the Pre-operative Clinic at the Holland Centre, Holland Musculoskeletal Program, is pursuing a PhD, studying ways to support patients in early mobility after hip fracture surgery.

"Hip fractures from falls, are the most common and serious of injuries. Understandably, we think that very related to this, is an individual's fear of falling and low balance confidence which may add

to hesitation about early mobility," she says. Delays in moving after surgery can result in a longer stay in hospital, more dependence and lower functional recovery.



Lynn Haslam

Fear of falling or low, falls self-efficacy is a known in Nursing, Physical Therapy and Occupational Therapy. "We use established assessments to measure a patient's falls self-efficacy to help guide next steps in care. Related to early mobility after surgery, we need to gather more data from patients and health care providers about what helps or hinders these efforts, to better support participation."

Helping Patients With Serious Shoulder Injuries

The shoulder is one of the most free-moving joints of the body and allows us remarkable range of motion. What if you couldn't comb your hair, or simply reach out to grasp a cup of coffee? **Dr. Patrick Henry** sees these, and more serious challenges as a result of complex shoulder injuries.

An orthopaedic surgeon of Sunnybrook's Holland Musculoskeletal Program, he specializes in complex reconstruction treatments for shoulder disorders, and minimally-invasive arthroscopic techniques. In collaboration with the Trauma, Emergency and Critical Care Program, he works with patients with injuries related to high-energy motor vehicle crashes, or other trauma.

Recently, a patient had sustained an explosive hit to the shoulder causing many fractures of the scapula or shoulder blade. Dr. Henry performed an open reconstruction of the back of the shoulder. To get to the fractures inside the shoulder joint, he used a more unique arthroscopic technique. Guided by a tiny arthroscope or endoscope with a flexible tube and a camera, he first re-aligned fractured bones. He

then used small screws and clip-like sutures inserted through thin tubes or cannulas deep into the joint through one centimetre incisions. The screws and sutures hold the fractured bone fragments together while they heal properly.



Dr. Henry also works with rotator cuff tears. These are caused by either an acute injury often due to sports, or by overuse in repetitive movements for manual labour work. The rotator cuff is made up of tendons and muscles that support the shoulder. During arm and over-the-head movements, the rotator cuff steadies the humerus (upper arm bone) within the shallow socket of the shoulder and keeps all connected with the clavicle (collarbone) and scapula.

Many tears are treated with physical therapy alone. However Dr. Henry's specialty is managing large rotator cuff tears that have less chance of healing. "Patients cannot even lift their arm to touch their faces. In the past, they were told 'nothing can be done', while others are offered complete shoulder

replacements," says Dr. Henry. He performs several specialized surgical treatments that can provide relief or at least postpone the need for shoulder replacement, giving patients back arm function. Treatments include transplanting other tendons into the shoulder, performing advanced rotator cuff repair techniques, or using a newer surgery called superior capsule reconstruction that involves a graft or small transplant to restore proper shoulder anatomy – all done through one centimetre incisions.

Related to shoulder traumas, Dr. Henry is studying the optimal use of different surgical techniques, and is nearly finished a PhD dedicated to massive rotator cuff tear surgical techniques. He is also researching arthritis of the shoulder, including the use of stem cells for early onset.

The Long Road To Recovery

To persevere through a grueling 10K race, in a wheelchair just two months after being treated at Sunnybrook for traumatic injuries, is testament to Dylan Itzikowitz's determination. Though the 22-year old still has a long way to go in his recovery.

Last year, Dylan was the pedestrian victim of a car's collision. He suffered multiple broken bones, torn ligaments and damage to motor nerves that control muscles. He underwent many surgeries, receiving treatment from **Dr. David Wasserstein** and **Dr. Hans Kreder** of the Holland Musculoskeletal program; two of only a handful of orthopaedic surgeons in Ontario who specialize in complex musculoskeletal (bony and soft tissue) injuries.

To help restore mobility as much as possible, Dr. Kreder performed surgery to piece together the dozens of small fragments in Dylan's smashed knee joint, and to repair the broken arm bone.

However, more work on the knee would be required later.



Dylan's care was coordinated in collaboration with the interprofessional teams of the hospital's Trauma, Emergency and Critical Care program. Dr. Wasserstein, a specialist in the repair of ligaments and soft tissues took

over Dylan's care once the broken bones had started to heal. He reconstructed all of the torn ligaments and soft tissue that support the knee joint so that Dylan can once again use his knee.

The crash changed Dylan's outlook about the future, and his career choice. Having had to take a year off from school, he spent time volunteering and giving back to the community. He re-applied to school, and begins a Masters of Social Innovation business degree at the prestigious London School of Economics. He continues to volunteer and has helped start The Forward Movement, a local group that focuses on different ability, not disability, says Dylan, and on determination to achieve

anything regardless of that different ability – a journey he understands all too well.



Research Highlights

The Holland Musculoskeletal Program continues to be productive in knowledge translation, with 20 peer-reviewed publications, and successful in grant funding to conduct research, including: **Dr. Jacques Lee**, scientist and physician, was successful with two grants from the Canadian Centre for Aging Brain Health Innovation (\$49,698 and \$589,728) for "Predicting Emergency Department Delirium with an Interactive Customizable Tablet to Prevent Repeat Visits: The PrEDDICT-PReV App".

Dr. Lee has a research interest in improving care for elderly patients accessing emergency services. These patients may be at higher risk for dementia, which relates to falls injury such as hip fracture. **Cari Whyne**, senior scientist and **Jeff Fialkov**, associate scientist were two of the co-applicants on Dr. Paul Santerre's Ontario Centres of Excellence's Medical Sciences Proof-of-Principle grant of \$140,000 for "Novel biodegradable adhesive polymeric membranes for binding to bone".

2017-2018 Health Professions Innovation Fellowship Program

Nelia de Leo, Registered Nurse, was awarded the 2017-2018 Holland Musculoskeletal Innovation Fellowship for her practice-based research, 'Empowering Best Practice Champions';

Senayit Afrasa, Registered Nurse, was awarded the 2017-2018 C.S. Wright Education Fund Innovation Fellowship for her practice-based research 'Implementation of Gentle Persuasive Approach'.

Octogenarian tennis champion wins with new hips, and offers a lesson or two.

At age 80, Inge Weber is a three-time world tennis champion and an inspiration to all, for her extraordinary feat and for winning, with a new pair of hips! Before winning the Super Seniors World Individual Tennis Championships in 2012, 2014 and 2016, she had surgeries at the Holland Centre to replace her hips. She had her first surgery in 2010. Eight months later she had her second.

“I was in such pain before the operation. It was bone on bone from all the wear and tear”, she says. “I know I should have had it done sooner, but I just kept putting it off. The pain meant there was no hesitation to choose surgery. I just wanted to get rid of the pain.”

Four months after each surgery she was back on the tennis court, doing controlled hitting with minimal movement and pivoting. “Your balance is not quite there, and I didn’t want to make the wrong step. As time went on, the safer I felt, the more I moved. It was only after a year after each surgery, that I felt fully comfortable, both mind and body.”



Inge Weber, with Dr. Jeffrey Gollish

Even with such athleticism, Inge sees herself like many aging Canadians whose hips or knees ‘give out’ and who experience pain, and fear of not being able to walk and move freely again, even after surgery. “The older we are, the more cautious we get – I don’t want to fall,” she says.

Having been through hip surgeries, she advises you can get back to where you were. “Think about how

you felt before the pain began, and work hard and push yourself, to get back to that place.” She says to do exercises more often but at a moderate level,

She also advises to try to get as fit as possible before surgery, strengthening the muscles around the specific area. “That way”, says Inge, “it’s likely a bit easier to pick up where you left off!”



For health blogs, visit: health.sunnybrook.ca

The Holland Musculoskeletal (MSK) Program is one North America’s finest in musculoskeletal care, education and research, and provides integrated services in orthopaedic surgery, orthopaedic trauma, rheumatology and rehabilitation. Located at the Holland Orthopaedic and Arthritic Centre and Bayview sites of Sunnybrook Health Sciences Centre, the Holland MSK Program is a key referral centre for complex traumatic orthopaedic surgery, spine surgery, hip and knee joint replacement, soft tissue injury reconstruction, and shoulder and upper extremity surgery, and also encompasses the Working Condition program and the Sunnybrook Centre for Independent Living.