



*Elevate
Explore Inspire*

Photo: Joel Forsman

PRINCESS MARGARET CANCER CENTRE

Annual Report 2022

“Although the fight is still going to be long, it is always moving forward at the Princess Margaret Cancer Centre.”

Ronald Gorospe, cancer survivor



Message from the President and the UHN Board of Trustees

We want to begin this year's letter by expressing our sincere thanks to each and every member of the Princess Margaret team who continually demonstrate perseverance, innovative approaches to care, and unwavering consideration for the urgent and emergent needs of patients with cancer. In particular, special thanks go to our nursing colleagues who are the backbone of our health system.

For the Princess Margaret Research Institute, 2022 was a year of innovation with cancer research funding reaching more than \$241 million, more than 1,200 peer-reviewed publications, and prestigious honours and awards to its staff and scientists.

Through the development of novel treatments for cancer, enhancements in virtual care and smart technology, and clinic optimization, we were able to improve the journey and treatment of cancer patients. Important new local and regional partnerships were developed to facilitate collaborative clinical care. Global partnerships were also established and will not only improve equity in cancer care but give the opportunity to share best practices. Additionally – and something we're exceedingly proud of – University Health Network was once again named Canada's top research hospital for the 11th consecutive year.

We are extremely grateful for the generosity of our donors and the Princess Margaret Cancer Foundation, which allows PM to pursue world-class research and education, empower the world's most advanced practitioners, and train those who represent the future of healthcare.

As we move forward, we know we will face unique challenges. We also know we will continue to seize any and all opportunities to advance science and enhance care for cancer patients.

Congratulations to the entire team at Princess Margaret Cancer Centre for an outstanding year of 2022. The determination and resilience of the Princess Margaret staff to provide exemplary care to cancer patients and their caregivers while supporting each other is truly inspirational. We thank you for your ongoing efforts to elevate, explore, and inspire.



Dr. Kevin Smith
President & CEO, UHN



Mr. Brian J. Porter
Chair, UHN Board of Trustees

Leadership Message



We are pleased to present the 2022 Annual Report for the Princess Margaret Cancer Centre at the University Health Network (UHN). The third year of the COVID-19 pandemic continued to present challenges; yet in spite of this, we not only survived, but thrived, thanks to the incredibly hard work of our staff, researchers, clinicians, learners, supporters and patients.

As one of our patients said, together we are “Always Moving Forward.”

We survived a major Omicron COVID wave, the largest snow storm since 1946, a trucker’s protest that shut down access, multiple floods and a complete power outage. We thank our facilities, IT, transport and security teams for guiding us through these critical moments.

In June our staff also rose to the occasion and successfully helped complete the UHN installation of the new EPIC electronic health record transformation. Thanks to the patience, positivity and cooperation of our staff during those difficult first few weeks, we quickly adapted to the new system.

Among our other highlights:

- As the pandemic restrictions were loosened, by late year, 55 – 60,000 patient appointments per month were being accommodated;
- The Princess Margaret was able to assist patients from across Canada by accepting leukemia and allogeneic bone marrow transplant patients from other academic centres in Ontario and New Brunswick, as well as patients from Newfoundland in need of radiation, and CAR-T cell patients from British Columbia, Saskatchewan and Alberta;
- We thank our surgery teams who worked overtime and Saturdays to catch up on the backlog of oncology cases. Our teams in nursing, pharmacy, pathology, lab, imaging and Allied Health handled very high volumes in our chemotherapy suites, and out patient clinics with calm and poise;
- The Facilities Management teams started much needed renovations of the PM Lodge, built a new Head and Neck Clinic, launched a major refresh of the GI clinic and helped steer submissions to the Ministry of Health for Canada’s first proton radiation facility, as well as the next phase of the Stem Cell 2 construction expanding our cellular therapy capacity.

- Our Global Oncology team added Cancer Centers in Kenya, Australia and Malaysia to our list of partners, and the Southlake Stronach Cancer Centre became the first member of the PM Cancer Care Network;
- We opened our first sexual health clinic for patients experiencing sexual dysfunction resulting from their diagnosis and treatment – a critical step towards improving cancer care across UHN, and the country.

We also saw another impressive year of research; 22 per cent of our patients enrolled in clinical trials; our scientists published numerous breakthrough discoveries and won many prestigious awards including the 2022 Canada Gairdner International Award, which went to Dr. John Dick for the discovery and characterization of leukemic stem cells.

Among our research highlights:

- Our researchers discovered the potential for a new therapeutic pathway to treat metastatic colorectal cancer using the technology behind some of the most successful COVID-19 vaccines;
- We are leading a universal genetic testing program with 1,300 patients at the Breast Site Group;
- Our researchers identified a potential target for a common form of blood cancer known as acute myeloid leukemia (AML);
- UHN clinicians and scientists began planning to pinpoint cancerous tumours in a world first-in-human trial using diagnostics called porphyrins, organic nanoparticles that show as red when exposed to blue light.

As always, The Princess Margaret Cancer Foundation continued to fuel our success through its philanthropic efforts that help make our programs, research, and innovations possible.

Of note this past year:

- La Fondation Emmanuelle Gattuso and The Slaight Family Foundation made a spectacular \$50-million transformational gift. Given in honour of the late Allan Slaight, Canadian business legend and philanthropist, this gift will support discovery research by allowing researchers to work in creative and unconventional ways.
- The Paula and Rodger Riney Foundation generously committed \$9.2-million in support of multiple myeloma research. The grant is the first in Canada from the U.S.-based Foundation, and will fund four projects with potential clinical impact using novel therapies being developed at the PM.

Finally, a big shout out to the Foundation for relaunching the in-person Ride, Walk, Journey, and Road Hockey to Conquer Cancer, which together raised \$30-million. Thank you to all of our donors and supporters for your incredible generosity!

And finally, our immense gratitude to our staff, volunteers, and learners, many from across the globe. Your unflagging optimism and dedication make a significant difference to patients, their families, and our colleagues.



A. Keith Stewart, MB, ChB
VP Cancer, UHN & Director,
Princess Margaret Cancer Centre



Aaron D. Schimmer, MD, PhD
Research Director,
Princess Margaret Cancer Centre

Targeted Cancer Therapy Gave Jenny Her Life Back

Revolutionary Targeted Cancer Therapies that Give Patients Hope
Jenny and Mark were just beginning their life together as a happily married couple when a diagnosis changed everything.

The day they returned home from their honeymoon, Jenny went to the doctor to investigate a twitch in her eye that had left her mouth drooping. “I knew something was wrong,” she says. Then, the unthinkable happened: Jenny was diagnosed with stage 4 lung cancer which had spread to her brain causing a tumour to develop.



“Everything Went Blank. Silent,”

The diagnosis was surprising not only because Jenny was a young, active person, but because of where the cancer originated in her body. “I don’t drink or smoke,” says Jenny. Her specific cancer type came down to chance. “It’s a mutation that is common in Asian females. The doctor said, ‘it’s just bad luck.’”

One thing that wasn’t unlucky was the timing of Jenny’s diagnosis. “My doctor said that without the treatment, I would have lived four to six weeks.”

Thankfully Jenny was quickly referred to the Princess Margaret under the care of Dr. Geoffrey Liu, a clinician scientist specializing in molecular genomics and pharmacogenomics. “They gave us so much hope and so much courage,” says Mark. “Dr. Liu said we have a treatment for you that’s extremely targeted, which did not exist years ago, and if and when that stops working I have more tools in my toolbox.”

The Princess Margaret Radiation Oncology Team treated Jenny’s brain tumour with Gamma Knife surgery, a recent advancement in radiation therapy that uses computer-guided planning to target brain tumours. Despite its name, this procedure does not involve any incisions. Instead, the Gamma Knife delivers beams of highly focused radiation, precisely to the targeted area of the brain, specifically in the shape of the tumour, while sparing the surrounding normal tissue.

This type of personalized, targeted cancer treatment is a breakthrough that gives doctors the ability to reduce the

“They gave us so much hope and so much courage.”



disabling side effects that come with radiating the entire brain. “Long term side effects such as memory loss and reduced cognitive abilities are greatly reduced or even eliminated,” says Dr. Liu. “This significantly maintains quality of life longer.”

Jenny was also prescribed Osimertinib, a molecularly-targeted drug used to treat metastatic lung cancer and the Princess Margaret was heavily involved in its clinical trials. “Well over 4 out of 5 patients will have their cancers shrink, with some benefiting only for a few months, but others for years. In many cases, we are seeing these patients four times a year, allowing them to focus on their regular lives instead of their cancer,” says Dr. Liu.

Since she started her targeted treatment plan, Jenny has gone from having MRIs every three months to only needing one every six months. She has returned to her job and is back to enjoying life with Mark and their poodle Rocky. She is managing her cancer, and can continue to live a very rich and fulfilling life.



Geoffrey Liu, MD MSc
Medical Oncologist,
Alan B. Brown Chair of Molecular Genomics
Princess Margaret Cancer Centre

The Power of People Coming Together

Nursing Leader Goes to Great Heights for Cancer Care and Research

When Anet Julius decided to climb Mount Everest Base Camp, she had no idea how hard it would be. Or, how rewarding.

Accompanied by a team of fellow healthcare workers, cancer survivors, and family of people impacted by the disease, Anet successfully completed the ascent, raising \$18,000 to benefit The Princess Margaret Cancer Foundation and Radiating Hope, a non-profit organization whose goal is to combine mountaineering with improving cancer care in developing countries (from this trip, benefitting the Kathmandu Cancer Center).

However, the purpose of Anet's trek was more than fundraising. Her choice to climb to the Base Camp of the world's tallest mountain was symbolic of the journey cancer patients go through.

"This experience shed some light into what patients with cancer may experience and the importance of mental and emotional endurance, being a team player, and the power of people coming together."

Along with high altitudes comes a whirlwind of uncomfortable, and at times, extremely challenging symptoms; the lack of oxygen forced her to conserve her breath as much as she could, preventing her from laughing out loud or talking to others during the trek. The dust in the air caused a persistent cough, the water contamination gave her gastrointestinal issues, in addition to headaches and nausea at the high altitude.

"These symptoms, whether it be shortness of breath, losing your appetite, exhaustion, tiredness, or GI issues are all things that many of our patients experience," she explains.



Photo: Joel Forsman

As Anet experienced these symptoms, she began getting vivid images of the patients she's cared for, especially from her early days as an oncology nurse on a sarcoma unit.

"I kept getting memories of my patients who couldn't get out of bed because of severe fatigue, people who couldn't eat because of their loss of appetite, and the non-stop journey they had to go through," she says.

"At the end of my 11-day journey, I was able to come back down from the altitude and I was much better," Anet explains. "People with cancer can't just do that."

Anet is deeply grateful for all her sponsors – family, friends, UHN colleagues. Their words of encouragement and support was the fuel that pushed her forward on those tough inclines, their donations will make a difference at the Princess Margaret, in Nepal and beyond.



Photo: Joel Forsman

Anet Julius, RN, BScN, MN, CON(C)
Director of Professional Practice, Nursing and Health Professions, Oncology, Blood Disorder Programs, Genetics, Supportive Care and Medical Assistance in Dying

“This experience made me truly appreciate my opportunities as a member of the Princess Margaret, as a Canadian, and the honour of being able to make a difference.”

The Future is Bright for Prostate and Testicular Cancer Patients

Male Cancers Benefit from a New App

Cancers can be difficult for men both physically and psychologically. Thanks to the efforts of patient education and social media campaigns, there is growing awareness around men's health and a willingness to engage in conversations around prostate cancer, testicular cancer, and mental health.

Prostate cancer is the most common cancer among males overall and testes cancer is the most common cancer for men aged 15 to 35. They are particularly difficult on men's health since they affect organs that are part of a man's private life (genital/sexual organs), and men generally don't like to talk about issues "down there." Delays in presentation of cancerous masses can stem from patient embarrassment, lack of knowledge or failure to exam. In addition, the treatments for these cancers can impact sexual performance and fertility, thus, learning about a cancer diagnosis can cause major psychological trauma that may be hard to overcome without the proper supports and guidance.

Fortunately, survival rates have improved for both cancers. For prostate cancer, about one in 18 diagnosed will die of the disease. For testis cancer, more than 95 per cent will survive.

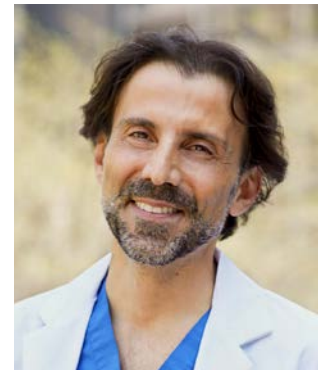
Survivors of both cancer types can experience significant mental health challenges across a spectrum of domains – anxiety, depression, loneliness, body image issues, depersonalization, difficulty forming and maintaining relationships, to name a few.

All cancers benefit from early diagnosis and treatment through regular physical exams by health professionals and this has improved over the past decade, particularly through education delivered via social media.

There is growing awareness around men's health and a willingness to engage in conversations around prostate cancer, testicular cancer, and mental health.



Robert Hamilton, MD, MPH
Clinician Investigator,
Princess Margaret Cancer
Centre



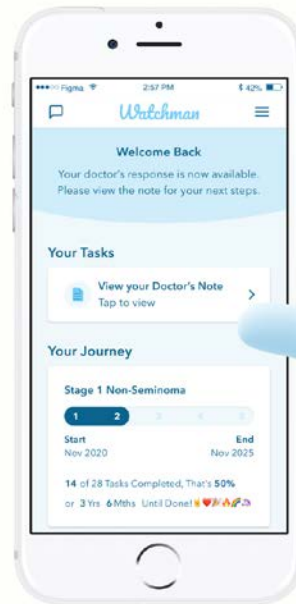
Antonio Finelli, MD, FRCSC
Professor of Surgery and
Martin Barkin Chair of
Urology, University of Toronto
Head, Division of Urology,
UHN

The WATCHman study provides patient-centred care for testicular cancer patients via a virtual surveillance clinic using a mobile app

WATCHman stands for Web virtuAI Testicular CANcer Clinic and was launched in 2017 when we realized that a lot of the routine survivorship care could be accomplished more efficiently.

The app was designed and built “in-house” at the Princess Margaret and a trial was launched where the results were overwhelmingly positive. Patients loved the virtual clinic where it was just as safe and follow-up protocols were followed even more closely. We have now designed version 2.0 of our clinic and are ready to launch.

The future is very bright for the treatment of both cancers. The pace of discovery and advancement is rapid.



The Sexual Health Clinic

The Princess Margaret Cancer Centre opened its first Sexual Health Clinic (SHC) for patients experiencing sexual dysfunction resulting from their diagnosis and treatment – a critical step towards improving cancer care across UHN, and the country.

Sexual health is compromised by the diagnosis and treatment of virtually all cancer types resulting in significant psychosocial distress for our patients.” says Dr. Andrew Matthew, Head of the Sexual Health Clinic at Princess Margaret. In fact, sexual dysfunction is as high as 90% in prostate and gynecologic cancers, 70% to 90% in breast cancer, 30% in colorectal cancer, and 20% in non-breast or non-pelvic cancers.

Using an interdisciplinary approach, Dr. Dean Elterman (Medical Director) and Leah Jamnicky, RN provide medical care for physical sexual dysfunction, while Dr. Matthew and a team of sexual health counsellors provide psychosocial care and support. Combined, the team is able to help patients navigate complex cancer-related sexual dysfunction such as body dysmorphia, stigma and disclosure, decreased sex drive, arousal dysfunction and loss of intimacy.

The SHC is dedicated to helping cancer patients and couples re-establish sexual function, satisfaction, and relational intimacy. Using a bio-psychosocial approach to care, the SHC offers patients biomedical assessment and intervention combined with psychosexual counselling. The SHC employs a combined in-person and virtual model of care that serves to increase reach and access without compromising effective personalized care delivery.

The Sexual Health Clinic is currently open to patients (and partners) with prostate, testicular, bladder, and kidney cancer. We look forward to opening up to patients with head and neck, cervical and ovarian cancer in the near future.



Andrew Matthew,
PhD, CPsych
Director, Sexual Health Clinic

‘A Major Impact on Cancer Research and Treatment’

2022 Canada Gairdner International Award Given to Dr. John Dick

Dr. John Dick, Senior Scientist at UHN’s Princess Margaret Cancer Centre, received the prestigious 2022 Canada Gairdner International Award “for the discovery and characterization of leukemic stem cells (LSC), providing insights into the understanding, diagnosis and treatment of acute myeloid leukemia (AML).”

“It was a bit of a surprise, shock, really!” Dr. Dick said when he got the news from Gairdner Foundation President and Scientific Director, Dr. Janet Rossant.

“I’m proud of the fact that our work is being recognized; we’ve done something important and we’re carrying the mantle of Canada, representing our country.”

Dr. Dick holds the Canada Research Chair in Stem Cell Biology, and is a Professor at the University of Toronto’s Department of Molecular Genetics.

Dr. Dick’s world-first discovery and characterization of LSC was lauded for changing the understanding of the underlying biology of cancer and stimulated exploration of cancer stem cells (CSCs) in other human cancers, including those affecting the breast, brain, colon, pancreas, skin and liver.

The Canada Gairdner International Award, which comes with a \$100,000 prize, highlighted Dr. Dick’s pioneering research which has reverberated at the patient level by reframing the approach to treatment.

“Dr. John Dick’s seminal discoveries have revolutionized our understanding of cancer, providing definitive proof of a new model of tumour initiation that is today a major field of study in virtually all major cancer types,” says Dr. Brad Wouters, Executive Vice President, Science & Research at UHN.



Photo: Delmar

John E. Dick, PhD
Canada Research Chair in Stem Cell Biology,
Senior Scientist, Princess Margaret Cancer Centre

If you’d like to hear Dr. Dick discuss his pioneering LSC discovery, as well as his career path – from going to a one-room schoolhouse in rural Manitoba to choosing medical research as a vocation, listen to his episode on the UHN podcast ‘[Behind the Breakthrough](#)’.



Royal Norwegian Order of Merit

In December, Dr. Marianne Koritzinsky was the recipient of the Royal Norwegian Order of Merit and the rank of “Knight – 1st Class.” The award recognizes outstanding service by citizens and foreigners in the interest of Norway and is bestowed by the Norwegian King. Not only is Dr. Koritzinsky an outstanding scientist, but she is also the Consul General of Norway.

Dr. Koritzinsky is a Senior Scientist at the Princess Margaret Cancer Centre. Research in her laboratory is focused on vulnerabilities in cancer that emerge as a consequence of the tumor microenvironment. Tumor hypoxia confers poor patient prognosis due to resistance to radiation and chemotherapy, and stimulation of a more aggressive phenotype. The aim of Dr. Koritzinsky’s research program is to increase our understanding of molecular and cellular responses to hypoxia, with the ultimate goal of targeting these responses to improve cancer treatment efficacy, mitigate cancer aggressiveness and improve patient outcomes.



Marianne Koritzinsky, PhD
Senior Scientist at Princess Margaret Cancer Centre
Associate Professor, Departments of Radiation Oncology,
Medical Biophysics, & Institute of Medical Science
University of Toronto

Proton Beam Therapy Centre

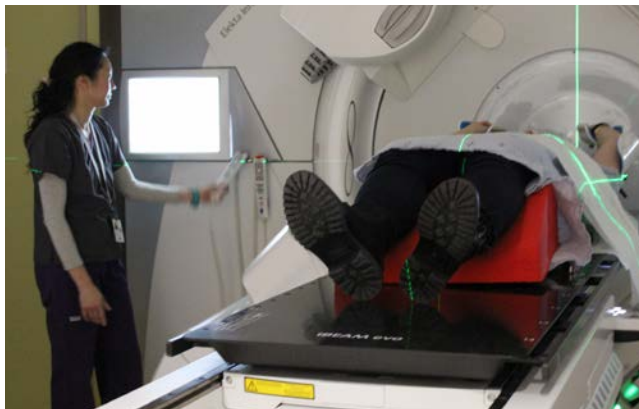


The Ontario Minister of Health, Christine Elliott was onsite in March 2022 to announce a \$5 million planning grant as the next step toward the goal of seeing Ontario's first proton radiation therapy centre built in downtown Toronto. Once approved and operational, this centre will be the first of its kind in Canada and will be run by the Princess Margaret-UHN in collaboration with the Hospital for Sick Children and Ontario Health. This centre will work with cancer facilities throughout Ontario to ensure that it is designed and built to fulfill the needs of all cancer patients in the province.

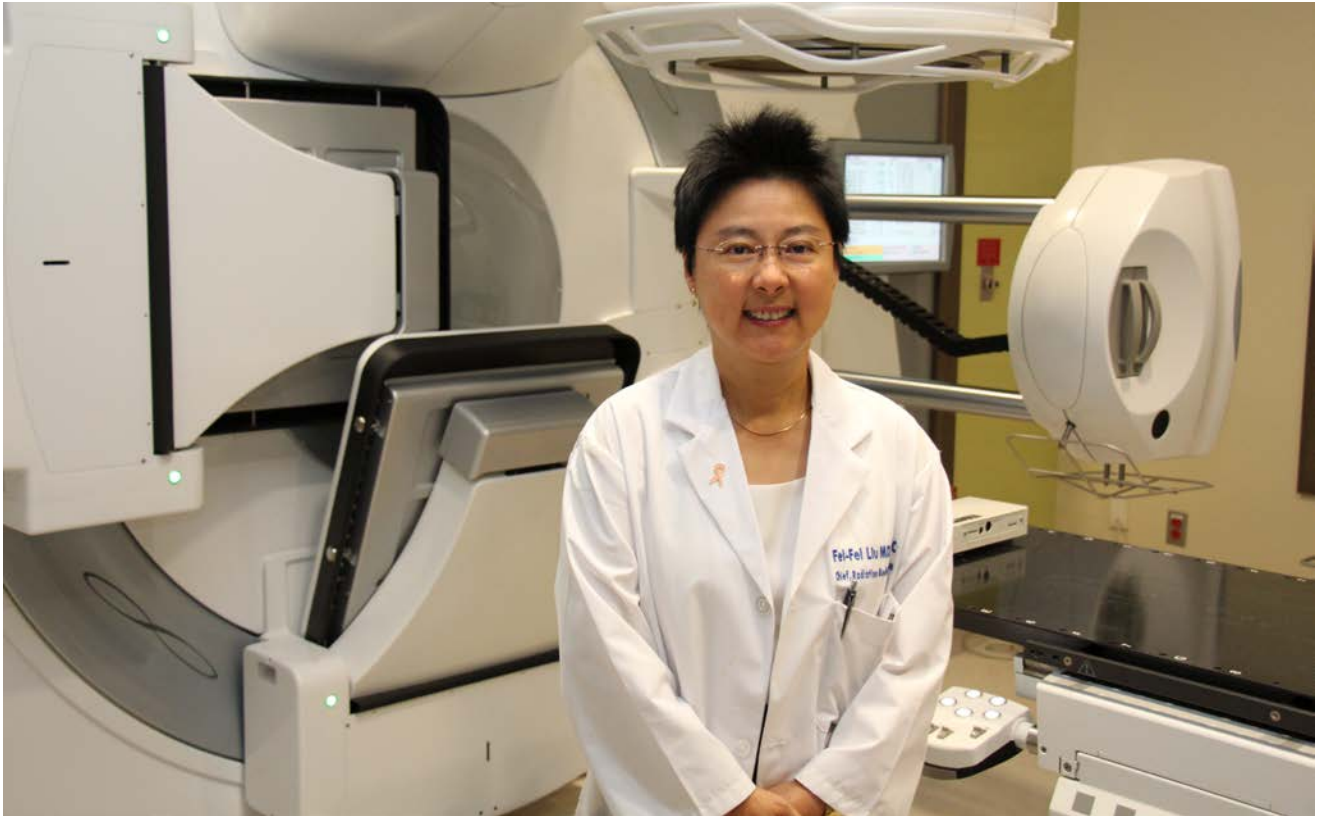
MOH Announcement L-R: Dr. Kevin Smith, President & CEO, UHN; Christine Elliot, Deputy Premier of Ontario and Minister of Health; Dr. Fei-Fei Liu, Chief of the PM Radiation Medicine Program and Head of UHN's Department of Radiation Oncology; Robin Martin, Parliamentary Assistant to the Minister of Health

Dr. Yat Man Tsang Appointed New Director of Radiation Therapy

Dr. Yat Man Tsang, an internationally renowned Radiation Therapist, has recently been appointed as Director of Radiation Therapy at the Princess Margaret. Previously, he was jointly employed as a Consultant Therapeutic Radiographer at the Mount Vernon Cancer Centre and Associate Professor at the London South Bank University in the UK. Thank you to Christine Hill for serving as Acting Director for the last two years and has done an excellent job in delivery of clinical care, research, education, and training.



A Visionary Leader and Champion



Dr. Fei-Fei Liu

The Chief of the Radiation Medicine Program (RMP) and Head of the Department of Radiation Oncology at the Princess Margaret, Dr. Fei-Fei Liu, stepped down to pursue a new role as Scientific Director of the Canadian Institutes for Health Research (CIHR) Institute of Cancer Research as of September 1, 2022. Over the past ten years, Dr. Liu guided RMP to exciting new frontiers in clinical care, research, education, technological development, and collaboration with her strong leadership, team-building attitude, and drive for excellence.

Under Dr. Liu's leadership, RMP has seen many groundbreaking achievements, including the recent advancements in proton therapy in Ontario and Canada, breakthroughs in AI-based systems and automated

care, as well as the development of a dynamic, diverse and exceptionally talented team who are transforming the radiation medicine landscape, locally, nationally, and globally. She has managed the team and the program with perseverance, optimism, and inspiration, as well as with a sense of humour.

On September 22, RMP held a celebration event for Dr. Liu, with 25 speakers and attendees joining us in person and via livestream to celebrate her contributions and impact as Chief of RMP over the past decade. We thank Dr. Liu for her outstanding leadership of RMP and wish her all the best in the next chapter of her career.

Radiation + Systemic Therapy Extends Survival of Patients with Advanced Liver Cancer

“We can now say without hesitation that radiation therapy is an effective treatment for patients with unresectable liver cancer that are not suitable for standard invasive or local regional therapies,” says Dr. Laura Dawson, a radiation oncologist at the Princess Margaret.

Liver cancers are the third-leading cause of cancer deaths worldwide, and liver cancer is now one of the fastest rising types of cancer in Canada. It is often diagnosed in later disease stages, when symptoms are more likely to show up.

Radiation therapy in combination with drug therapy for patients with advanced liver cancer can extend patients’ lives and delay the progression of their tumour without a concerning increase in toxicity, a randomized phase III study found.

The study, led by Dr. Dawson, is the first North American randomized study focused on how radiation therapy in combination with drug treatments can help patients with advanced hepatocellular carcinoma, the most common type of liver cancer. The study reported on 177 patients from more than 20 oncology departments, mainly from Canada and the United States, with new or recurrent advanced liver cancer who could not have surgery.



Laura Dawson, MD, FRCPSC, FASTRO
Radiation Oncologist, Radiation Medicine Program,
Hepatobiliary Cancer/Pancreas Cancer Multidisciplinary Site
Lead, Princess Margaret Cancer Centre

“Some of the patients who had radiation therapy on the trial are still returning to my clinic more than five years after being treated and are doing very well,” says Dr. Dawson. “People are well aware of surgery and drugs that treat cancer, but less aware of radiation therapy that is very effective, especially today when it is targeted to the tumour.”

Dr. Dawson hopes the findings will spark increased interest in future clinical trials to study the benefit of radiation therapy in combination with new drug therapies.

An Emerging Leader



Innovations in Complex Oncological Reconstruction and Microsurgery

Cancers involving the airway, head and neck, breast and limbs require complex reconstructive surgical treatment. These patients suffer dramatic life-changing disfigurement and disability affecting their quality of life. Although most injuries are amenable to surgery, there continues to be a significant proportion of patients who require innovative solutions.

The field of vascularized composite allo-transplantation (VCA) represents a solution to the described injuries. This relatively new field involves the procurement of tissue from a donor and transplanting it into the patient. One of the major challenges of this field is the requirement for life-long anti-rejection medications that may have serious side effects such as infections, hospitalizations, organ damage and cancer. The research in our laboratory addresses this challenge by using pre-clinical models that focus on airway transplantation that only requires short-term anti-rejection medications.

This research represents a safe and easy way to determine how anti-rejection medication regimens can be modified to ensure long-term survivability of the tissue and to decrease harmful side effects.

Our research is focused on finding new techniques to advance the field of VCA, which will ultimately improve patients' quality of life and help them recover from devastating injuries.

Siba Haykal, MD, PhD, is a plastic and reconstructive surgeon at UHN with a subspecialty in microsurgery. Her clinical practice focuses on complex cancer reconstruction and microsurgical reconstruction of the breast, head and neck, and extremities. She was named to Canada's Top 40 Under 40 in 2021. In 2022, she was named one of the Top 40 Surgeons Under 40 by the Association of Women Surgeons.

Palliative Care is the Umbrella, Not the Rain

A Metaphor to Guide Conversations in Advanced Cancer

Late palliative care referral:



A comic strip helps to dispel misconceptions about Palliative Care

There is a nagging misconception about what palliative care means for patients with cancer. Some interpret it as the end – the end of treatment, the end of hope, the end of life. Dr. Camilla Zimmermann’s mission is to help us understand that is *not* the meaning of palliative care.

Palliative care is team-based care for patients and their families and is designed and proven to enhance quality of life.

“Patients are seeing a palliative care team for additional support – for their pain and symptom control, guidance with treatment decisions, caring for their family, psychological support,” Dr. Zimmermann says. “For anyone with advanced cancer that’s going to be hard to deal with emotionally.

“So we are actually an extra layer of support – not only for the patient, but also the family who’s caring for them and living through this with them.”

And yet – the misconception persisted.

Then Dr. Zimmermann turned to a new unique communication tool – a comic strip – for help.

Two different scenarios depict the impact on a patient for late and early referral to palliative care. The metaphor of an umbrella protecting the patient from the rain of symptoms and problems faced in advanced cancer is used to demonstrate the purpose – and benefit – of early palliative care. The umbrella works best if it is provided before the rain starts – otherwise the patient will get drenched.

“We’ve test driven this concept with patients in clinic, with the media, and at conferences and it’s always been really well received,” says Dr. Zimmermann, “People could understand it and thought it had an underlying humour to it. Since it’s not a lighthearted subject, it’s kind of an icebreaker.”

**“Palliative care is the umbrella, not the rain.
Like the umbrella, palliative care is good to
have just in case, and you can bring it out
when you need it.”**

Early palliative care referral:



To bring the comic strip to life, Dr. Zimmermann partnered with Dr. Jean Mathews, a palliative care fellow, and the comic strip was [published in JAMA Oncology](#) with a commentary from Drs. Zimmermann and Mathews.

**“The hope is healthcare workers
can use the comic strip to help
patients better understand
the meaning and purpose of
palliative care.”**



**Camilla Zimmermann, MD, PhD
Head and Lederman Chair,
Department of Supportive Care,
Princess Margaret Cancer Centre**

“The opportunity to help people and families in their most vulnerable and unexpected moments makes my job as a nurse most meaningful and rewarding.”

*Princy Geevarghese, RN
Chemo Day Care*

Ontario Health Update

In 2022, the Toronto Central South Regional Cancer Program sought to advance progress across three priority areas:

Complex Malignant Hematology

Locally, UHN launched efforts to expand Complex Malignant Hematology services via a large scale capital project. Across the Toronto Central South Network, additional support for less intensive treatments for disorders and cancers of the blood, were expanded at additional hospitals. Provincially, funding mechanisms have been updated to ensure more comprehensive treatment funding.

Indigenous Cancer Program

The Indigenous Cancer Program shared a ceremonial bundle with all cancer hospitals in Toronto Central, including ceremonial drums to be made available to Indigenous community members. Through a number of engagement events, the team has worked to strengthen relationships with all care sites sharing educational presentations, providing linkages to cultural safety training, and facilitating cancer screening events.

Cancer Screening Initiatives

With a small investment from Ontario Health, the Toronto Central Regional Cancer Program collaborated with 17 hospitals, Family Health Teams, Community Health Centres, and primary care offices to execute various quality improvement projects. These projects advanced primary care management of patients overdue for cancer screening to allow for improved outreach and eventual cancer screening. Improved cancer screening rates for eligible patients were achieved through all 17 projects.



Suman Dhanju, MBA, PMP
Director, Regional Cancer Program
Toronto Central South Regional Cancer Program
Princess Margaret Cancer Centre



**Ontario
Health**

Reflecting on Truth and ‘The Work We Have to Do’



National Day for Truth and Reconciliation

It was a time for reflection. With drumming and song, a sacred fire and commitments – both organizational and personal – UHN marked the second National Day for Truth and Reconciliation.

Every September 30, UHN commemorates Orange Shirt Day, which is dedicated to creating opportunities for meaningful discussion about all aspects of residential schools and their lasting effects.

“Days like today show that we’re not gone, we’re still here,” Dr. Mike Anderson, Strategic Lead of the Indigenous Health Program (IHP) at UHN, told those attending the event, which was held at the Michener *Gitigan* (the Anishinaabemowin word for garden) at the Michener Institute of Education at UHN.

“We always recognize that truth comes first but the second part is reconciliation and that’s an action, and that’s the work we have to do.”

(L to R) Singer and Drummer, Sara Luey, also known as Spotted Eagle Woman and Singing Wolf, and Fire Keeper & Knowledge Keeper, John LaForme sing the “Travelling Song”

“The Truth and Reconciliation Commission laid out 94 Calls to Action, they gave us a roadmap on the work institutions, organizations and individuals can do to improve our relationship and develop a better understanding.”

The event was co-hosted by the IHP and the Toronto Central Regional Indigenous Cancer Program.



Leonard Benoit

A member of the Qalipu Mi'kmaq First Nation in Newfoundland and Labrador, Leonard Benoit, the Regional Indigenous Cancer Patient Navigator for the Toronto Regional Cancer Program, draws on his professional background, as a nurse and community service worker and his Indigenous lived experience, to bridge the gap between Western medicine and Indigenous spiritual practices.

“Every patient needs to be looked at past their illness. The history of Indigenous people is important to understand.”

As there is no word for “cancer” in Indigenous language, Leonard supports Indigenous patients during different stages of the cancer journey such as screening, diagnosis, treatment, survivorship, and palliative and end-of-life care.

The role of the Indigenous Navigator makes a significant impact as we move forward to bridge Indigenous culture and care at the Princess Margaret.



Leonard Benoit, Regional Indigenous Cancer Patient Navigator

Muriel Lopez Silva



“I feel honoured to be part of such important work and I have learned so much. I always look forward to working toward improving the cancer care system for Indigenous patients and their families.”

Muriel Lopez Silva, Coordinator of the Regional Indigenous Cancer Program

The Princess Margaret Helped Allen Beat the Seemingly Impossible Odds



Allen Chankowsky

Receiving the life-altering diagnosis of cancer not once but twice, Toronto resident Allen Chankowsky is not one to shy away from talking about the realities of living with cancer and the emotional impact.

He heard of cancer before, its power, influence, and strength. Yet, as Allen wrote in his book *On the Other Side of Terminal*, "I never thought I would come to know cancer so intimately. As many people do, I assumed that I would be one of the lucky ones to never personally get to know such an illness. I was wrong."

In 1991, when he was only 21, Allen was diagnosed with Hodgkin's disease – a form of cancer that affects the lymphatic system. His cancer went into remission after undergoing radiation treatment; Allen went on to live a healthy and fulfilling life, having two children and a thriving career.

Unfortunately, 25 years later, Allen received life-changing news again: a diagnosis of Stage 4 salivary duct carcinoma.

“I’ve always been a big backgammon player. The Princess Margaret always said that there’s always hope. You stick it out and you keep playing the game. No matter how bad the odds are; there is always a chance. The key is keep playing the game.”

With no known cure for the aggressive and rare form of head and neck cancer, Allen’s treatment options were limited. Allen shares, “My kids were 9 and 12, and it was heartbreaking. Four out of five people with my cancer type die within the first three years so it was a breath of fresh air knowing full well that I was in the right place within the Princess Margaret Cancer Centre.”

After undergoing surgery, it was recommended to try more radiation therapy to the head and neck. Discovering the cancer had spread to his lungs, Allen was referred to palliative care as his cancer was deemed terminal. Allen and his girlfriend Cynthia had to make the difficult decision of whether he should accept palliative chemotherapy to help control the disease for as long as possible or try to find an alternative.

Allen was determined to not give up hope. The grim prognosis led them to read hundreds of peer-reviewed journal articles to learn more about the disease and to see if there were creative ways to approach treatments.

Discussions with his oncologist, Dr. Lillian Siu, led to his tumour being genetically sequenced, which in turn helped lead to the discovery of a unique treatment option: androgen deprivation therapy. Genetic sequencing paired with his surgical pathology results led to a deeper understanding of the biology behind the tumour. Learning androgens were acting as a main driver for the tumour’s growth, Allen started the treatment commonly used for prostate cancer to treat his own cancer.

Miraculously, it worked.

Against all odds, Allen is thriving six years later. He credits his survival to his care team, the loving support from his family, and the determination to reclaim his life from cancer’s grip.

“The Princess Margaret, in the way in which they creatively leverage all their skills, is a tremendous benefit for the cancer community at large.”

“The team not only understands the physical impact of cancer but also the tremendous emotional impact on a patient and their loved ones, says Allen.”

Thanks to the Princess Margaret stepping outside of traditional approaches to cancer care and embracing precision medicine to cater treatment that would specifically attack his cancer, Allen has been able to attend his son’s high school graduation, watch his daughter perform in dazzling theatre performances, and continue to win backgammon tournaments.



Lillian L. Siu, MD, FRCPC, FASCO
Medical Oncologist,
Princess Margaret Cancer Centre
Director, Phase I Program
BMO Financial Group Chair in Precision Genomics

Putting Vision into Action



(L to R) Arden Krystal, President and CEO, Southlake, and Dr. Keith Stewart, VP Cancer, UHN and Director, Princess Margaret Cancer Centre

The Princess Margaret Cancer Care Network

The Princess Margaret Cancer Care Network aspires to be a collective of local, regional, and national partners committed to facilitating collaborative clinical care, accelerating the adoption of new technologies, engaging more patients in research through improved access to clinical trials, and advancing innovations which improve patient outcomes and provide confidence and comfort that the best care can be achieved close to home.

In 2022, The PM Cancer Care Network, welcomed its first Network Partner, Southlake Regional Health Centre. The Princess Margaret Cancer Centre and Southlake Regional Health Centre have a history of working together on patient care, including an existing partnership in radiation oncology, shared-care models in leukemia, and formal and informal collaborations on clinical trials. Under this partnership agreement, and with a common goal: putting the needs of the patients first, the Princess Margaret and the Southlake Regional Health Centre will work together to leverage both centres' respective strengths, resources, and expertise. Already, the partnership has opened new doors to collaborations on second opinions, joint multi-disciplinary

research grants, lectures and educational rounds, and patient and provider resources. The partnership has enabled patients to receive optimal care while remaining in their home community while also having access to the Princess Margaret if and when the need arises.

For more information: www.pmcancercarenetwork.ca

“This is just the first step, the goal is to expand the network to multiple partner sites leading to a network of multidisciplinary teams collaborating, improving outcomes and advancing cancer care.”

“This type of partnership between organizations is the future of healthcare, an integrated system where resources and expertise are shared and collaboration is the norm. This is how patients will truly benefit.”

Barb Steed, EVP Clinical Services, Southlake, and Regional Vice President, Central Regional Cancer Program



Photo: Courtesy Southlake Regional Health Centre

(Back Row, L to R) Dr. Charles Cho, Physician Lead, Radiation Oncology, Southlake; Calvin, D'souza, Planning Associate Transformation & Strategic Partnerships, PM; Arden Krystal, President and CEO, Southlake; Dr. Keith Stewart, VP Cancer, UHN and Director, PM; Lorrie Reynolds, Director, Central Regional Cancer Program at Southlake; Barb Steed, EVP Clinical Services, Southlake, Regional VP, Cancer Program; Dr. Andrea Bezjak, Medical Director, Princess Margaret Cancer Care Network; Meena Merali, Director, Transformation and Strategic Partnerships, PM; and Dr. Peter Anglin, Physician Lead, Stronach Regional Cancer Centre.

Network Benefits

- Fewer patients need to be seen in person
- Creates capacity, reduces wait times, provides prompt opinions
- Allows patients to proceed with standard of care treatments or access care for more complex issues appropriately and equitably
- Supports patients in a more collaborative fashion
- More options regarding how to provide multidisciplinary input

“This new expanded relationship will increase access to advanced diagnostics, personalized medicine, and clinical trials. We are privileged to be the first member of the Princess Margaret Cancer Care Network.”

*Dr. Peter Anglin, Physician Lead,
Stronach Regional Cancer Centre at Southlake*

Global Cancer Program

This past year, new global partnerships were established through the Princess Margaret's Global Cancer Program. Led by Dr. Danielle Rodin, the program is committed to addressing disparities in cancer treatment within Canada and internationally to improve equity in cancer care. These new partnerships will benefit cancer patients, and drive global impact and research.



L-R: G. Rodin, L. Chalklin, Z. Merali, Founding Director, Brain and Mind Institute, Aga Khan University, D. Rodin, M. Saleh, Founding Director, Cancer Centre at Aga Khan University Nairobi, M. Merali, C. D'Souza, M. Zammit

Kenya

Leaders from the Princess Margaret Cancer Centre at UHN and the Aga Khan University in Nairobi (AKU) came together in July to announce a partnership.

“International collaborations like this help share best practices in delivery of cancer services, train the next generation of international cancer leaders and support research with global impact,” said Dr. Keith Stewart, Vice President Cancer and Director of the Princess Margaret Cancer Centre at UHN.

Dr. Mansoor Saleh, the Founding Director of the AKU's Cancer Centre, called it an opportunity to “join hands across dividing lines.”

“Together with the Princess Margaret, we can explore a number of areas that will make a big impact on how we treat our patients,” said Dr. Saleh, who travelled to Toronto from Nairobi for the announcement. “Together we can make a difference.”

Malaysia



The Princess Margaret welcomed the CEO of Clinical Research Malaysia and the Director General of Health Malaysia as a new global partner. Together, we will collaborate further on clinical, academic, research, and training opportunities.

L-R: K. Stewart, VP Cancer, PM, D. Rodin, Director, Global Cancer Program, PM, Noor Hisham Abdullah, Senior Consultant Surgeon in Breast and Endocrine Surgery, Director General of Health Malaysia, Dr. Akhmal Yusof, CEO, Clinical Research Malaysia (CRM)

Australia

An exciting partnership established with the Peter MacCallum Cancer Centre in Melbourne, Australia will focus on training, education and research. Dr. Gary Rodin, UHN Director of Cancer Experience, launched the new Patient Experience Plan and Carer's Strategies at Peter Mac. Dr. Rodin delivered the Trevor Anderson Lecture at Peter Mac, where he spoke on the psychological and social aspects of cancer care.

L-R: Karen Fox, Chief Operating Officer, Peter MacCallum Cancer Centre, G. Rodin, Director, Cancer Experience, PM



Jordan

Drs. Keith Stewart, Mary Gospodarowicz and Girish Kulkarni visited the King Hussein Cancer Foundation and Center in Jordan, to attend the second annual Award Ceremony of the King Hussein Award for Cancer Research which aims empower cancer research efforts and transform the landscape of cancer research in the Arab world. The King Hussein Cancer Foundation and Center is one of the Princess Margaret's long-standing global partners.

Enhancing Patient Care at the Princess Margaret

Collaborating with Physician Assistants

Physician Assistants (PAs) are highly trained clinical professionals who help to reduce physician workload, wait times and improve patient access to timely care.

PA colleagues at the Princess Margaret Cancer Centre, Monica Monchis and Eugene Leung each took a winding path to their current destination at UHN.

“As a PA, I can focus on direct patient care and work collaboratively with physicians and other Allied Health professionals,” says Monica, who, prior to becoming a PA, held various roles in health care. Before becoming a PA, Eugene trained and worked as a radiation therapist.

“As a PA, I have a broader scope of practice compared to when I was a radiation therapist,” Eugene says. “As a result, I’m able to feel more involved in my patient’s care and directly make a difference in their treatment.”



L-R: E. Leung, CCPA, M. Monchis, CCPA, LMT-IEC team (Lymphoma, Myeloma, autoTransplant-Immune Effector Cell therapy)

“The continuous presence of skilled PAs is a major contributor to patient safety.”

At the Princess Margaret, the pair work with patients who undergo autologous stem cell transplant and immune effector cell therapy for treatment of lymphoma and multiple myeloma. They also assist in managing patients on various clinical trials, as well as those who require urgent chemotherapy or are

admitted with acute complications related to their treatment or underlying disease.

“Monica and Eugene have been wonderful additions to our inpatient team,” says Dr. Robert Kridel, a clinician scientist at the Princess Margaret and their supervisor. “As the care we provide to our patients is highly complex, the continuous presence of skilled PAs is a major contributor to patient safety.”

“PAs are an invaluable addition to the health care team,” say UHN PA Clinical co-Leads, Dr. Richard Tsang and Jessica Danquah. “We think the best for this profession is yet to come.”

Acute Cancer Care

The Right Team, in the Right Place, at the Right Time



L-R: R. Khanano, S. Shinde, S. Thyagu, D. Hogg, A. Barton, N. Dhani, K. Touri, Tony Chan



Neesha Dhani, MD, PhD
Staff Medical Oncologist
Medical Director,
Inpatient Services
Princess Margaret Cancer
Centre, Division of Medical
Oncology & Hematology

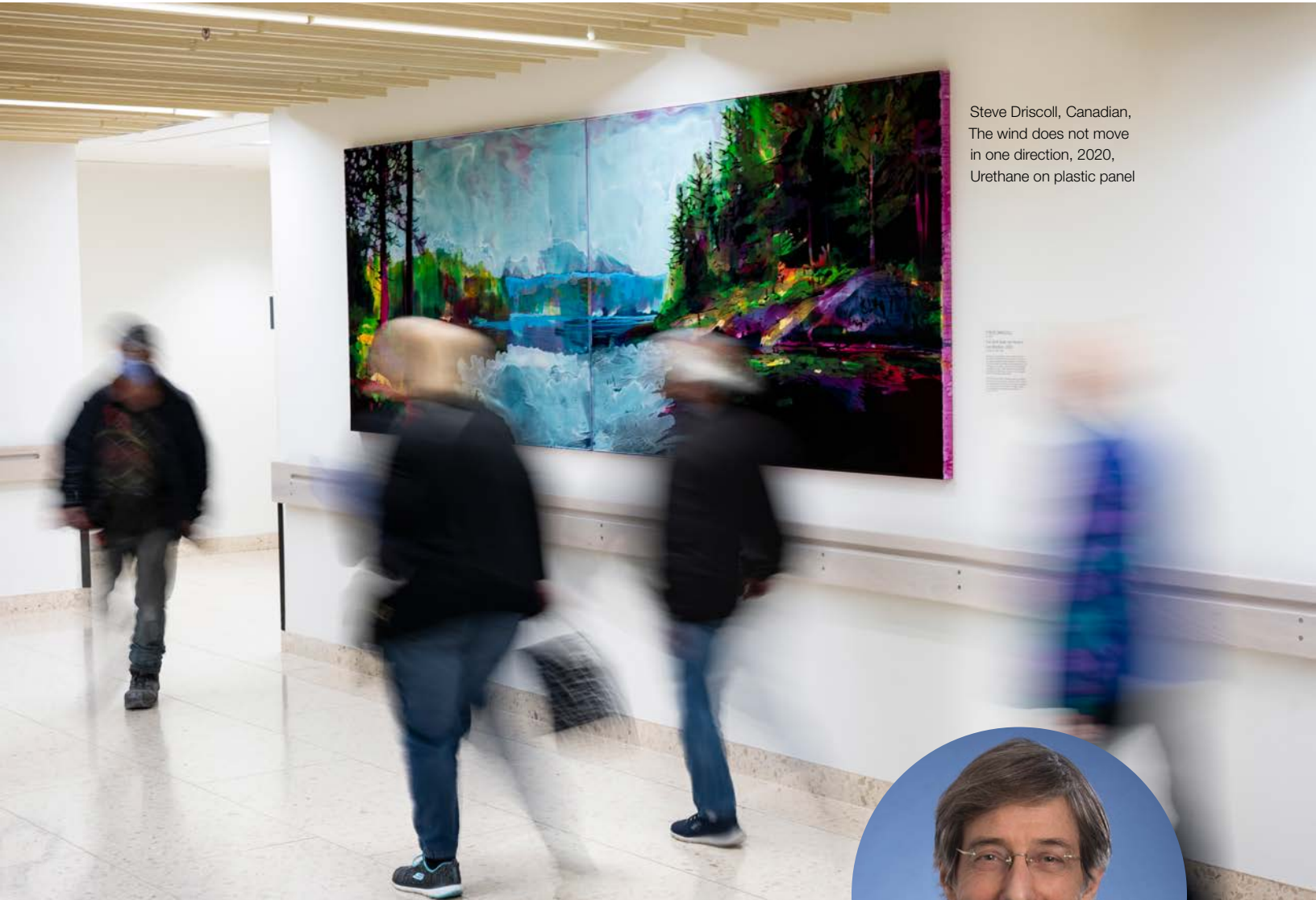
Acute Oncology is an innovative program at the Princess Margaret which brings acute cancer care into the fold of personalized oncology. The partnership between PM's Department of Medical Oncology and Hematology (DMOH) and the Toronto General's General Internal Medicine (GIM) program, focuses on providing cancer patients with the highest level of medical and oncologic care when they are admitted with complications of their cancer and/or treatment. The Acute Oncologists, General Internists, Hospitalists, Nurse Practitioners and Physician Assistants together bring a unique, yet complementary, expertise to provide medical management with an oncology lens for patients on the newly designated "Oncology Ward" on 6 Eaton South.

Seamless Transitions

The multi-disciplinary and inter-professional Acute Oncology and GIM-Oncology teams work side-by-side daily to provide patient management to the wards, sharing skills and expertise. In addition, they also lead the way in the transformation of acute cancer care. The PM transfer of Accountability Working Group was awarded a UHN Local Impact Award in 2022 for their work in improving communication around patient transitions, and a newly-formed Goals of Care Working Group brings together providers at all levels and across these teams with a mandate to improve our approach to addressing goals of care for cancer patients.

Improving Cancer Experience

The Cancer Experience Program aims to elevate the comfort, confidence and support the well-being of our patients, caregivers, trainees and staff as they navigate through the complex system of cancer care at the Princess Margaret.



Steve Driscoll, Canadian,
The wind does not move
in one direction, 2020,
Urethane on plastic panel

Ambience

As part of the ongoing partnership with the Toronto Symphony Orchestra (TSO), regular Symphony for the Soul sessions are held at PM where TSO musicians come to play calming and uplifting music. The TSO also offered complimentary tickets for concerts at Roy Thomson Hall for PM staff.



Gary Rodin, MD
Director, UHN Cancer Experience Program

Inclusion, Diversity, Equity, Access, & Anti-Racism (IDEAA)

Dr. Gilla Shapiro, the inaugural Cancer Experience Research Lead in IDEAA, will develop research that examines IDEAA in cancer care and strategies to further this aim.

Patient Navigation

The Healing Beyond the Body Program, now called the “e-Team” of volunteer navigators, recently joined CEP. The e-Team offers peer support to PM patients and acts as a catalyst for ongoing navigation initiatives. Proactive PSO, our Grand Challenge project co-led by Dr. Madeline Li and Megan Wexler, provides referrals to psychosocial resources that include the e-Team for at-risk patients and is now live in gynecology. CancerSpace, a comprehensive digital navigation platform, is being developed and will provide live support to patients through these volunteer navigators.



Magic Castle, located on first floor at PM

The Magic Castle

The re-opening ceremony for the Magic Castle was held in October where Early Childhood Educator, Alketa Kumbaro and Drs. Keith Stewart and Gary Rodin cut the ribbon to welcome families once again. The Magic Castle is a unique program that provides a free and dedicated play space for children of patients at PM. For more info: [Magic Castle Website](#)

The Young Leaders Cancer Experience Innovation Challenge

Launched to support early/mid-career members of the Princess Margaret, the Cancer Experience Program and the Young Leaders (YL) Program formed a unique partnership with the [PM Elders](#) to improve the cancer experience. The Young Leaders Cancer Experience Innovation Challenge brings together new and experienced talent to promote positive change and lead multidisciplinary projects at PM. Members of the PM Elders, a body of distinguished past

leaders of PM, were engaged in the adjudication and the inaugural winners were Drs. Christian Schulz-Quach, Gilla Shapiro, Jennifer Croke, and Samantha Scime, for their project titled, “Development of an education module to improve communication, engagement and inclusivity at PM: A curriculum focused on pronouns, gender, sexual orientation and relationship diversity in cancer care”.



From left to right, Drs. Christian Schulz-Quach, Gilla Shapiro, Jennifer Croke, and Samantha Scime

Your Voice Matters: Patients Weigh In to Improve the Patient Experience

Cancer Care Quality & Innovation (CQIN)

Improving the patient experience through active engagement is integral to providing the best cancer care. Each month the Cancer Care Quality & Innovation (CQIN) team, led by Drs. Monika Krzyzanowska and Lesley Moody, sends out a survey called *Your Voice Matters* (YVM) to patients with the support of Cancer Digital Intelligence (CDI). YVM is a validated outpatient oncology experience measure that has been implemented in all regional cancer centres in Ontario and is mandated by Ontario Health. Local quality improvement initiatives are guided by YVM and provide important information about patient health care experiences every month. Patients can anonymously share their ideas to improve care and enhance the patient experience.



CQIN uses this real-time data to identify gaps, assess performance, and provide proactive solutions to continually enhance the quality of care. Through close collaborations with care providers, researchers, and administrators, CQIN has led the implementation of several solutions including signage improvements, creation of a free loading zone for patient pick-ups and drop-offs at the Cancer Centre, improved flow and supports at the blood lab, seating upgrades in clinics, and clearer communication for patients using digital screens. Large scale initiatives are also underway in partnership with CDI, including: improvements in clinic wait times, an on-line messaging system for patients, enhanced symptom management, and education and training for care providers.

Shay Kittuppanantharajah, BScN, RN, MBA, CQIN Patient Experience – Quality Liaison, analyzing the *Your Voice Matters* survey data

“Of course, anything can be improved but I find the care and professionalism at Princess Margaret is just incredible,” says a patient. “Every time I visit, something has improved. Everyone is personable and attentive in helping patients through this difficult journey. It makes me proud to be a Torontonians, Ontarian and a Canadian.”

Optimizing Clinic Efficiency

Prioritizing an Improved Patient Experience: The Wait Times Project



Sanaz Ghazi, PhD, CSSBB, CCMP, CRP, Operational Excellence Lead Quality, Princess Margaret Cancer Centre

Optimizing clinic efficiency is one of the top priorities at the Princess Margaret. The Gynecology Clinic was the first to adopt a new quality improvement model of care. Using a data driven approach, they introduced a new Physician Assistant clinic on Friday afternoons to increase the clinic's capacity. In addition, they streamlined the visit process and introduced an optimized booking system to balance the number of daily appointments. Further, through education they worked to improve patient communication. Within six months after implementation, wait times improved by 34% and visit capacity increased by up to 37%. Currently there are three more projects in progress with the goal to bring this model of improvement to more clinics across the Princess Margaret.

“Introducing culture changes to the clinic team helped the clinic manage in a more efficient way. There’s been a lot of buy-in to the new approaches, and that’s really led to positive results.

We’re excited to bring this model of improvement to more clinics across Princess Margaret.”

Sanaz Ghazi

Shifting the Focus of Cancer Treatment

The Cancer Early Detection program shifts the focus of cancer treatment and research from advanced cancers to early cancers. By detecting cancer in its initial stages, curative treatment is more achievable. The program supports advances in cancer genomics, liquid biopsy, imaging and precision cancer therapy approaches to stop cancer before it progresses or recurs.

2022 Grand Challenge Winners

Cancer Early Detection Grand Challenges support bold, innovative and high-impact projects across the spectrum of cancer care. In 2022, we had the pleasure of administering two significant grant competitions.

The first Health Equity Grand Challenge (\$7 Million), supported by the Lindy Green Family Foundation, was launched in July 2022.

“The donor’s focus on equity is invaluable to the health of the communities served by the Princess Margaret.” says Jacqueline Silvera, Director of IDEAA (Inclusion, Diversity, Equity, Accessibility and Anti-Racism) at UHN.

The Health Equity projects focus on establishing strong ties with community partners with collaboration and guidance from Drs. Jacqueline Silvera, Sane Dube and Gilla Shapiro.

The most recent Agnico Eagle Princess Margaret Grand Challenge in Early Detection (\$500,000) was awarded in September 2022.

Dr. Robert Hamilton and his team are exploring the role of a specific miRNA in blood to serve as a liquid biomarker to characterize small testicular masses which were incidentally detected. This project has the potential to save young men with benign masses unnecessary testicle removal and guide those with malignant masses to timely surgery.

UNIFY: UNiversal genetic testing For oncology

In collaboration with the Breast Site at the Princess Margaret, the Bhalwani Familial Cancer Clinic is embarking on a new genetic testing strategy where all breast cancer patients will be offered comprehensive hereditary genetic testing. Unlike current criteria which focuses on select breast cancer patients, we will offer genetic testing to all breast cancer patients seen at the PM Breast site. This program will launch in 2023 and is supported by our generous donors at the Princess Margaret Cancer Foundation.



Raymond Kim, MD, PhD
Medical Director, Early Detection

Breast Cancer Combined Assessment Tools – Molecular Imaging and Liquid Biopsy bCOMBAT MI&LB

The bCOMBAT project strives to detect breast cancer early by combining liquid biopsy and the emerging low-dose positron emission mammogram (PEM). Expanding on the scope of Drs. Vivianne Freitas and Trevor Pugh's current work, the project will allow radiologists to use new technologies

to better identify imaging lesions that need biopsy, discern cancerous lesions from non-cancerous lesions, and minimize unnecessary biopsies. These advances will reduce anxiety among screened women, as well as lower health care costs.

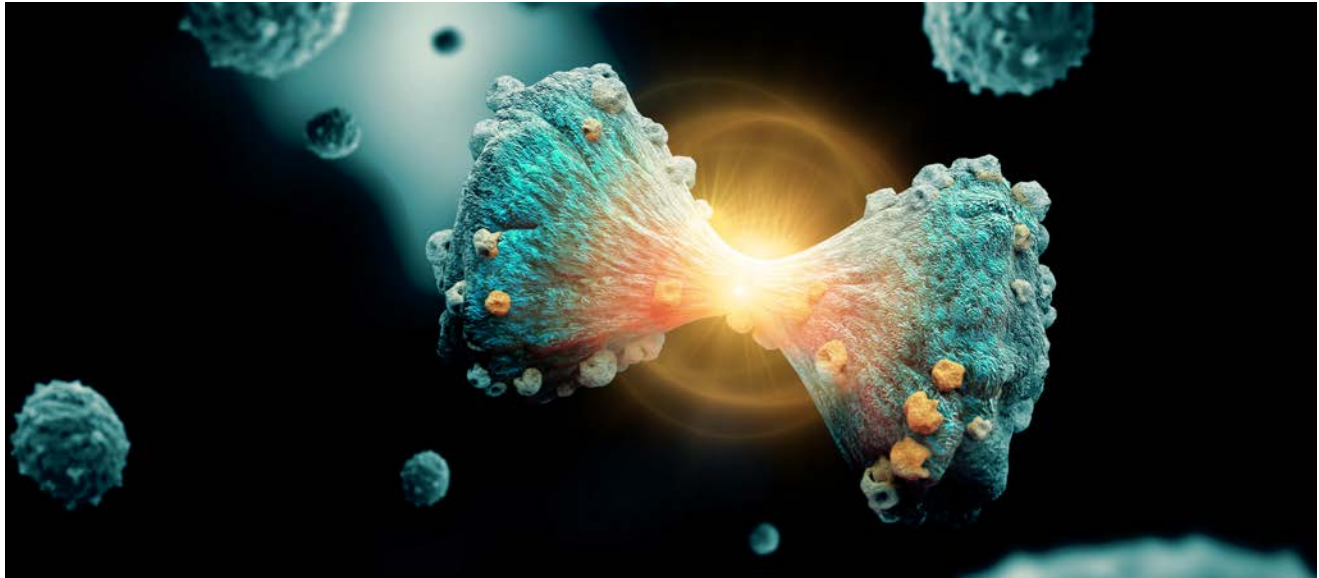
The Early Detection Team

Led by Dr. Raymond Kim, Medical Geneticist & Medical Director, Shalwani Familial Cancer Clinic and Cancer Early Detection.



Front left: Kirsten Farncombe, Helia Purnaghshband, Carolina Sanabria Salas, Samira Taeb, Iva Stankovic, Dr. Raymond Kim
Back left: Larissa Peck, Derek Wong, Julia Sobotka, Yazan Ahmad, Precious Uju

Alternative Treatment Interventions



The Beyond Chemotherapy Strategic Pillar was devised to move us towards a future where innovative therapies are used to improve patient outcomes, treatment approaches and quality of life. The team aims to do this in several key areas, including Theranostics, Immunotherapy, and Precision Genomics, while also exploring novel Models of Care.

The mission of the Beyond Chemotherapy team is to uncover and expand access to alternative treatment interventions that are highly effective and minimize toxicities. This work is led by Dr. John Kuruvilla and Dr. Stephanie Lheureux, who are Clinical Investigators at the Princess Margaret, and Suman Dhanju, the Director of the Toronto Central South Regional Cancer Program.

In 2022, the third **Agnico Eagle Beyond Chemotherapy Grand Challenge** was launched, whereby several investigators submitted their work for consideration. Each submission was assessed on its readiness, innovation, and the opportunity to reduce the use of non-specific chemotherapy. Drs. Michael Reedijk, Pam Ohashi, and David Cescon were named winners for their project evaluating immunotherapy in early-stage triple-negative and ER-low breast cancer work.

Throughout the year, the Beyond Chemotherapy Strategic Pillar has hosted seminars on worldwide revolutionary work and fostered partnerships to revolutionize cancer treatment as we know it. In 2023, our goal is to continue to build on these core concepts and to deliver cutting-edge therapies developed at the Princess Margaret to our patients and the world.



John Kuruvilla, MD and Stephanie Lheureux, MD, PhD are Co-Directors, Beyond Chemotherapy

Advancing Artificial Intelligence in Oncology



Through close collaborations with patients, health teams, researchers and external partners, Cancer Digital Intelligence (CDI) continues to advance the application of digital discoveries and data science to transform cancer care, education and research.

In partnership with the Vector Institute, CDI launched an open competition to explore the computational limitations of object detection and contouring to develop accurate auto-segmentation models in medical imaging. Currently, image segmentation to develop radiation treatment plans is a time-consuming, manual task taking several hours per patient. Eleven teams accepted the challenge to develop AI-assisted models for auto-segmentation and contouring of regions of interest to improve workflow processes and create efficiencies that will allow patients to receive radiation treatment sooner. The data and winning computational models developed by the *Fight Tumour* team, led by Dr. Bo Wang, will be made available to the biomedical community (Open Science) and were presented at the 2022 Toronto Machine Learning Summit.



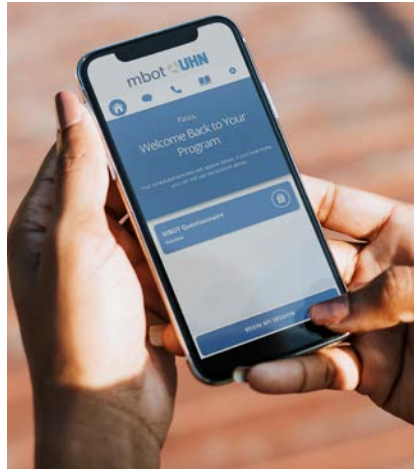
Alejandro Berlin, MSc, MD
Medical Director,
Cancer Digital Intelligence



Benjamin Haibe-Kains, PhD
Scientific Director
Cancer Digital Intelligence

Enabling Access to Care Anywhere through Remote Patient Monitoring

The *My Bowels On Track* (MBOT) app was created to digitally optimize the Malignant Bowel Obstruction (MBO) Proactive Call Program in the Gynecological Cancer Clinic by monitoring and prioritizing calls to patients with serious symptoms. Patients report their symptoms online and responses are automatically triaged based on severity. The MBOT app increased the number of patients monitored and reduced nursing workload on proactive calls with 100% of nurses reporting that they would use an electronic monitoring service again.



“I love that the app has many resources at your fingertips,” says a patient of the MBOT program. “It is a user-friendly app. I can contact my nurse and team very quickly and speak with them through text. **I love the quick access to my team. It feels like they are tuned in to my situation 100%.**”

Improving Patient Care, Research and Discovery by Tracking Patient Outcomes

In collaboration with clinical site leads and led by Dr. John Waldron and Dr. Alejandro Berlin, CDI designed synoptic notes templates within the new electronic patient record for 14 disease sites across 3 specialties. Using these templates:

- Providers can gain insights into their patient’s outcomes and can provide better care.

- Outcomes are captured in a consistent and retrievable format which can be used for research and quality improvement and assist in the development of care management guidelines.

Over 6,000 clinical notes have synoptic outcomes captured since the templates were launched in June 2022.

Grand Challenge Winner: Accelerating How Eligible Patients are Matched to Clinical Trials

Matching patients to clinical trials is a highly manual and time-consuming process that can take between 2 hours and 4 weeks to complete – time that is essential for patient care. CDI’s Grand Challenge winner, a team led by Dr. Trevor Pugh, is deploying a new computational platform, the *Clinical Trial Integrated Matching System* (CTIMS), to automate and reduce the time, effort and resources required to match patients to the best clinical trial by leveraging “digital fingerprints” comprised of genomic, pathology and clinical data.



Trevor Pugh, PhD, FACMG
Canada Research Chair in
Translational Genomics
Senior Scientist,
Princess Margaret Cancer Centre

EPIC Goes Live



Front L-R: B. Wouters, K. Stewart, A. Julius, L. Moody, L. Tinker, R. Desai

A New Era in Health Information

On Saturday, June 4, 2022 at 4:30 a.m., a symbolic button was pushed to signal the go-live of UHN's new health information system (HIS). Since that major milestone in UHN's clinical transformation, teams across the organization have been adapting to use this powerful new tool.

The project to implement EPIC at UHN was code-named Synapse to symbolize the interconnections created when there's a single source of truth about each patient's medical journey. The transition was made possible with the help of at-the-elbow support staff and the round-the-clock EPIC Contact Centre.

At the Princess Margaret, the early days of the new HIS has already seen improvements in communication, quality of care and patient safety. For instance, the improved interface of appointments, notes and key information between EPIC and MosaiQ, an electronic medical record and practice management system for oncology practitioners, has ensured that *everyone* in the circle of care is aware of the appointments and care provided to patients.

Thank you to the Synapse and Digital teams for their unwavering determination transitioning UHN to EPIC.

Biosciences Oncology Leadership Development Program (BOLD):

Enhancing Scientist’s Ability to Lead

The Princess Margaret Cancer Centre is recognized as an international leader in cancer research and is home to highly committed scientists and trainees. Postdoctoral researchers are critical members of research teams and make important contributions to biomedical research. As future leaders, they are now able to benefit from BOLD, a new program launched in October, 2022. The program aims to enhance key leadership skills in early career researchers including self-awareness, team management, communication, mentorship and knowledge transfer.

BOLD is open to any senior postdoctoral researcher in the cancer program. It was designed to open doors and reduce disparities in leadership by removing some of the traditional barriers to leadership training including cost and location, and systemic barriers, like selection and promotion bias. BOLD is free to participants and hosted in a hybrid format to enable full participation.

With executive sponsorship from Drs. Keith Stewart and Aaron Schimmer, BOLD was developed under the direction of Dr. Meredith Giuliani and Tina Papadacos from the Cancer Education program in collaboration with Dr. Catherine O'Brien, and Drs. Linda Penn and Amanda Veri from the Office of Research Trainees, and a committed program advisory.

The inaugural launch of BOLD included ~20 participants and highly interactive sessions with leaders in science and across disciplines, and online asynchronous education units. It also provided networking opportunities for building connections across labs and throughout the cancer program.

“We are trained to focus on science and data but not so much on people. BOLD is so important for a leader... everything highlighted is what I need to succeed.”



**Mona AlQazzaz, PhD,
Postdoctoral Researcher**





BOLD program fireside chat with Dr. Brad Wouters



Combating T Cell Exhaustion During Immunotherapy



L - R: Sabelo Lukhele, PhD and David Brooks, PhD

Immunotherapy is a type of cancer treatment that uses the body’s immune system to fight cancer. It heavily relies on a subset of immune cells, known as T cells, to attack and destroy tumours. However, sometimes these T cells can become exhausted and lose their ability to kill.

A study led by Princess Margaret researchers found that a protein called interferon regulatory factor 2 (IRF2) promotes exhaustion of the immune system during immunotherapy. Therefore, targeting IRF2 might help overcome treatment failure.

“Although interferon signaling enhances the success of anti-cancer therapies, this signaling can sometimes become prolonged, which weakens the ability of T cells to fight tumours,” says Dr. David Brooks, Senior Scientist at the Princess Margaret Cancer Centre and co-corresponding author of the study. “This switch to exhaustion is devastating because it can cause many highly effective therapies to fail.”

It is still unclear how interferons switch between roles—i.e., from maintaining the activity of T cells, to mediating their exhaustion.

Using various experimental models, the researchers found that deletion of IRF2 in T cells overcame exhaustion and led to sustained anti-tumour activity. The team also tested whether the deletion of IRF2 in T cells enhanced the effectiveness of different immunotherapies in breast and colorectal cancer. They found that IRF2-deleted T cells greatly impeded tumour growth and improved therapy effectiveness.

“We are now deleting IRF2 from human T cells and testing these in pre-clinical models of adoptive cell therapy with the hopes of transitioning this into human clinical trials,” says Dr. Brooks. “This work has the potential to improve existing cell therapies, while expanding treatment options for currently hard-to-treat cancers.”

Dr. Sabelo Lukhele is a postdoctoral researcher in Dr. David Brooks’ lab.

Advancing RNA Therapeutics for Colorectal Cancer



Researchers have discovered a possible new treatment for metastatic colorectal cancer that uses the same technology behind COVID-19 vaccines.

Colorectal cancer is one of the most common causes of cancer-related deaths worldwide and incidence and death rates have been increasing in younger adults in recent years. The spread of cancer to other parts of the body, known as metastasis, is a major cause of cancer death.

Co-led by Dr. Hansen He, the study identified a possible therapeutic target for the deadly disease by exploring the function of a gene, YTHDF1, which codes for a protein that binds mRNAs and regulates gene expression. The YTHDF1 gene is often overexpressed in colorectal cancer.

The researchers found that the YTHDF1 gene increases the production of a protein called ARHGEF2, which promotes cancer growth and metastasis. Using experimental models, the group found that inhibiting expression of ARHGEF2 using RNA technology led to decreased tumour growth and spread.

“Using our approach, we identified a new potential therapeutic target in colorectal cancer and this may expand to other cancer types,” Dr. He says.

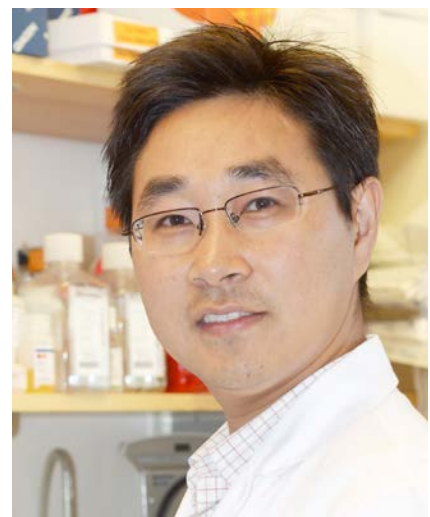
Dr. He’s team worked with fellow Princess Margaret Senior Scientist, Dr. Gang Zheng, and his lab to leverage their work

on lipid nanoparticle RNA-based therapy, the technology used in COVID-19 vaccines, to target ARHGEF2.

“This provides a very unique and novel therapeutic angle to potentially treat colorectal cancer,” Dr. He says.

Scientists will need to continue developing further treatment options, but Dr. He says the advancement is promising and breaks new ground in an under-studied area of RNA epigenetics.

A new core facility dedicated to RNA medicine has recently been established at the Princess Margaret Cancer Centre. Led by Dr. He, the facility is providing expertise in RNA production, lipid encapsulation of RNA drugs and screening of lipid nanoparticles.



Hansen He, PhD
Senior Scientist, Princess Margaret
Cancer Centre

New Targets Found for Blood Cancer Treatment

Acute myeloid leukemia (AML) is a type of blood cancer characterized by the presence of leukemic stem cells. These cells have self-renewal capacity and can be drug-resistant. Due to similarities between leukemic stem cells and normal blood-generating stem cells, it is hard to design drugs that specifically target the disease-causing cells.

Therefore, to seek new ways to treat the disease, Dr. Kristin Hope and her team decided to study a group of proteins known as RNA splicing factors. These factors are involved in molecular mechanisms during normal gene expression but become dysregulated in cancer. The team discovered that an elevated level of the splicing factor called RNA-binding motif protein 17 (RBM17) was associated with poor prognosis in AML patients.

Splicing factors, including RBM17, play a part in regulating protein production from a single gene. "In this study, we looked at the expression of 203 known RNA splicing factors," says Dr. Hope, "Strikingly, RBM17 was the only splicing factor that was elevated in leukemic stem cells, which indicated that it may play a role in sustaining the disease."

Digging deeper, the team further discovered that RBM17 gets in the way of eliminating another factor that seems to



Kristin Hope, PhD
Senior Scientist,
Princess Margaret Cancer Centre

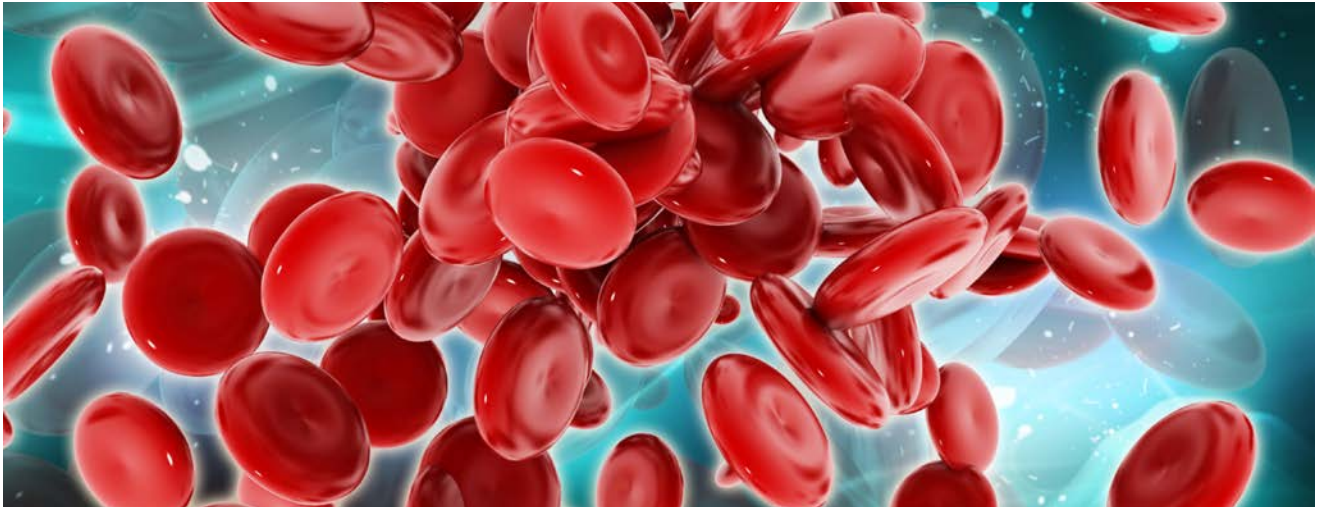


Lina Liu, PhD
Postdoctoral researcher
Princess Margaret Cancer Centre

promote leukemia called EIF4A2. Using experimental models, the researchers found that deleting either RBM17 or EIF4A2 resulted in reduced cancer growth. Therefore, both RBM17 and EIF4A2 represent potential targets for devising new AML treatments. "The mechanism of how RBM17 mediates its specific splicing will be of interest to pursue in future studies," says Dr. Hope.

Lina Liu, PhD, is a postdoctoral researcher in Dr. Kristin Hope's lab and is first author of the study.

A Promising New Drug to Improve Anemia in Thalassemia Patients



Thalassemia is a genetic disease that causes anemia in patients, leading to dizziness, weakness, organ damage, and early death. These patients have an imbalance in making hemoglobin, an essential protein in red blood cells that transports oxygen to the body's organs and tissues. This results in a low red blood cell count and some patients need life-long blood transfusion. However, there are no known effective drug therapies for this condition.

A phase 2 clinical study led by Dr. Kevin Kuo and his colleagues showed promising results for the drug mitapivat to treat non-transfusion dependent thalassemia. The study examined changes in hemoglobin level before and after treatment. A significant portion of patients had an increased level of hemoglobin that sustained over 24 weeks, associated with reduced anemia symptoms and comorbidities. Safety was also assessed, revealing a tolerable profile for mitapivat in non-transfusion dependent thalassemia patients.

“Together, the efficacy and safety results provide rationale for the continued investigation of mitapivat for the treatment of thalassemia in larger randomized, placebo-controlled, phase 3 studies,” says Dr. Kuo.

Mitapivat is a pyruvate kinase activator, which helps the body to create more energy molecules to fight the damaging effects of the imbalance in hemoglobin production. This could be the mechanism of how mitapivat works, as people with

thalassemia have a higher energy demand to mitigate these harmful effects.

“Hemoglobin responses were observed within the first few weeks of mitapivat treatment, along with an increase in ATP (energy molecules) levels,” says Dr. Kuo. “These findings support current theories of how the drug works in similar conditions by improving red blood cell maturation and survival, instead of stimulating their production.”



Kevin H. M. Kuo, MD, MSc
Clinician Investigator,
Princess Margaret Cancer Centre

Screeners Rise to the Occasion

Making a Difference

From the onset of the pandemic in March 2020 until early July 2022, approximately 400 screeners were hired to manage the surveillance at the hospital entrances.

Located at the dedicated entrances of each hospital, screeners were amongst the first to greet patients, visitors and staff and played a vital role in ensuring anyone coming into UHN hospitals met the required guidelines.

Screeners not only kept everyone safe, they also ensured every patient in the hospital had the best possible experience they could. Many walked away with a newfound passion for working in healthcare.

“They did a lot more than screen people – it was a huge opportunity to make a difference in patients’ lives,” said Alyssa Macedo, Quality and Patient Experience Manager at the Princess Margaret Cancer Centre. “Some screeners connect with patients so well, it was as if some were lifelong friends.”

When screening eventually came to an end, many screeners stayed on.

“For any screener that wanted to stay, we worked with them to find employment and made sure that they had an opportunity to apply for a new job.” says Brenda Perkins-Meingast, Senior Director, Practice Based Education, Synapse, Nursing Clinical Lead.



**Alyssa Macedo, MSc OT,
Manager, Cancer Care Quality
and Innovation (CQIN)**

Three screeners discussed their experience.



“It’s opened up my universe, I’m so proud of what we’re doing and proud to be a part of Princess Margaret’s chosen family.”

Raymond Dang



“What I liked most about being a supervising screener was being able to support other screeners to be the best that they could be. I wanted everyone on my team to feel empowered.”

Joseph Abernethy



“Even the small things – like reassuring somebody that patients are going to be safe, and we’re doing everything we can to keep them safe – it made me want to give back.”

Alessandra Ramos Moreno

Together Again: Connection, Reflection and Celebration

Celebrating the 19th Annual Oncology Nursing Day



The nurses at PM play an incredible role on the front lines of cancer treatment, care and research. On April 5th, 2022, the 19th Oncology Nursing Day, nurses were honored for their perseverance through extraordinary times. The flexibility, adaptability and team spirit displayed by our nurses has been the key to our pandemic response – always keeping the patient the focus of their care.



JOY at Work!

Thank you to our staff, volunteers and learners whose unflinching optimism and dedication make a significant difference to patients, their families and our colleagues.





The Princess Margaret Cancer Foundation

At The Princess Margaret Cancer Foundation we can picture a world where cancer is no longer a dreaded disease. We can imagine a time when some forms of cancer are eliminated completely through vaccines and early detection, and others simply become manageable chronic conditions treated with therapies that don't have harmful side effects. We can see a world where all cancer patients, regardless of their background or where they live, can benefit from the breakthroughs taking place every day at The Princess Margaret.

Our vision at The Princess Margaret Cancer Foundation is to Conquer Cancer in Our Lifetime.

Cancer continues to be the leading cause of death in Canada, impacting 2 in 5 Canadians in their lifetime. It is also the second leading cause of death globally. We are determined to change these statistics and thanks to our incredible community of supporters, we are making progress! Whether people demonstrate their commitment by purchasing a lottery ticket, sponsoring a friend in one of our events, contributing annually, making a multi-year major gift, or leaving a gift in their will, they are helping to advance research, education and clinical care at one of the world's top 5 cancer research centres, The Princess Margaret.

Not only do we believe that cancer will be conquered by the talented and dedicated team at The Princess Margaret, we believe that "our time is now". Looking back on multiple decades of cancer research, we've learned more about cancer in the past ten years than in the previous fifty. We are at a moment of huge opportunity in terms of our ability to understand cancer and truly transform cancer outcomes and the patient experience. It is this spirit of bold optimism that inspires all of our supporters and motivates each member of our Foundation team.

Ten years ago, immunotherapy was a new idea being investigated by a relatively small number of visionary researchers; today, it is an exciting and effective treatment option for many types of cancer. Liquid biopsy – a simple blood test to detect cancer and other diseases – was a futuristic concept; today, two of our Princess Margaret researchers have developed a liquid biopsy test that can also monitor treatment response. All of this – and more – has been possible because of the tremendous generosity of our dedicated Foundation supporters. We believe that this support, combined with the excellence, determination and



vision of the team at Princess Margaret Cancer Centre, will catapult us into a new era of cancer care; an era where things that we dream of today will become a reality.

Whether you are a member of Team UHN, our Canadian healthcare sector or our donor community, please know how grateful we are for your support and partnership. Together, we can do so much, not just for Princess Margaret patients, but for cancer patients across Canada and around the world. Our time is now.

With deepest gratitude,

A handwritten signature in black ink that reads "Miyo Yamashita".

Miyo Yamashita, BA, MA, PhD
President & CEO
The Princess Margaret Cancer Foundation

“We can see a world where all cancer patients, regardless of their background or where they live, can benefit from the breakthroughs taking place every day at The Princess Margaret.”



Department Heads



Dr. Amit M. Oza
Head Of Medical Oncology
And Hematology

Department Of Medical Oncology

The Division of Medical Oncology and Hematology (DMOH) is dedicated to providing the most advanced therapeutic approaches to patients diagnosed with solid or hematologic malignancies, and is home to internationally recognized programs in genomic medicine, immunotherapy, myeloproliferative neoplasm, and hematology programs. DMOH is also home to the largest leukemia, stem cell transplant, and malignant hematology programs in Canada. We have contributed to seminal practice changing studies and biologic knowledge through our early phase clinical trials programs. Together we endeavour to be global leaders in improving outcomes, and advancing care through continuous innovation and research.



Dr. Richard Tsang
Interim Head
Radiation Medicine Program

Radiation Medicine Program

The internationally acclaimed Radiation Medicine Program (RMP) at the Princess Margaret Cancer Centre is the largest radiation treatment centre in Canada, and amongst the top three such programs in the world. Our program is committed to patient-centred care with a focus on quality, safety and knowledge dissemination. We improve the quality of radiation therapy worldwide through innovative research education and cutting-edge radiation practices and technologies. RMP has the world's largest MR Program with two MR-guided radiation therapy facilities onsite (a state-of-the-art Magnetic Resonance-guided Radiation Therapy (MRgRT) facility and an MR-Linac), and the world's largest deployment of the RayStation Treatment Planning System. Our program includes 15 linear accelerators, two Leksell Gamma Knife Perfexion units, a Gamma Knife Icon unit, an orthovoltage unit, a PET CT, an MRI 3T simulator, and three CT simulators. In addition, RMP offers a Pediatric Radiation Therapy Program, which delivers specialized pediatric radiation for children with cancer.



Dr. Girish Kulkarni
Chief Of Surgical Oncology

Department Of Surgical Oncology

Surgical Oncology is committed to providing access to leading edge surgical techniques and technologies that improve patient outcomes, with a focus on delivering comprehensive, compassionate care for our patients. With 76 dedicated cancer surgeons our multidisciplinary surgical teams offer services for central nervous system, breast skin and melanoma, sarcoma, urology, head and neck, thoracic, hepatobiliary, colorectal, gynecologic, ocular neoplasms, oncological reconstruction, endocrine, and dental oncology. We have an internationally recognized interdisciplinary program dedicated to clinical and translational research, innovation, and education. We endeavour to meet the increasing demand for the surgical management of cancer, and we are committed to providing the best practice of care through collaboration outreach, and partnership with our community.

Department Heads



Dr. Camilla Zimmermann
Head Of Supportive Care

Department Of Supportive Care

The Department of Supportive Care (DSC) is dedicated to relieving physical and psychological distress and improving quality of life for patients and families throughout the trajectory of illness. The DSC provides a holistic and comprehensive team-based approach to care for patients and their families. Our Department is comprised of Psychosocial Oncology, Palliative Care, and Cancer Rehabilitation and Survivorship. Our interdisciplinary clinical team includes social workers, psychiatrists, psychologists, palliative care physicians, nurses, expressive arts therapists, kinesiologists, occupational therapists, physiotherapists, registered massage therapists and other allied health professionals. The DSC has become an internationally recognized program for research and education, developing and testing novel approaches to treatment and training learners from all over the world. In addition, we have gained international acclaim for novel programs such as the Adolescent and Young Adult Program, Geriatric Oncology Program, Caregiver Clinic, Sexual & Gender Diversity in Cancer Care Working Group, Equity, Diversity and Inclusion Working Group, as well as the Global Institute of Psychosocial, Palliative and End-of-Life Care (GIPPEC).



Anet Julius
Director Of Professional Practice

Collaborative Academic Practice

The Collaborative Academic Practice (CAP) portfolio is rooted in the strength and contribution that each profession brings to the whole. CAP leads the synthesis of practice, education and research within the individual professions and collectively integrates practice amongst the health professions. The CAP portfolio consists of 15 health professions comprised of more than 650 people, including: Nursing, Medical Imaging Technology, Respiratory Therapy, Occupational Therapy, Physiotherapy, Radiation Therapy, Speech Language Pathology, Social Work, Spiritual Care, Clinical Nutrition, Therapeutic Recreation, Kinesiology, Anesthesia, Psychology, and Chiropractic.

Committees

Princess Margaret Executive Committee

Keith Stewart (Chair) – VP Cancer, UHN & Director, Princess Margaret Cancer Centre

Aaron Schimmer – Director, Research

Richard Tsang – Interim Head, Radiation Medicine Program

Amit Oza – Head, Medical Oncology and Hematology

Girish Kulkarni – Head, Surgical Oncology

Camilla Zimmermann – Head, Supportive Care

Anet Julius – Director of Professional Practice, Oncology, Blood Disorders Program and Supportive Care

Taymaa May – Surgical Oncology Lead, Toronto Central South

Lesley Moody – Clinical Director, Solid Tumour, Ambulatory and Supportive Care

Colleen Dickie – Director of Operations, Radiation Medicine Program

Lisa Tinker – Clinical Director, Malignant Hematology and Blood Disorders Program

Monika Krzyzanowska – Medical Lead, Quality

Meena Merali – Director, Transformation and Strategic Partnerships

Meredith Giuliani – Medical Director, Cancer Education

Gary Rodin – Director, Cancer Experience

Zsolt Hering – Director, Finance

Richard Ward – TGH, Blood Disorders & UHN Ambulatory Strategy

Siba Haykal – Jr. Faculty Member, Department of Surgery (Plastics)

Miyo Yamashita – President & CEO, The Princess Margaret Cancer Foundation

Clinical Practice Committee

Monika Krzyzanowska (Chair) – Medical Lead & Chair, Cancer Quality Program

Lesley Moody (Co-Chair) – Clinical Director, Solid Tumour, Ambulatory and Supportive Care

Lisa Tinker – Clinical Director, Malignant Hematology and Blood Disorders

Colleen Dickie – Director of Operations, Radiation Medicine Program

Anet Julius – Director of Professional Practice, Oncology, Blood Disorder Programs and Supportive Care

A. Keith Stewart – VP Cancer, UHN & Director, Princess Margaret Cancer Centre

Nazek Abdelmutti – Senior Manager, Clinical Strategy and Innovation

Iqra Ashfaq – Implementation Lead, Clinical Strategy and Innovation

UHN PROGRAM LEADS

Ilan Weinreb – Division Head, Anatomic Pathology, Laboratory Medicine & Pathobiology

Ur Metser – Site Director of Medical Imaging

MEDICAL LEADS

Anne Koch – Breast Site Lead

David Goldstein – Endocrine Site Lead

Vikas Gupta – Leukemia Site Lead

Stephanie Lheureux – Gynecology Site Lead

Anca Prica – Lymphoma/Myeloma Site Lead

John Waldron – Head and Neck Site Lead

Antonio Finelli – Genitourinary Site Lead

Sami Chadi – Lower Gastrointestinal Site Lead

Laura Dawson – Upper Gastrointestinal Site Lead

Marc De Perrot – Lung Site Lead

Peter Ferguson – Sarcoma Site Lead

Normand Laperriere – Central Nervous System & Ocular Site Lead

Marcus Butler – Skin/Melanoma Site Lead

Breffni Hannon – Supportive Care Site Lead

Jonas Mattsson – Director of Allogeneic Transplant Program

Neesha Dhani – DMOH Medical Director of Inpatient Care

Alejandro Berlin – Medical Director of Cancer Digital Intelligence





Photo: Christian Schulz-Quach, Mount Kilimanjaro

“My patients are my heroes. They have inspired me to set goals beyond my comfort zone, to walk fearlessly, and to hope for a better tomorrow.”

Christian Schulz-Quach, MD, MSc, MA