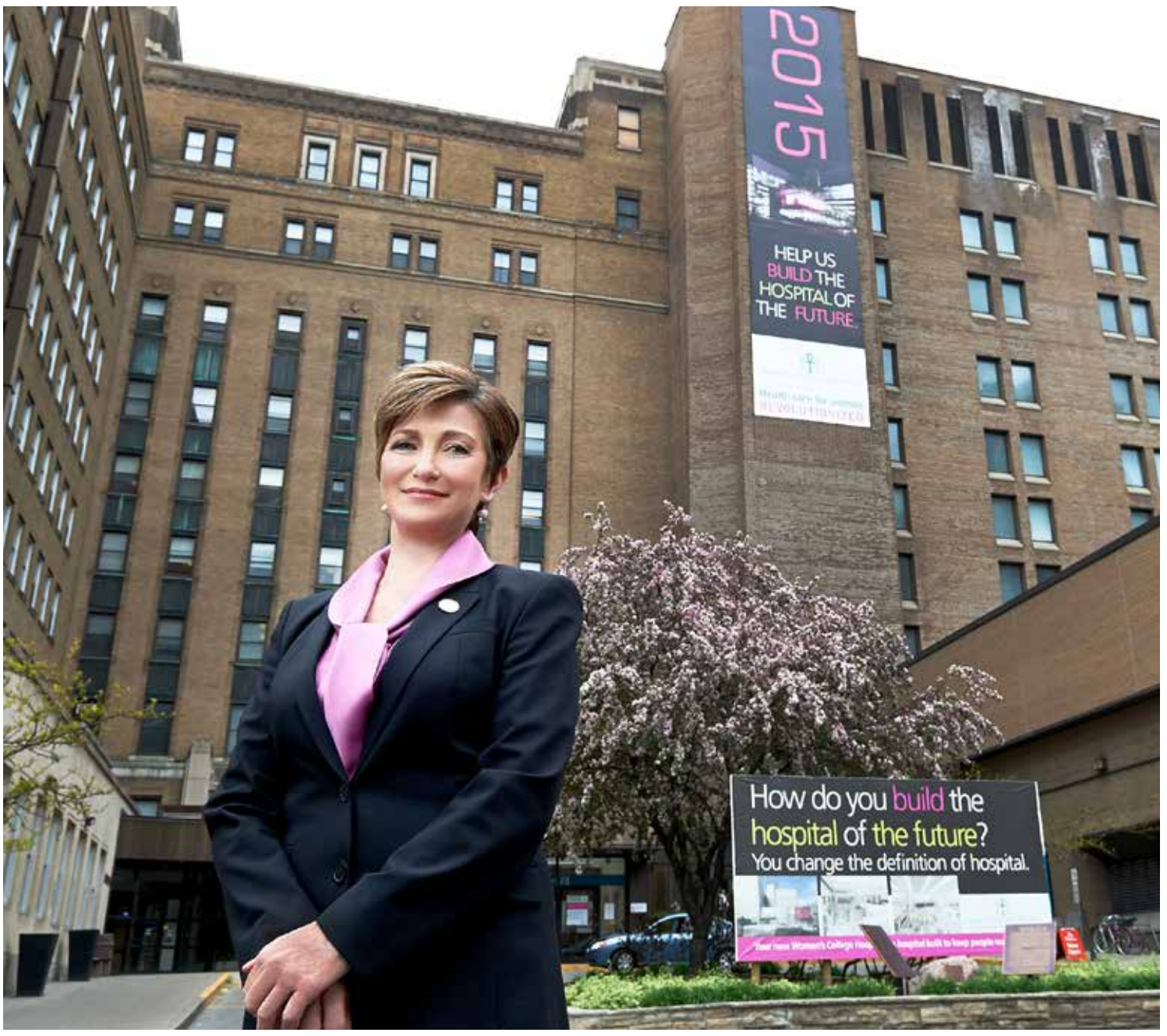
Global reach
Women in rural Bengladesh are benefiting from WCH breast-screening project 5

Smart care
Surgical teams use apps for patients' followup care 6

Women's College Hospital

GAME CHANGER



Tim Leyes

Marilyn Emery, CEO of Women's College Hospital, says the expansion and redesign of WCH is just the latest innovation in its rich historical tapestry.

Healthcare revolution

Boldly leading the way of the future, Women's College Hospital is changing how healthcare is delivered to suit 21st-century living

From a seven-bed infirmary where women practised medicine for the first time in Canada to the groundbreaking teaching hospital it is today, you'd be forgiven for thinking the evolution of Toronto's Women's College Hospital is now complete.

But no, it isn't. According to its CEO, Marilyn Emery, this latest revolutionary transformation is just the "next chapter of our incredible legacy." Simply put, WCH is "a hospital designed to keep people out of hospital," says Emery.

With the first phase of its $460-million redevelopment now complete, WCH has positioned itself at the forefront of ambulatory (outpatient) care and research focused on delivering health system solutions.

Indeed, it is Ontario's leading ambulatory care hospital — meaning patients can be released and recover at home after surgeries and procedures that do not require overnight hospitalization.

"It's an amazing and exciting time for us at Women's College. It's a hospital designed unlike any other," notes Emery, who started her career as a registered nurse some 40 years ago and joined WCH in 2007. "We have combined treatment rooms together with surgery, education and research, so that we can deliver superior, integrated healthcare."

Indeed, from its inception in 1911, WCH has always been different. It was the first hospital in Canada to train women physicians and has a track record of firsts in areas such as mammography, Pap tests, perinatal care and cardiac prevention and rehabilitation programs for women.

The staged redevelopment on its Grenville St. site began three years ago, when a large parking garage was demolished to make way for the first 10-storey tower to be built. Now that all the clinical services have moved into this new space, work has begun on the second phase. This includes demolishing the remainder of the old hospital and constructing a new, nine-storey tower, which will be joined to the first to comprise an L-shaped building.

At its base will be a light-filled pavilion with a welcoming lobby and café, as well as an auditorium for educational programs and public events, set in an iconic pink-coloured glass cube.

By the time the project is complete in 2015, the 400,000-square-foot facility will have the capacity to accommodate 340,000 patients a year, an increase of 70 per cent over current volumes.

But though the new hospital is big on style, the name of the game is all about substance and patient care .

The new breast centre, for instance, will put mammography and ultrasound imaging labs right where patients receive co-ordinated care from physicians, nurses and therapists.

Continued on pg 2

INSPIRED DESIGN

Building with passion

Clinical 'neighbourhoods,' a welcome and wellness pavilion, and more — it's all going to be under one roof at the new hospital

BUILDING A NEW HOSPITAL means giving it an iconic look and a comforting feel, all while accommodating highly efficient ways to provide patient-focused care.

The design, execution and finishing touches for the expansion of Women's College Hospital are being overseen by two women who are passionate about WCH: Heather McPherson, vice-president of patient care and ambulatory innovation, and Susan Black, principal and director of Perkins Eastman Black, the architectural company that designed the building with IBI Group Architects. The following conversation with McPherson and Black explains how it all came together.

What were the guiding principles behind the hospital's design?

Heather McPherson: We looked at how clinical-space design can enable superior patient care. We worked on what programs we could put together; for example, through having diagnostics in the same area where patients would be seeing their physician. It's been an iterative, collaborative process.

Continued on pg 3

Jeremy Kolm

Heather McPherson, left, and Susan Black are giving WCH patients what they want.

INNOVATION

The right medicine

Ambitious initiative aims to focus care by connecting disciplines, saving money, 'acting local, thinking global'

How do you run a hospital that's designed to keep people out of hospital? That is the challenge that Women's College Hospital has undertaken; and the answer is WIHV.

WIHV (pronounced *weave*) is the acronym for WCH Institute for Health System Solutions and Virtual Care. Dr. Danielle Martin, vice-president of medical affairs and health system solutions, states the goal of WIHV very simply: "What we're really interested in is improving the healthcare system as a whole."

To do this, WIHV will create innovative health system solutions to help keep complicated medical patients out of hospital, provide evidence to show the innovations work, and then share these models of care with others across the country.

The ambitious undertaking is being approached one step at a time. As the first step, WCH has recruited cardiologist and Harvard research fellow Dr. Sacha Bhatia to be the director of WIHV, luring him home to Toronto from the Massachusetts General Hospital in Boston. Dr. Bhatia starts his new job on July 1, but he's already busy developing a strategic plan for the organization of the new institute.

"This is an innovation laboratory," he explains. "It's a great opportunity to develop and test new ways of delivering healthcare at a higher quality, more efficiently, and also to evaluate how successful these innovations have been. It's a combination of doing work on the ground, and then evaluating the results to figure out how they can be scaled across the province; and what are the barriers to doing this."

As WIHV works in collaboration with other healthcare organizations, its goal will be to develop and test systems designed to streamline healthcare delivery. Dr. Martin points out that many millions of dollars are misspent on preventable emergency department visits across the province; avoidable hospital admissions; and unnecessary or redundant diagnostic tests and scans. And it's bad for patients, too.

"We're all awakening to the idea that more isn't necessarily better, and sometimes more can be decidedly worse," she explains. "Unnecessary investigations and treatments can cause real harm to people. That harm on the individual level obviously leads to harm on the system level: every dollar spent on intervention that doesn't help an individual is a dollar that can't be spent on something that could. We want to find solutions that can be adapted across the system, so that we get maximum bang for the buck and the best patient care."

However, she adds, this is not just about saving money. "We need to ensure that the right care goes to the people who will benefit, that the dollars are going where they're needed. Our goal is about acting local but thinking global. Our patients are first and foremost, but we want to improve care across the board."

To achieve these goals, WIHV envisions a wide range of possibilities, both organizational and technology-based. "We're going to study how we integrate technology into the workflow to benefit patients and doctors," Dr. Bhatia points out.

WIHV will also be working on new, fast ways to achieve speedy care for patients with chronic illnesses. Delays in seeing a specialist may result in a visit to emergency, or even hospitalization. "Are there fast ways to triage patients, to get them rapid access to specialty care?" muses Dr. Bhatia. WIHV is already involved with the SCOPE project, which facilitates rapid consultations between family doctors in the community and specialists in the relevant field, thereby curtailing potentially lengthy wait times for a specialist appointment.

Dr. Bhatia points out that the current healthcare system is hampered by its "silo" approach: the different facets of care don't always connect seamlessly with each other. "What is needed is a re-engineering of the way we deliver care and transfer data," he says.

Another area of focus will be ensuring equity for marginalized segments of the population — refugees, new immigrants, the poor. "Equity is *so* critical," notes Dr. Bhatia. "Patients in these groups often use a lot more of our healthcare resources, but also, their outcomes are much worse. If you address the systems issues relating to these groups, you'd improve the outlook, not just for them but also [in terms of] the costs to the system. A very small percentage of the population actually accounts for a lot of healthcare."

Key to the success of WIHV will be its collaboration with other institutions. "Women's College has a tradition of partnering with other hospitals," Dr. Bhatia points out. "Our goal is to work with as many groups as we can, where it makes sense, to improve care within the system." This includes not only other hospitals, but also social services, home care agencies, CCACs (Community Care Access Centres), and post-secondary training institutions. "We aim to be the 'glue' that holds the rest of the system together," Dr. Martin adds.

Laura Arsie

Through WIHV (WCH Institute for Health System Solutions and Virtual Care), a brand-new way to deliver healthcare is being spearheaded by Dr. Danielle Martin, vice-president of medical affairs and health system solutions, and Dr. Sacha Bhatia, a cardiologist and Harvard research fellow.

Both doctors see WCH's unique status as an ambulatory hospital — with no overnight beds — as a rich opportunity to "build something special." With money and energy directed to new models of care, WIHV will focus on more medium- to long-term care, Dr. Bhatia points out. "We can explore how to be innovative; how to push the envelope as to what healthcare can look like not just six months from now, but a year, five years, ten years. That's really exciting."

"Women's College has always been an organization of innovation firsts," concludes Dr. Martin. "It's never been big, but it's always at the forefront." With the creation of WIHV, this tradition will continue.

Delivering solutions for the health system

continued from pg 1

"That means women who are going through the stress of breast disease — and feeling physically, emotionally and mentally vulnerable — are not moving all over the hospital in gowns," Emery explains. "It is the most effective and comfortable way to deliver patient care."

The design of WCH comes from a landmark 2010 study where 1,000 women from 60 communities said they wanted a hospital with more privacy and safety, more inviting and supportive environments, even softness and curves.

"Women told us loud and clear what they want," Emery says. "It's not a big leap to know that it's going to work for men as well."

As an ambulatory, or outpatient, hospital, WCH delivers treatments, conducts diagnostic procedures, holds clinics and performs complex surgeries without requiring overnight stays.

> *'We are literally creating the future of healthcare.'*
>
> **MARILYN EMERY,** CEO, WOMEN'S COLLEGE HOSPITAL

"We do that with the highest levels of patient satisfaction and treatment outcomes," Emery says, adding that a critical element is followup; for example, using smartphone applications that allow surgeons to monitor patients after surgery.

Such advances help reduce costs and improve the quality of healthcare, Emery notes. "We are focused on delivering tangible solutions that deal with the most pressing issues facing our health system today."

For example, new programs will ensure that patients can make seamless transitions between healthcare providers and organizations, which is especially important after patients leave hospital. "We are focused on ensuring that patients don't end up back in an emergency room or being readmitted."

While the hospital serves men and women, its research institute focuses on the gaps in healthcare for women, and developing specialized programs to meet their needs.

"It's really the most exciting time right now to have this mandate," Emery says, especially with an aging population where people are living with multiple chronic conditions.

For example, Emery notes that the WCH is "providing a whole new dimension to diagnosis of cardiac disease." It is also looking closely at gestational diabetes, integrating research and lifestyle assessments to help lower the rate of the disease during and after pregnancy.

This new integrated model will transform such research, putting scientists right next to the physicians providing treatment, Emery points out. "To have a situation where researchers are collaborating daily with clinicians is the best of all worlds."

As an academic health science centre, the hospital is also teaching the next generation of healthcare providers in an ambulatory environment, rather than training them only in acute inpatient care.

"They will need to know how to function in integrated, complex, interdisciplinary settings. That's what Women's College is doing," Emery says. "We are literally creating the future of healthcare."

MENTAL HEALTH

A healthy mind is key to a woman's well-being

WCH provides "care without boundaries" for women in distress

Following a lifelong pattern of finding comfort in food, when her 23-year-old son died in a car crash 13 years ago, Jean Filiatrault began binge-eating uncontrollably. "It's the end of life as you know it," the 63-year-old says.

Filiatrault's weight ballooned, and today it's a matter of life or death. A year ago, she was diagnosed with idiopathic pulmonary fibrosis and was told she would need a lung transplant within five years. But with her current BMI (39), she doesn't qualify for new lungs; she must lose 50-60 lbs. (reaching BMI 30) before she can even be considered.

The therapy she is undergoing at Women's College Hospital's mental health department instills the hope she needs to achieve that goal before time runs out.

A patient of WCH psychiatrist Dr. Erin Carter, Filiatrault has also benefited from consultation with the hospital's chief of psychiatry, Dr. Valerie Taylor, who specializes in obesity issues.

Laura Arsie

Dr. Valerie Taylor, right, Women College Hospital's chief psychiatrist, specializes in obesity issues. Her patient, Jean Filiatrault, left, is treated holistically through a wide range of services available at the hospital.

"I guess, clinically, I'm suffering from depression," Filiatrault says. "Without Dr. Carter seeing me, I really don't know mentally where I'd be. It's a tremendous help to go to someone who understands that binge-eating is an addiction to food that's different from just being fat."

Filiatrault's story is just one example of the seamless care —"care without boundaries" — which is Dr. Taylor's goal for the hospital's mental health department. "We want to make sure we're as accessible as possible," she says. "The very specialized expertise we have here is hard to find anywhere else. The emphasis on women and their families really makes [the program] stand out."

Recognizing that some mental health issues are specific to women — those centring around life stages and hormonal changes, such as menstruation, pregnancy, motherhood and menopause — the WCH mental health department concentrates on helping women resolve issues without rupturing their home lives. There is also a strong focus on women who have suffered childhood abuse and neglect, and those whose mental health issues may have developed due to chronic medical conditions (such as obesity, or diabetes).

The department also acts as a link between a patient and the different forms of outpatient treatment or support — psychiatric, medical, or social — she may need. In Filiatrault's case, she was referred to Ontario's Bariatric Program to address her physical challenges, but continues therapy at WCH to resolve psychological concerns. "This is *not* a weight-loss program," Dr. Taylor clarifies. "We help people identify problematic behaviour and work on behavioural change."

Filiatrault has high praise for WCH, saying she has been "overwhelmed with care" at every step, "from the receptionists to the doctors."

This is exactly what Dr. Taylor wants her department to achieve. "This is a place which makes (women) feel safe; they're really supported," she says. "Patients very much feel that this is a place where they are valued and where they do get well."

In addition to assisting patients like Filiatrault, the department generates valuable research data, creating unique programs that are then evaluated for effectiveness. Of particular interest are patients who are high users of healthcare resources, requiring repeated interventions. The department of psychiatry is working closely with CAMH to see if rehospitalization rates can be lowered.

Another initiative is the creation of online resources, such as Mother Matters, an interactive forum directed at new mothers; the Sweet Sisters discussion forums, which offer support to women with diabetes; and Gyne Gals, which helps women deal with psychological issues arising from a diagnosis of gynecological cancers.

"We're really focused on making care as seamless as possible and keeping people at home in the community as much as they can, not having to leave their families," says Dr. Taylor. "Women today are juggling a lot more in terms of family and career. I think they're better at recognizing when they're not well and [are] looking for help.' Dr. Taylor's goals for her department are straightforward: "To continue to provide our excellent level of care and to strengthen our international recognition as leaders in mental health for women."

Façade glows by night

continued from pg 1

How did the study "A Thousand Voices for Women's Health" guide the process?
McPherson: We asked a huge cohort of women — from all cultural backgrounds and different socioeconomic groups — exactly what they wanted from a hospital. They wanted holistic care; they wanted everything from prevention to diagnosis and treatment in one place. But they also wanted privacy, to feel safe, and they wanted the environment to be accessible to them — not just physical accessibility, but a comforting look and feel.

Is there an example of a practical element that was introduced to address these needs?
Susan Black: In the report, childcare was a big issue; mental health patients particularly talked about it as a barrier to care. On the mental health floor, we've got a beautiful "children's wait space" off the reception area. It's one of my favourite rooms.

It must be difficult to run a hospital while it's being torn down and rebuilt.
McPherson: The main building was designed as an L, with two towers that could be constructed at different times and then attached. Once the first tower was built, everything from the old hospital could be moved into it while the second one goes up. That's happening now.

What will this L-shaped building feel and look like when it's finished?
Black: The L is like an opening of arms; if you stretch both of your arms out, you're embracing the whole community. It's what women do. In the centre of the L will be a glass auditorium dedicated to research, innovation and patient care.

How different will the patient's medical experience be?
McPherson: We've made "clinical neighbourhoods," where we've hugged together services that share providers and specialists. An example would be someone who has thyroid cancer. They need to see an endocrinologist, they need to see an ear-nose-and-throat surgeon, they need to see a nurse. In most models, you would be going to different appointments and different parts of the organization to do that. We've put them all in one place.

There must be advantages and challenges in building an entirely outpatient hospital.
McPherson: The real opportunity with intentionally designing an ambulatory hospital was to build it, based on efficiency and utilization of space. We've really looked at the flow of the clinic rooms and the exam rooms and the master scheduling of the whole building. You may have a clinic in the morning that is an endocrinology clinic, and in the afternoon that same space might be a gynaecology clinic.

What finishing touches make Women's College different?
Black: At the end of Phase 2 in 2015, when the building is complete, there will be a three-storey "welcome and wellness" pavilion.
The light-filled waiting area will be a comfortable sanctuary with tub chairs around coffee tables, and a beautiful café. On the corner there will be a fuchsia-coloured glass box that cantilevers out, holding an auditorium for conferences and public events. That is "the pink cube."

Lighting up "the pink cube" at night is a bold touch.
Black: It's about place-making. You're going to know you're at Women's College Hospital before you see a sign. You're going to know that pink glow is for you.

What is the thinking behind the neutral finishes and splashes of colour we see?
Black: The interior will respect the preferences of what I call "feminine principles," while emphasizing wellness and empowerment. Today, mainstream architecture trends toward mixing higher-value contrasts, injecting more daring expressions of colour with neutrals. Using what are perceived as "natural" neutrals as backgrounds, and then adding careful but sometimes edgy colour is also a direct "steal" from nature.

Does the hospital's redevelopment reflect its century-old legacy?
McPherson: Women's College has always been about innovation and has been on the leading edge of many things over the years. The new building is another one of these innovations.

VIRTUAL REALITY

A hospital with no beds

You've heard of doctors making house calls. Imagine a whole hospital team watching over you to help you manage your healthcare needs at home

If you ask Dr. Gillian Hawker how to define Women's College Hospital (WCH), her answer is unequivocal.

"We are not a hospital where patients are admitted, nor do we provide community-based care," the chief of medicine at WCH explains. "We are the glue that helps transition patients with complex medical conditions safely and smoothly from inpatient hospitals [to] back home. And then, together with our health-sector partners, we help keep these patients from ending up back in hospital. Reducing the time people stay in hospitals helps to minimize risks to the patient [and] reduce healthcare costs. And it's what our patients want."

This is a promise that WCH, as the first fully ambulatory teaching hospital in Toronto, has made to its patients and the healthcare community.

"We are in the business of doing things differently to address the gaps in our healthcare system," Dr. Hawker says. "Ambulatory care means that all healthcare happens outside the hospital ward. Because we don't have inpatient beds, we have to think out of the box and do things differently. So, we focus 100 per cent of our energy on helping patients prevent and manage their chronic conditions, so they don't need to be admitted to hospital."

PREVENTATIVE CARE

When Harriet Akanmori was feeling stressed and tired all the time, she never imagined it had anything to do with her heart. After tests showed that she had dangerously high blood pressure, cholesterol and blood sugar levels, her family doctor told her she was at risk of having a heart attack or stroke. If she hadn't sought help, she may have ended up in hospital. Instead, her doctor referred her to WCH's cardiovascular rehabilitation program.

The diabetes specialist, nutritionist and exercise physiologist at WCH prescribed a regimen of physical activity and nutrition for the 50-year-old PhD student and mother of two. For the past six months, Akanmori exercised on the treadmill and did strength training twice a week. Before and after her workout, her blood was taken to monitor blood sugar and cholesterol levels. Her health has since improved significantly. Her blood pressure dropped, she is no longer at risk of developing Type 2 diabetes, and her blood cholesterol levels are back to normal. Through this type of proactive, holistic and preventative care, Akanmori's likelihood of ending up in hospital with a heart attack or stroke has been substantially reduced.

COMPLEX CARE

Taking a proactive approach is critical. Up to 80 per cent of Ontarians over the age of 45 are living with more than one chronic condition, such as diabetes, heart disease, arthritis or depression. It's challenging for patients to manage all these conditions, especially if they have to see multiple care providers, family physicians and specialists. This is why WCH created the Centre for Ambulatory Care Education (CACE) Complex Care Clinic (CCC), to address the needs of these types of patients in a one-stop shop.

The Complex Care team at WCH includes doctors, pharmacists, respiratory therapists, dietitians, nurses, social workers and internal medicine specialists, depending on patients' needs. Patients can be referred by their family physician to the CCC for a single comprehensive assessment by a team of health experts who create a personalized treatment plan in coordination with family physicians and community care providers, instead of requiring patients to see individual specialists for each of their health problems.

"We've broken down the silos," says Dr. Hawker. "When all of the care happens at the same time, in the same place, it's not only simpler for the patient and their family, but also reduces the likelihood of miscommunications that might result in hospital visits and admission." Currently within the health system, 20 per cent of patients who go home from hospital after admission for a medical problem are back in hospital within 90 days. "Our goal is to help reduce that rate of hospital readmissions."

Dr. Hawker also notes the other important aspect to this program: the education component. At WCH, medical trainees and students from various health disciplines learn how to prevent and manage chronic disease in the outpatient setting. They learn how to be proactive and prevent the acute exacerbations of chronic conditions that often result in hospital admission.

VIRTUAL CARE

"Our goal is to curb the exponential increases in healthcare costs, with a focus on reducing hospital readmission rates by 20 to 30 per cent," says Dr. Hawker. "Keeping people out of hospital has many benefits beyond the costs to society. It reduces the risks associated with hospital admissions, like picking up drug-resistant infections. What's more, most patients prefer to be in their own homes while recovering."

WCH is doing just that through a range of innovative programs that include "virtual" teams of healthcare providers who can monitor and support patients post-surgery, after discharge from inpatient hospitals and over the longer term.

A team of healthcare professionals is assigned to a patient and together they review the patient's medical record and reports to determine ongoing care requirements. If need be, one of the specialists may visit the patient's home. When a medical expert is available to answer questions and attend to various concerns, patients don't feel the need to go to emergency. "It's wrap-around care, where the patient is the central focus," says Dr. Hawker.

URGENT ASSESSMENT

An estimated 1 per cent of the Ontario population is responsible for close to 50 per cent of provincial healthcare costs; many of these individuals have complex medical and social needs.

The Acute Ambulatory Care Unit (AACU) — a short-stay medical unit at WCH — is helping meet the needs of these complex patients and improving their quality of life.

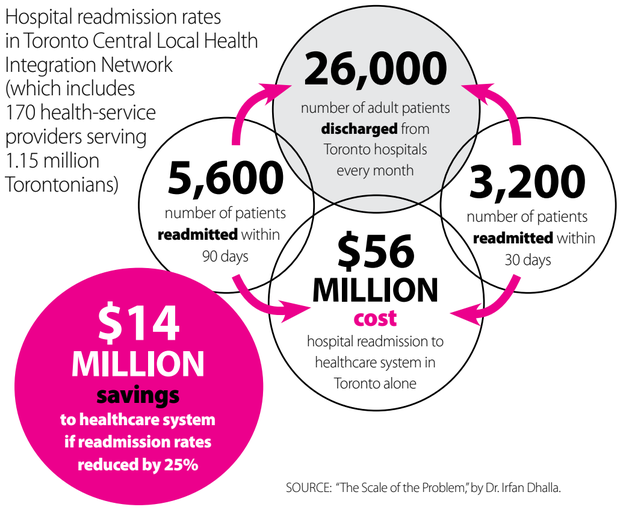
Patients are referred by their physicians to the AACU for urgent assessment, investigation and management of their chronic conditions — a work-up and management process that occurs within a 24-hour time frame. The unit is staffed by a general internist as well as medical nurses who have direct access to specialist consultations, diagnostic medical imaging, and non-invasive cardiac testing. A one-of-a-kind unit, the AACU can preemptively manage complex medical patients to avoid emergency department visits and inpatient hospitalizations.

IMMEDIATE ACCESS TO HEALTH SPECIALISTS

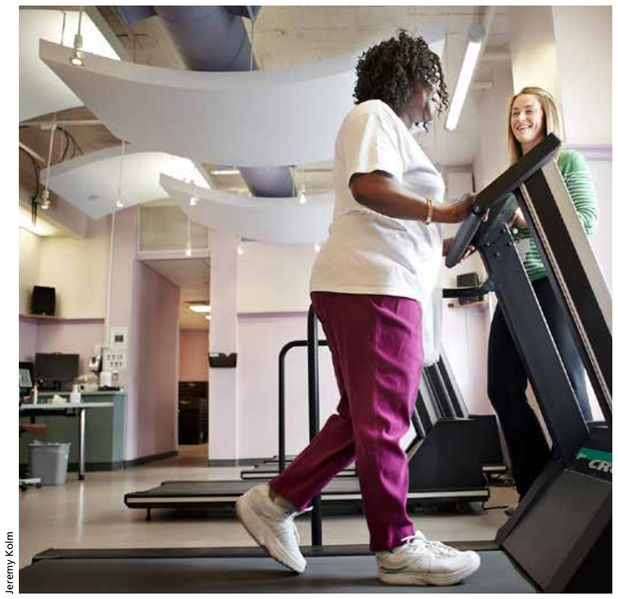
A 76-year-old patient with heart failure complains of shortness of breath. She visits her family doctor and tells him she had trouble sleeping the previous night and difficulty breathing while lying down. Her doctor diagnoses her with pulmonary edema, or fluid in the lungs — a condition that can be fatal without prompt treatment.

In most cases, the family doctor would direct the patient to the nearest emergency department. Now, a new joint pilot program between WCH, the University Health Network and the Toronto Central Community Care Access Centre (CCAC), is putting the doctor of this patient with pulmonary edema directly in touch with medical specialists and community resources through a single telephone call. Says Dr. Hawker, "It's about embracing the family physicians to ensure that they, and their patients, are getting the most timely and effective support and care."

In this case, the patient was referred to the AACU at Women's College. After being treated and stabilized, she was booked to return every couple of months to the AACU for proactive preventative management. Now at home, the patient is also receiving continued support from the CCAC. Thanks to the rapid assessment, care and support from the project and its partners, the patient has been able to manage her health conditions, avoid going to emergency departments and improve her quality of life.



SOURCE: "The Scale of the Problem," by Dr. Irfan Dhalla.



Jeremy Kolm

After being diagnosed with dangerously high blood pressure, Harriet Akanmori has been participating in the WCH's cardiac rehabilitation program for women.

Benefits of the virtual ward at WCH

- **1,900** enrolled and stabilized
- **Average age** between 60 and 85
- **Average virtual stay** 30 days
- Once patient is stabilized, family doctor takes over ongoing care

COMMUNITY INTERVENTION

Breaking down taboos

Women in rural Bangladesh believe breast cancer is a curse that could lead to losing their home and family

ABOUT 200 KM EAST of Kolkata, on the Bay of Bengal, Dr. Ophira Ginsburg, a research scientist at Women's College Research Institute, and her team introduced a new model of care in the region last summer to lower the rates of breast cancer.

Armed with nothing more than a cellphone, the team recruited 30 local community health workers to go into 30 villages in the Khulna Division (population, 15.5 million), in southwestern Bangladesh. The workers talked to families, the majority of whom are Muslim, about their general well-being and then asked the women more specific questions about their breast health.

It was a challenge because many taboos keep the local people from talking about their bodies, especially the breasts. There is also a widespread belief that having breast cancer is a curse. "These women are terrified of abandonment, either being [cast out] from their villages or having their husbands divorce them," says Dr. Ginsburg.

The community health workers were well trained to sensitively solicit information about the women's breast concerns, but they also had an innovative way of convincing the women to allow the workers to perform a breast exam in the home. On their mobile phones, the health workers showed testimonial videos of survivors who had come to the clinic for treatment. The mobile phones also helped the workers to track and refer the patients for care.

By the time the project was over, four months later, the workers had detected breast lumps in 500 women, and other findings of concern such as skin or nipple changes suggestive of breast cancer. "Our workers were able to gain the trust of the men and women of the villages," says Dr. Ginsburg, "with the result that out of the 22,000 interviewed, only a handful of women declined participation."

Today, Dr. Ginsburg and other oncologists still provide breast cancer consultations, via Skype, to the Bangladesh clinic. They are also taking their findings and applying them to the South Asian population in the GTA.

Working in central east Toronto, with the Thorncliffe Neighbourhood Office and the Crescent Town Club, the oncologists identified a barrier to breast screening that's unique to South Asian women. In another study, Dr. Ginsburg found that these women are highly dependent on their families because they don't drive and don't feel comfortable travelling alone. "They felt they were burdens, mostly to their grown children, who have to take time off work to drive them to appointments," she says. The solution? A bus was hired to take the women to the nearest breast screening clinic.

Gaining the trust of village women in southern Bangladesh, WCH clinicians interviewed 22,000 of them, finding breast lumps in 500.

The new hospital

1 Surgery & technology
Each of the operating rooms features the latest anaesthesia machines and TV monitors, with touch-of-a-button access to patient images and lab results.

2 A place for recovery
The pavilion's 8th-floor operating suite flows seamlessly from where the patients are prepped for surgery, through eight high-tech operating rooms (ORs) and all phases of post-op recovery. The Surgical Day Care Unit and the Post-Anaesthetic Care Unit, where patients are prepped for and recover after surgery, are combined a short distance away from the ORs on the same floor, making this the most comfortable and efficient experience for both patients and their surgical care team.

3 Room to share and learn
Interprofessional-team rooms on every patient floor provide room for healthcare professionals to develop shared treatment plans and for health-discipline students to learn together from the best in diverse fields.

4 Clinical neighbourhoods
Complementary programs are located in the same "neighbourhood," so patients can accomplish more in a single visit and healthcare practitioners can collaborate on superior co-ordinated care.

RESEARCH

Recovery in the palm of her hand

Mobile app links patient to medical team for post-operation care

When Leela Goldhar-Waxman found out she carried a gene mutation that increased her chances of getting breast cancer 10-fold, she knew what she had to do.

The BRCA 1/2 mutations are those that actress Angelina Jolie spoke out about last month, telling the world she'd had a double mastectomy to decrease her risk of developing breast cancer.

Jolie found out the hard way that she had one of the faulty genes: her mother's illness and death.

For Goldhar-Waxman, who also opted for a double mastectomy, it was through volunteering for a research program run by Women's College Research Institute. Otherwise, she would never have known she was at risk.

"No one in my immediate family had ever had cancer, so my doctor had not flagged me for testing," says Goldhar-Waxman, a 38-year-old mother from north Toronto with three children. "I feel I was handed a golden ticket that saved my life."

Thomas Bollmann

Leela Goldhar-Waxman, who underwent a double mastectomy and breast reconstruction, uses a mobile app to communicate with her WCH medical team from the comfort of her own home.

LOWER COSTS

When Women's College Hospital was established more than 100 years ago, its primary focus was on the care and treatment of women, which made it unique in Canada. Today, the hospital and the research institute have as their primary goal to anticipate women's medical needs in order to keep them healthy and out of hospital in the first place.

By combining science, research, education and ambulatory patient clinics, the hospital has become a model for the most effective healthcare delivery at a lower cost. "We have made huge gains, but we still have places to go," says Dr. Paula Rochon, vice-president of research at the WCRI.

What makes WCH's research arm distinctive among national and international academic institutions is that 80 per cent of its researchers are women. Fully 70 per cent of the WCRI researchers are also clinicians, working directly with patients. "WCRI is like a living laboratory because our scientists test, study and then incorporate their results into their practice," says Dr. Rochon.

A century of collaboration has resulted in WCH being at the forefront of research into women's health, including playing a major role in the development of a simplifed Pap test to detect cervical cancer, mammograms in the diagnosis of breast cancer and the establishment of the first hospital-based sexual assault centres.

The findings at WCRI and the model practices created there reach deeply into the community and around the world to enhance women's overall health over their lifespan. That research includes investigating the newly discovered link between diabetes and cancer, cardiac rehabilitation geared to women, and new uses for old medications for the treatment of osteoporosis that may be more effective with fewer side-effects, among other areas of study.

WCRI's familial breast cancer research unit is a case in point. The unit follows women like Goldhar-Waxman with the BRCA 1/2 gene mutations. The medical director of the unit, Dr. Steven Narod, is at the forefront of research into breast and ovarian cancer. A seven-time award-winning scientist and the most cited researcher in his field, Dr. Narod has taken the results of his studies and research drawn from a database of 14,000 women from 20 countries and put them into practice.

GENETIC COUNSELLING

"We are looking to translate our findings and make them available to women in Ontario and around the world, so that they can assess their personal risk and make informed decisions," says Dr. Narod.

Each woman who is referred to the unit is tested and if she receives a positive result, undergoes thorough genetic counselling. She is then offered several options: mastectomy and removal of her ovaries and fallopian tubes followed by treatment with Tamoxifen, a drug that reduces her risk by lowering the levels of estrogen. Women who don't choose surgery are followed with clinical breast examinations every six months and yearly mammograms and MRIs. They also receive nutrition and exercise counselling. To date, the BRCA research study has screened approximately 7,000 women.

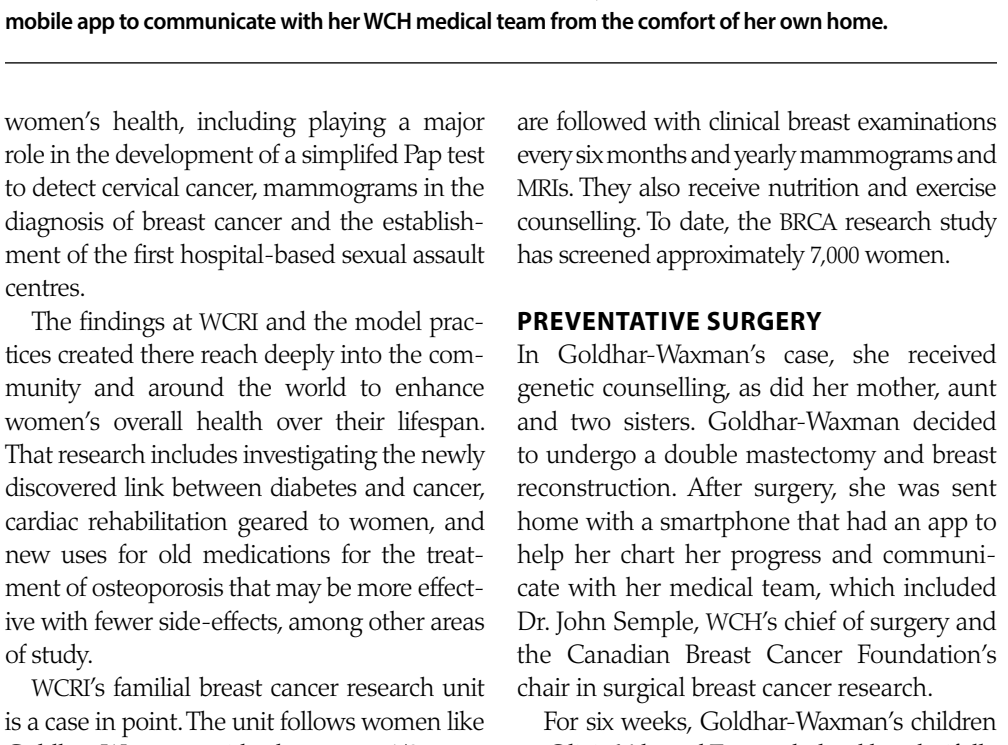
PREVENTATIVE SURGERY

In Goldhar-Waxman's case, she received genetic counselling, as did her mother, aunt and two sisters. Goldhar-Waxman decided to undergo a double mastectomy and breast reconstruction. After surgery, she was sent home with a smartphone that had an app to help her chart her progress and communicate with her medical team, which included Dr. John Semple, WCH's chief of surgery and the Canadian Breast Cancer Foundation's chair in surgical breast cancer research.

For six weeks, Goldhar-Waxman's children — Olivia, Yale and Ezra — helped her dutifully record her pain levels, her emotional state and took pictures of the incisions to monitor for infection.

Within 24 hours, Dr. Semple and his team would review the data and photos and then send assurances that all was well. "Patients love the app," says Dr. Semple. "They feel connected and vested in their own care. It also reduces their anxiety to know whether what they are experiencing is normal, and that their surgeon is monitoring their progress, especially after being discharged from the hospital within 18 hours after their surgery."

Being an ambulatory care hospital means WCH can deliver treatments, diagnostic procedures and clinics, and perfom complex surgeries without patients requiring overnight stays. "We have developed an ambulatory surgery process that enables patients to go home within 18 hours of their surgery," explains Dr. Semple. "This reduces their risk of infection, and patients recover safely and comfortably in their own home."



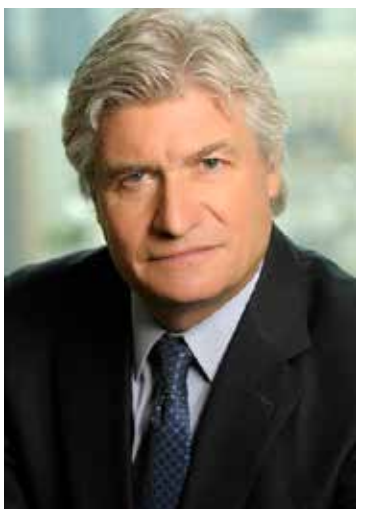
Dr. Paula Rochon (centre), vice-president of research at the WCRI, believes the future of healthcare is in cutting-edge research and applying that knowledge to practice on the ground.

THE FOUNDATION

Paving the way

Supporters make research and education possible through time, dedication and fundraising

Joanne Mealia



David Shaw

Arlene Dickinson

Christopher Wahl

Margaret McCain

Colleen Moorehead

FIRST IMPRESSIONS COUNT — especially when it comes to healthcare.

Just ask **Joanne Mealia**. Twenty-one years ago Mealia, a sales executive, gave birth to her second child at Women's College Hospital after scouting around for doctors who delivered their patients' babies. Her research paid off. "Carolyn arrived [at the hospital] in an evening gown from a Christmas party," Mealia says of physician Carolyn Bennett, now a Liberal Member of Parliament for Toronto's St. Paul's riding. "That dedication from Carolyn and, by extension, Women's College, is what motivates me to help as they embark on this most ambitious campaign," says Mealia, who chairs the board of directors of the Women's College Hospital Foundation (WCHF).

She's referring to the $70-million fundraising campaign that will support WCHF's $555-million redevelopment of the hospital, invest in state-of-the-art technology, and fund critical research and education. "Women's College is creating something different. It's going to a much more ambulatory-type hospital, with its clear focus on women and women's research," says **David Shaw**, vice-chair of The Campaign for WCH.

That's important to Shaw, who is also founder and CEO of Knightsbridge Human Capital Management Inc. Seventy-five per cent of Knightsbridge's employees are women. "We're very clear that, as an organization, we're going to continue to give back to the community," says Shaw." And we're going to do it in areas where our people have a lot of interest." The hospital's transformation — "the evolution of healthcare," says Shaw — will help lessen the strain an aging population places on the provincial healthcare system.

> *"We're very clear that as an organization, we are going to give back to the community."*
>
> **DAVID SHAW**, VICE-CHAIR
> THE CAMPAIGN FOR WCH

WCHF board member **Arlene Dickinson** is also enthusiastic about WCH's departure from the traditional healthcare model. "I love anytime someone disrupts an existing model by finding a more effective and, ultimately, rewarding way to deliver the service or the product," says Dickinson, who is the CEO of Venture Communications and appears on CBC's *Dragons' Den* and *The Big Decision*. WCH asked 1,000 women from all walks of life about what they'd like to see in a healthcare facility. Their feedback has helped shape a model that focuses on the whole patient experience. "Everything — from its design and how they set up the facility to how patients are processed — has been thought about it in a unique way," says Dickinson. "I think it's really smart."

Of course, WCH has been a game changer ever since it opened its doors in 1928. "Even before I moved to Toronto, I was aware of Women's College," says **Margaret McCain**, a generous donor and volunteer leader who, from 1994 to 1997, served as the first female lieutenant governor of New Brunswick. One of her mother's close friends was Dr. Henrietta Banting, who served as director of WCH's Cancer Detection Clinic, the first Ontario facility of its kind dedicated to women, from 1958 to 1971. "Historically, Women's College has been a place where women health professionals have been treated with respect without being hampered by discrimination, repression or disregard," says McCain.

McCain's decision to become involved with WCH was a straightforward one. "The concentration on women's health was very appealing," she says. "Women react differently to different diseases and respond differently to pharmaceuticals. Research on women's health has really shone the light on how women need to be treated in a very distinctive, specific way."

Indeed, research on women's health has flourished at WCH. World-renowned Women's College senior scientist Dr. Steven Narod is part of the team, for instance, that discovered the BRCA1 and BRCA2 genes — one of the most important breakthroughs in cancer research. Now, healthcare professionals around the globe understand these genes associated with breast and ovarian cancer, and routinely test for them.

It's a discovery that resonates with **Colleen Moorehead**, whose niece died from the disease in her early 30s. "Women's College Hospital is one of the few institutions that is globally focused on developing breakthroughs in women's health," says Moorehead, a chief client officer at law firm Osler, Hoskin & Harcourt and vice-chair of the campaign.

Moorehead has also carved out time in her busy schedule to chair the WCHF's annual luncheon called "Women for Women's," which brings together influential business leaders for thoughtful conversations about women's health. "It's a 'friend-raiser' for the hospital that heightens awareness," says Moorehead. Last year's event raised close to $400,000.

Her niece would be proud.

The capital campaign

Ed Clark

Throwing his support behind Women's College Hospital is a natural for Ed Clark. With a wife, daughters and granddaughters, he feels strongly that women and girls have a stellar facility dedicated to their healthcare.

But there's an unexpected twist. "What I've found exciting is that I started with an emotional reason and I ended up with a business reason" for getting involved, says the group president and CEO of TD Bank Group, who is honourary chair of WCHF's capital campaign. He points to WCH's focus on ambulatory care, the "virtual" ward and comprehensive followup of critical care patients as ways to address Ontario's daunting healthcare cost challenges.

"This is a great business model with a high rate of return to society," says Clark. Supporting it "can help make a huge difference."

Sylvia Chrominska

As chair of WCHF's campaign, Sylvia Chrominska hasn't let a shaky economy dampen her fundraising efforts. She takes inspiration from Lady Eaton, the wife of Toronto department store magnate Sir John Craig Eaton. "Lady Eaton took on fundraising in the depths of the Depression," she says. "I'm so honoured to have been asked to follow in her footsteps."

Lady Eaton helped raise $750,000 as honourary president of the WCH Building Fund between 1928 and 1935, and her contributions as honourary chair of the WCH Fund in the 1950s attracted $4.15 million to build a new south wing for the hospital.

"Hearing her story inspired me to the point where I said, 'This can be done,'" says Chrominska. "She was successful. We will persevere."

Thank You!

We sincerely appreciate the generosity of all individuals, corporations and foundations who have invested in our $555 million redevelopment project since April 2006. Cumulative gifts of $10,000 and more are listed below.

Association of Volunteers, Women's College Hospital
Charles Luther Burton Trust
Louise A. Fast
Serge Godin
Estate of Edwin Arthur Gomme
Estate of F. Marguerite Hill
Estate of Rauha 'Maude' Jack
The Honourable Margaret McCain
The Morrison Foundation
Nancy's Very Own Foundation
Scotiabank
Estate of Florence Winnifred Stacey
Women's College Health Research
Shoppers Drug Mart
Anonymous (1)

BMO Financial Group
Canadian Breast Cancer Foundation, Ontario Chapter
Canadian Imperial Bank of Commerce
Fran and Edmund Clark
Elizabeth D. Hamilton
RBC Foundation
TD Bank Financial Group
Anonymous (1)

The Bennett Family Foundation
Carter Layne Charitable Fund
Paul and Lynn Damp
Joan Eakin and Chris Hoffmann
The Friends of Women's College Hospital
Estate of Margaret Gerrard
Shirley Granovsky
The KPMG Foundation
Estate of Patricia Pepall
Estate of John Morrison Williamson

Gail R. Appel
Karen and Bill Barnett
Margaret G. Chambers
Sylvia D. Chrominska
Carol A. Cowan
The E & S Charitable Foundation
Eleanor & Burnett Thall Family Foundation
The Henry White Kinnear Foundation
The Linda Frum & Howard Sokolowski Charitable Foundation
The Linda Judith Reed Foundation
Nancy MacKellar
Colleen Moorehead and Daniel McCarthy
Estate of Gilbert Colin Murray
The Muzzo Family
Brian and Megan Porter
Len and Vivian Racioppo
Sheila Craig Waengler
Women's College Family Practice Associates
Anonymous (1)

The Bruce H. Mitchell Foundation
V. Ann Davis
George and Katherine Dembroski
Marilyn Emery
Ian and Patricia Fraser
Carol A. Gray
J.P. Bickell Foundation
Thomas Kierans and Mary Janigan
Mary Lou Maher and Lara Shewchuk
Gillian Riley and Chris Thompson
Eva Ryterband
Michelle Samson-Doel
Bill and Bronwen Thomas
Estate of Beatrice Catherine Titley
Women's College Hospital Department of Medicine
Sally C. Wright
Anonymous (2)

Amgen Canada Inc.
Michael J. Bratty
Brookfield Partners Foundation
George and Martha Butterfield
The Cadillac Fairview Corporation Limited
Debra Campbell and Barbara Lefcoe
Marlene Cepparo
Stan and Debra Couto
Jeanne DesBrisay and Donald Gilchrist
Mary Dodd and Daniel Dederer
Tania Martin and Stephen Dowd
Senator Art Eggleton and Camille Bacchus
Elizabeth Fanjoy
Pati Greenwood and Jeff Dowsett
Lorraine Greey and Stephen LeDrew
James H. Cummings Foundation Inc.
Mary Susanne Lamont
KPMG
The Langar Foundation
The Honourable Donald S. Macdonald and Mrs. Adrian Macdonald
Janet MacInnis
Karin McCaskill
June McLean
Joanne S. Mealia
The North Toronto Business & Professional Women's Club
Gerald O'Leary
Jocelyn Palm
N. Jane Pepino
Paula Rochon
James Ruderman
Estate of Ouilla Shirriff
Ann Southam
Mary Thomson
Thomson Reuters
Elaine Todres
Anonymous (1)

Jim Andersen
Peter Angelou
Claire Angus and Mark Caplan
Charalambos Antoniou
Carolyn Bennett
Jason L.S. Birnboim
Sue A. Carruthers
Tonie Lynne Chaltas
Curtis and Joanne Cole
Jillian Coles
Co-operators General Insurance Company
Catherine David Nolan
Anne M. Delicaet
Robert Dorrance and Gail Drummond
Frank and Joan Lew Charitable Trust
Margot Franssen
Frederick and Douglas Dickson Memorial Foundation
St. Clair and Margaret McCabe
Gillian Hawker
Dan Hill
In Memory of Lucie Helen Homburger
William Hughey
The Jarislowsky Foundation
Helen Kampfmuller
Melenda Lam
Mary Ann Lawrie
Estate of Laura Legge
Jodi Macpherson
Arlene and Ian Madell
Irene Martin
McCarthy Tetrault Foundation
Heather McPherson and John Sims
Julia Murphy
Jean Murray
Elisabeth M. Orsten
Coulter and Barbara Osborne
Jackie Schleifer Taylor and Paul D. M. Taylor
Lili Shalev Shawn
Dianne J. Sloan
Joan M. Sproat
George Stowe
Laura Thanasse
Anne Marie Thomas
Sidney H. Troister
Nadia Walter
John Watson
John Weir
Ryan Wiley and Brian Vandervecht
The William and Nona Heaslip Foundation
Susanne Williams
Estate of Jessie Elizabeth Wright
Anonymous (1)

The future of health care wouldn't be possible without the expertise, commitment and vision of Women's College Hospital Foundation's volunteers. Thank you to our Campaign Executive for leading us in the next chapter of our remarkable legacy. We are ever grateful to our campaign volunteers who are helping to share Women's College Hospital's story of innovation. And a heartfelt thank you to the Women's College Hospital Foundation Board of Directors – with your leadership, we're not just changing lives; we're changing the future of health care.

CAMPAIGN EXECUTIVE COMMITTEE
W. Edmund Clark, Honourary Chair
Sylvia D. Chrominska, Chair
Colleen Moorehead, Vice Chair
David R. Shaw, Vice Chair
Sue A. Carruthers, President & CEO, WCHF
Tonie L. Chaltas
Carol A. Cowan
Marilyn Emery, President & CEO, WCH
Jodi Macpherson
Joanne S. Mealia, Chair, Women's College Hospital Foundation
N. Jane Pepino, Chair, Women's College Hospital

CAMPAIGN LEADERS 2006-2013
Annette Addison
Robert L. Armstrong
Inka Bari
Leon Bloom
Libby Burnham
Marlene Cepparo
Susan Chinery
Judi Cohen
Paul Damp
Catherine David Nolan
V. Ann Davis
Julie Di Lorenzo
Stephen Dowd
Senator Art Eggleton
Louise A. Fast
Sue Fitzpatrick
Kim Forgues
Margot Franssen
Peter Giacomelli
Kathryn A. Giffen
Zabeen Hirji
Christopher S. L. Hoffmann
Valerie Hussey
Vicki Jones
Sushma Kilachand
Adrian Macdonald
Janet G. MacInnis
Mary Lou Maher
The Hon. Margaret McCain
Karin McCaskill
Julia Murphy
Mark O'Connell
H. Wanda O'Hagan
Judy Paradi
Elizabeth Paras Lye
Susan J. Perren
Marisa Piattelli
Susan Rabkin
Gillian Riley
Ron Riley
The Hon. Senator Nancy Ruth
Michelle Samson-Doel
Tracy C. Sandler
Karen Seward
Gillian Smith
Philip Smith
Victoria Sopik
Elaine M. Todres
Beverly Topping
John Webster
Laura William
Sally C. Wright

"I'm surrounded by incredible women and the fact that someone is focused on providing them with tailored, innovative healthcare is a pretty impressive thing. Women's College Hospital's ambulatory care model is a piece of the future."
– William Thomas, CEO, KPMG

"Women's Cardiac Program is a very important resource within our system. My mother died at age 64 during open-heart surgery. While she didn't live in Toronto, she would have appreciated the importance of an institution that brings a sharp focus and level of expertise and research to women's cardiac health."
– Debra Campbell

"Women's College Hospital's ambulatory care model makes good sense. They prevent medical problems, gather the expertise to deal with most issues and rely on other organizations when the need warrants. The reality is every hospital doesn't need inpatient beds. Recognizing that is the mark of a successful organization and Women's College Hospital is definitely a success story!" *– Elisabetta Bigsby*

"WCH is leading the way in healthcare innovation and women's health research. We are proud to support this work and invest in the health of women."
– The Linda Frum & Howard Sokolowski Charitable Foundation

WCHF BOARD OF DIRECTORS
Joanne S. Mealia, Chair
Sue Carruthers, President & CEO, WCHF
Tonie Chaltas
Arlene Dickinson
Stephen Dowd
Marilyn Emery, President & CEO, WCH
Christopher S. L. Hoffmann
Christopher Knight
Blair Levinsky
Nancy MacKellar
Patricia McGee
Colleen Moorehead
Marisa Piattelli
Dan Rees
Gillian Riley
Maryam Sanati
John Semple
Ryan Wiley
Sally Wright

WCHF ADVISORY COUNCIL
Carol A. Cowan, Chair
The Hon. Dr. Carolyn Bennett
The Hon. Elinor Caplan
The Hon. Margaret McCain
The Hon. Senator Nancy Ruth
The Hon. George Smitherman
Patricia Campbell
Sylvia Chrominska
Louise Fast
Maureen Kempston Darkes
Ann Kerwin
Mary Susanne Lamont
Janet MacInnis
Wanda O'Hagan
Jocelyn Palm
Susan Perren
Len Racioppo
Gail Regan
Jim Ruderman
Elaine Todres
Beverly Topping

Every effort has been made to ensure the accuracy and completeness of these lists. Please contact foundation@wchospital.ca regarding any omissions or corrections.

WCHF
WOMEN'S COLLEGE HOSPITAL FOUNDATION
Health care for women | REVOLUTIONIZED