

## GOODLIFE FITNESS GIVES CARDIAC REHAB A BOOST

Physical activity plays a critical role when patients are living with heart disease.

“People who exercise have a much higher chance of successful recovery and improved long-term outcomes than those who don’t,” says Dr. Paul Oh, Medical Director of UHN’s Cardiovascular Prevention and Rehabilitation Program and GoodLife Fitness Chair in Cardiovascular Rehabilitation and Prevention.

To help aid Peter Munk Cardiac Centre

patients in their recovery, GoodLife Fitness recently donated more than \$330,000 in fitness equipment to Toronto Western Hospital and Toronto Rehab’s Rumsey Centre (adding to an earlier donation worth \$143,000). These two locations provide rehab services to more than 2,500 patients each year. The new treadmills, exercise bikes and elliptical machines will help cardiac patients make physical activity a part of their recovery regime.

In 2012, GoodLife donated \$5-million to the centre’s Cardiovascular Prevention and Rehabilitation Program, with the goal of creating the best possible cardiac rehab program and supporting further research in this field. ■



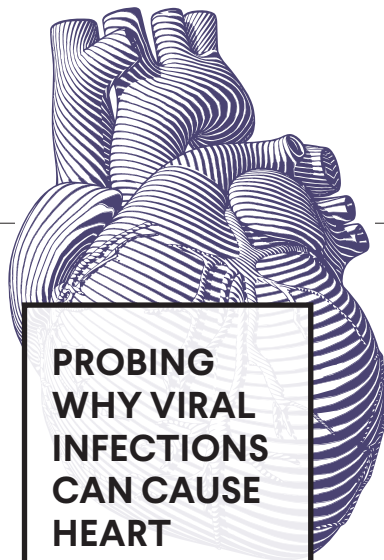
## PROBING WHY VIRAL INFECTIONS CAN CAUSE HEART FAILURE

Heart failure is commonly caused by heart attacks, but did you know that viral infections can lead to the condition too?

Even a harmless common cold virus can do damage. While most colds clear up in a few weeks, in some people they persist and cause risky infections in other organs. Dr. Slava Epelman, a clinician-scientist with the Peter Munk Cardiac Centre and the Loretta Rogers Chair in Immunobiotechnology at the Ted Rogers Centre for Heart Research, is examining which specific types of immune cells actually help prevent an infection from wreaking havoc on the heart.

The findings so far? Some cardiac immune cells generate antiviral T cells, which prevent long-term damage. The absence of these cells not only suppresses the anti-virus response, but can also lead to heart damage that weakens the organ’s ability to pump.

The results may eventually lead to new understanding about why only some people who contract viral infections of the heart go on to develop heart failure. ■



All stories written by Kira Vermond

## PETER MUNK CARDIAC CENTRE DOCTORS CELEBRATED WITH AWARDS

World-renowned cardiac surgeon **Dr. Tirone David** has been bestowed the Honorary Fellowship of the Royal College of Surgeons of Edinburgh. It’s the highest accolade granted by the college, one of the oldest of its kind in the world.

The honour is well-deserved. Since moving to Toronto in 1975, Dr. David has performed more than 15,000 open heart

surgeries, published more than 350

scientific papers and demonstrated complex surgical procedures around the world. (Read more about the life and career of Dr. David on page 29.)



**Dr. John Byrne**, a vascular surgeon at the Peter Munk Cardiac Centre, is the 21st Wylie Scholar. The Wylie Scholar Program awards one outstanding surgeon-scientist annually in North America. Dr. Barry Rubin, Medical Director and Chair of the Peter Munk Cardiac Centre, was the first Canadian to win this award; Dr. Byrne is the second.

Dr. Byrne’s research will study how abdominal aortic aneurysms develop and become inflamed, which could improve how physicians predict and treat those at high risk of a fatal rupture.

For more than 40 years, **Dr. Wayne Johnston** has trained generations of physicians and saved countless lives. Yet when he received a call from Canada’s Governor-General’s office earlier this year, he was surprised to learn he would be receiving one of the country’s highest civilian honours: becoming a recipient of the Order of Canada.

“This is an honour that goes beyond the medical community and speaks to one’s impact as a Canadian citizen,” says Dr. Johnston, Medical Director of the Vascular Lab at the Peter Munk Cardiac Centre.

According to the Order of Canada website, Dr. Johnston receives his honour “for his foundational leadership as a surgeon, researcher and educator in the field of vascular surgery in Canada.” ■



## APP HELPS PATIENTS MANAGE SYMPTOMS FROM HOME

After spending time in a hospital for heart failure, patients may have concerns about their condition between their six-month follow-up visits. They wonder: Is that heart flutter dangerous or benign? Is feeling dizzy a symptom of worsening cardiovascular disease or simply due to skipping breakfast? Many Canadians may head back to the hospital’s emergency room, just in case.

But a new app called Medly is changing how heart failure patients at the Peter Munk Cardiac Centre manage their symptoms. Developed at University Health Network, Medly can also help patients keep in contact with their health teams without leaving their homes.

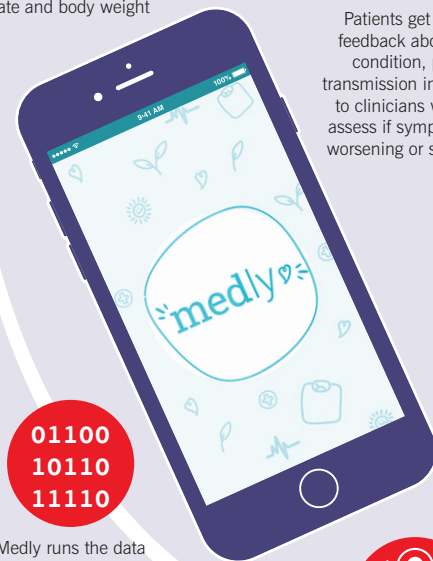
### HERE’S HOW IT WORKS:



Patients record their physical measurements, like blood pressure, heart rate and body weight



Patients get instant feedback about their condition, plus a transmission in real time to clinicians who can assess if symptoms are worsening or stabilizing



01100  
10110  
11110

Medly runs the data through a clinically-validated algorithm



The app means patients can check in from anywhere – even from remote locations in Ontario, where they don’t have rapid access to health care

Infographic by Trevor Johnston

## NORTHERN EXPOSURE

*Thunder Bay hospital and the Peter Munk Cardiac Centre partner in innovative program: one program, two sites*

Not long ago, when people living in Thunder Bay and northwestern Ontario experienced cardiovascular problems requiring surgery, their lives were turned upside down – again and again.

Not only were they required to travel to southern Ontario for face time with a cardiovascular diagnostic team in Toronto, Hamilton or London, but preoperative testing required travelling south too. Then, of course, there was another gruelling trip for the surgery.

Multiple journeys not only created a financial burden, but they placed undue stress on patients and families.

But now that’s changing, because of an innovative program in partnership with the Peter Munk

Cardiac Centre.

“Our motto is, ‘one program, two sites,’” explains Helen Storey, the Thunder Bay Nurse Co-ordinator at the Peter Munk Cardiac Centre. “We’re committed to providing the same level of care regardless of where the patient lives.”

The “one program, two sites” program helps northwestern patients receive care closer to home, says Ms. Storey. There are two Peter Munk Cardiac Centre-trained vascular surgeons currently working at the Thunder Bay Regional Health Sciences Centre. On the cardiovascular side, two perfusionists – healthcare professionals who use the cardiopulmonary bypass machine during cardiac surgery – are now training at Toronto General Hospital, so

they’ll be ready to head north soon.

What’s more, four cardiovascular surgeons from the Peter Munk Cardiac Centre are already on rotation to travel to Thunder Bay and handle 12 clinics per year. The surgeons see patients preoperatively and then follow up with them in the months after their Toronto surgeries.

Because of this pioneering partnership between medical institutions, more people in Thunder Bay are getting cardiovascular care at home. Medical professionals like Ms. Storey, a 35-year nursing veteran, help to bridge the two communities by offering attention and support.

“Nobody is getting lost in the shuffle,” says Ms. Storey. ■

“We’re committed to providing the same type and level of care regardless of where the patient lives.”

**Helen Storey,**  
Thunder Bay Nurse Co-ordinator at  
the Peter Munk Cardiac Centre