# **News @ SRI**

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**Dr. Kullervo Hynynen**, director of physical sciences and lead of CeRIGT, talked about the benefits of the centre, including for youth. "It also means we can catch the attention of the best trainees and young people, so that we can prepare another generation to do what we do." He presented an award in honour of the occasion, naming Sharon Yeung as recipient of the Focused Ultrasound Research Project Award of Excellence.

After the ceremony, the Governor General and his wife Mrs. Sharon Johnston, along with Patry, were whisked away on a whirlwind tour of some of the labs of CeRIGT, with media trailing close behind.

In the neurointervention centre, Their Excellencies tried their feet at the walking track, which **Dr. Sandra Black**, director of SRI's Brain Sciences Research Program, and colleagues are using to understand normative patterns of gait, and to help people relearn how to walk after stroke.

One floor up, Their Excellencies were treated to a demonstration of the device development lab's waterjet cutter in all its spritzing glory. This machine can cut any substance, and is used to make parts for medical devices at SRI. His Excellency pressed the start button to launch the machine, and received an aluminum SRI token in return. Down the hall, **Dr. David Andrews**, director of biological sciences at SRI, then demonstrated the Opera system, an automated high-content screening microscope that can take 100,000 pictures a day without anyone being there. Andrews is using the system in his work on cell death, but it is available to all scientists at SRI.

A mere five minutes later, **Dr. Charles Cunningham**, a researcher in physical sciences, and colleague **Dr. William Dominguez-Viqueira**, were showing Their Excellencies how to assemble a catheter they've invented to help cardiologists see inside blocked blood vessels of the heart while the patient is in a magnetic resonance scanner. His Excellency called it "impressive."

Crowning the tour was a visit to a tissue culture room in the lab of **Dr. Juan Carlos Zúñiga-Pflücker**, senior scientist in biological sciences, who spoke about his research on using T cells toward regenerating a devastated immune system.

As Their Excellencies and Patry left, the other invited guests, hailing from industry, government, academia, research and philanthropia, poured into the space, after having enjoyed a reception anchored by a custom cake depicting CeRIGT in three dimensions.

More than 50 interactive activities were set up across 16 labs and facilities, for anyone game to try such larks as purifying



Dr. David Andrews speaks with Governor General David Johnston and his wife Sharon during the tour of the CeRIGT labs [Photo: Doug Nicholson]

a protein, using ultraviolet light to identify a contaminated clay steak, "diagnosing" disease using image-processing software, or pushing a catheter through a machine to measure its torque and resistance.

Although the activities were fun, they were not born of frivolity. They were designed to help people, namely those without PhDs in physics or biology, experience and understand the science of the centre. Even smashing pink and white carnations dipped and frozen in liquid nitrogen had an aim: to help those unacquainted with basic science principles understand why biologists cryopreserve cells.

The same activities were experienced by the afternoon attendees, staff from Sunnybrook and the wider community. To learn more about CeRIGT, including its research facilities, which are open to all at SRI, and opportunities for collaboration, visit **sunnybrook.ca/research/cerigt**.

# Heart Scientists Aim To Get Innovations to Patients Faster

Sunnybrook Research Institute (SRI) hosted the seventh annual Schulich Heart Program Research Day on November 19. Scientists, clinicians, research staff and students heard 16 talks from experts speaking about one of three themes: imaging and intervention; outcomes and electrophysiology; and commercialization and innovation.



#### Dr. Graham Wright, director of the

Schulich Heart Research Program, presided over the event and said that going forward there would be more of a focus on commercialization. In his concluding remarks, he told the audience that a seminar series on commercialization will soon be rolled out. "[Commercialization] is not apart from the process of translational research; it's a critical part of it—going beyond getting an idea published, and moving it toward clinical practice," Wright said. For the full story, visit **sunnybrook.ca/research**.

## Award Supports Anesthesia Research

The Langar Foundation awarded **Dr. Pamela Angle**, an associate scientist in evaluative clinical sciences, a grant worth \$60,000 over three years. She will conduct a multiphase study examining intracranial blood flow for diagnosis of postdural puncture headache (a complication of spinal and epidural anesthesia and lumbar puncture) using transcranial doppler flow velocity.

### **Collaboration With China Funded**

The Canadian Institutes of Health Research awarded **Dr. Burton Yang** a grant of \$225,000 over three years through the China-Canada Joint Health Research Initiative. Yang, a senior scientist in biological sciences, will investigate how miR-17 causes fatty liver and hypercholesterolemia (high levels of cholesterol), and the potential of developing agents for gene therapy to treat these diseases.