

# Bringing Research to LIFE

## In Brief

### Human Wrongs: Making Things Right

A public forum with keynote speaker David Matas, international human rights lawyer and 2010 Nobel Peace Prize nominee, will take place on Wednesday, March 31 at the University of Manitoba (Manitoba Room 210, University Centre) from 2:00 to 4:30 p.m.

Matas will discuss his recent human rights advocacy and present the case of China. A panel discussion with Professors Karen Busby (Law), Andrew Woolford (Arts) and Jessica Senehi (Peace and Conflict Studies) will follow. Their topics, respectively, are: *Acting Out In The Public Realm: Thinking About Sexuality And Religious Rights Conflicts; The United Nations Genocide Convention and Aboriginal Peoples in Canada: Defining and Experiencing Genocide; and The Role of Storytelling in Human Rights Work*. There will be an opportunity for questions and discussion following the keynote and panel presentations.

## Upcoming

### Presentation:

#### The Canada Council for the Arts – Killam Presentation

Wednesday, March 3, 2010

9:30 AM - 11:00 AM

Room 530 (MBA Room)

I.H. Asper School of Business

Fort Garry Campus

For more information contact Brent Deere at Brent\_Deere@umanitoba.ca

### Bringing Research to Life Speaker Series:

#### HIV Vaccines: The Frustrations and the Hope

Wednesday March 17, 2010

7:00 PM

Room 290

Education Building

FREE ADMISSION

For more information call 474-9020

## Budding Researchers on Your Mark...Get SET...Go!

U of M's annual SET Day gets high school students fired up about science and engineering

BY KATIE CHALMERS-BROOKS

Nearly 200 Manitoba high school students and their teachers got a firsthand glimpse at the power of research last week.

A handful of professors showed the teenagers the latest discoveries to come out of their labs and also provided a look into what research and technology is coming down the pike worldwide: from intelligent vehicles that sense and prepare for a collision to finding new sources of water on Mars.

Science, Engineering and Technology (SET) Day was held Feb. 19 on the Fort Garry Campus. The event is organized by the Natural Sciences and Engineering Research Council (NSERC) delegate and the Office of the Vice-President (Research), and sponsored by Manitoba Hydro, the Province of Manitoba, NSERC, and the Association of Professional Engineers and Geologists of Manitoba.

Participant Deanna Wolfe, who made the trek from her family farm in Rivers, Man., plans on earning her degree in medicine and one day doing health-related research like presenter Judy Anderson. The head of the department of biological sciences, Anderson shared with the aspiring scientists how she and her colleagues discovered a treatment for people with muscular dystrophy by exploring how nitric oxide activates satellite cells (found in the muscle).

Seventeen-year-old Wolfe was impressed. "It's hard to believe you can give somebody a drug and rebuild their muscle," she said. "It's pretty cool."

Dave Chomiak, provincial Minister of Innovation, Energy and Mines, earlier took to the podium to encourage the young participants to set lofty goals for themselves, noting they could eventually be the researchers who make a big difference. "The sky is the limit. What you can dream can happen. Don't let anyone tell you otherwise," Chomiak said. "Today, you have a wonderful opportunity. Take advantage of it."

Participants from 35 schools took part in the day-long event, now in its fourth year. Teacher Noah Joseph from Miles Macdonell Collegiate – who brought along four Grade 12 students – said this field trip differed from others since it was the students who requested to come, each of them having shown a special interest in science and engineering.

Joseph said he liked how SET Day presenters made learning about scientific research fun. "The speakers here have been really entertaining. Not just that, but they're speaking about interesting subjects and presenting



Photo by Katie Chalmers-Brooks

Students take hands-on approach at SET Day 2010.

really relevant information," said Joseph, who plans on returning next year. "It's important that (the students) see the possibilities of a future in science and engineering, and things they're passionate about."

Prof. Martin Scanlon and research technician Michael Stringer of the Department of Food Science showed students how bubble and foam technology play an important role in the production of beverages and foods like soufflés and ice cream.

But controlling bubbles, given their inherent instability, and creating foamy food systems is no easy feat, explained the energetic duo, who came armed with props for experiments and also threw aerated chocolate bars into the audience for trivia winners.

Dayle Sanders, 17, from Nellie McClung Collegiate in Manitou, Man., said Prof. Dean Kriellaars' presentation *Lifestyles of the Facebook Generation* was an eye-opener. Kriellaars shared his research findings, including work he's done about the surge in caloric intake of Grade 12 students the summer after graduation. Sanders was struck by the "false ideas our generation has of dieting and health."

Kriellaars said of calories: "Any input over output, stays put." He explained that the younger generation will have a shorter lifespan because of a surge in Type 2 diabetes. Eating healthy and staying in motion is key. "Disease is related to inactivity," he said, showing scans of deteriorating bones.

Assistant Prof. Trish Stadnyk also provided the students with the tools to live more responsibly – by getting them up to speed on the looming global water crisis. "By 2030, 50 per cent of the world population will feel water scarcity," she said. "Here in Manitoba, we'll start to feel the demands of overusing."

Engineer Jeannette Montufar pressed the fast forward button as well to give students a peek at what's to come in transportation technology – like vehicles with start-stop engines to reduce idling, and in-vehicle voice prompts alerting a driver that another motorist is running a red light.

"Technology will make things possible," Montufar said, "but it is only a tool – you still need your brain, innovation, and creativity to make it happen."

See back page for more photos of SET Day 2010.