

# Bringing Research to LIFE

## Upcoming Events

### Undergraduate Research Award

A new initiative of the VP (research and international) office will provide undergraduate students with an opportunity to experience research this summer at the U of M.

### Meet and Greet

An opportunity for students from the Fort Garry campus to connect with professors at the Bannatyne Campus.

**Wednesday, Mar. 7, 2012**  
**3:00 p.m. to 8:00 p.m.**

Brodie Atrium  
University of Manitoba

**Deadline to submit an application is Mar. 15, 2012**

For further information visit: [umanitoba.ca/experienceresearch](http://umanitoba.ca/experienceresearch).

## Café Scientifique

### Diabetes: is resistance futile?

**Tuesday, March 13, 2012**  
**at 7:00 p.m.**

McNally Robinson Booksellers  
1120 Grant Avenue

**FREE ADMISSION**  
**EVERYONE WELCOME**

To assist us in planning seating, RSVP to:  
(204) 474-9020

For more information, visit:  
[umanitoba.ca/research/cafe\\_scientifique.html](http://umanitoba.ca/research/cafe_scientifique.html)

## CSI: Wallace

### High school students take on forensic investigating

BY KATIE CHALMERS-BROOKS  
For The Bulletin

A group of high school students are standing over a mock crime scene in the basement of the Wallace Building. They're trying to figure out who killed geochemistry professor Dr. Andrey Bekker based on the physical evidence left behind: shell casings from the gun in question and mud from the culprit's shoes.

Before the morning is over, the aspiring forensic investigators will have collected and analyzed samples — scrutinizing the tiniest particles under a microscope and with X-ray — to determine which of the four suspects pulled the trigger.

The exercise is meant to give the students a taste of what geologists can do, which is not unlike the granular-level guesswork fictional investigators employ on popular TV shows CSI, NCIS and Bones. Sixteen-year-old Madison Chapel from Pinawa Secondary School plans on attending the U of M but is still looking for ideas about what to study.

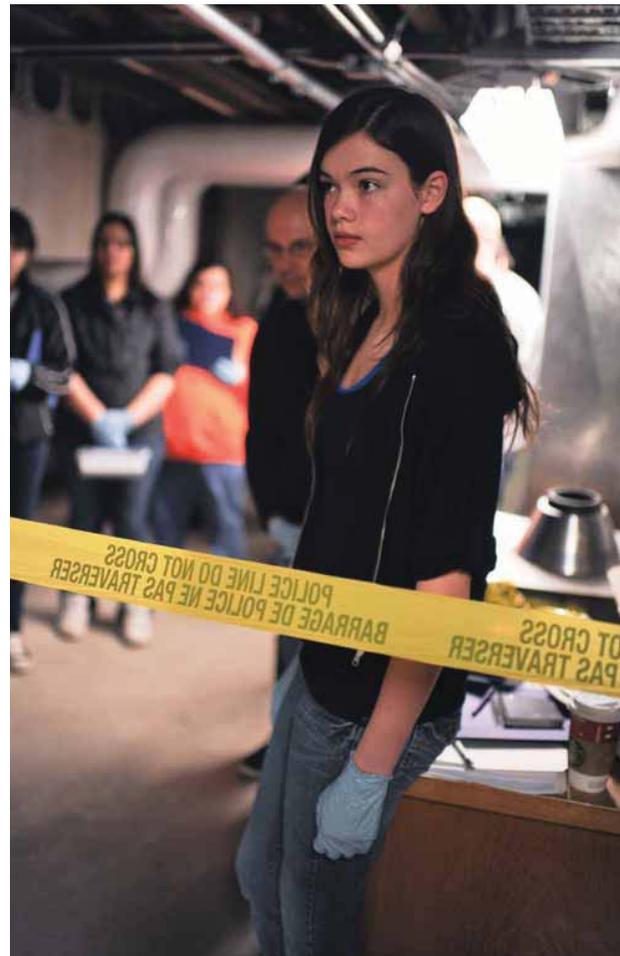
"I like how it's very precise work and the attention to detail," Chapel says while chopping up coarse bits of rock. "It's pretty cool."

She is one of roughly 150 students from Winnipeg and elsewhere in Manitoba who took part in Science Engineering and Technology (SET) Day held Feb. 24 on the Fort Garry campus. The sixth annual event aimed to show Grade 11 and 12 students what researchers do at the U of M.

The students spent half the day listening to presentations and, new this year, the remainder doing hands-on activities hosted by the following faculties: agricultural and food sciences; science; Clayton H. Riddell environment, earth and resources; engineering; and kinesiology and recreation management.

"It's a good opportunity to open up young people's mind to science," says Kristie Lester, lab coordinator for anatomy and physiology who led 'Hearts and Rec.' "And it's good for them to see how a university lab is run, using equipment they may not have access to in their high school."

She had participants dissect sheep hearts, and taught them how to test the



Photos by Mike Latschistaw

**Madison Chapel, from Pinawa Secondary School, assesses a mock crime scene during SET Day 2012.**

effects of exercise on their own heart rate, heart sounds, blood pressure and electrocardiogram results.

For Indira Mendoza, a Grade 10 student from Kildonan East Collegiate who wants to be a doctor, it is the first time she has held a heart in her hands. "It's really amazing," she says.

Meanwhile, in the Engineering building, professor Cyrus Shafai is teaching participants how to build an amplifier that measures the voltage generated from their arm muscle.

"I figured this would be a fun lab for them," Shafai says as participants arm wrestle each other while hooked up to electrodes.

The students also heard presentations from professors who

pressed the fast forward button and shared their vision of the future, three decades down the road. Human nutritional sciences professor James House spoke about foods we might be eating (including stem cell burgers); marketing professor Fang Wan shared her thoughts about how we'll shop; and biochemistry and medical genetics professor Geoff Hicks offered his predictions of how DNA sequencing will change healthcare.

Westwood Collegiate math teacher Art Penning says the researchers made science "really relevant."

"And they showed a real connection to the kids," he says.