

# Bringing Research to LIFE

## Upcoming Events

### Café Scientifique

#### NATURE AND NURTURE (NOT VERSUS): THE NEW SCIENCE OF EPIGENETICSM

Epigenetics steps in where mapping the human genome left off. Nature says we inherit our genetic make-up or DNA code from our parents. Many believe this code and the genes it represents set the 'program' for who we are and what health risks we might possess. Nurture (or epigenetics) says that this program can be 'hacked' by life experience, either increasing or decreasing health risks already in our DNA code. Join our experts in a discussion about whether we can control our health destinies by controlling what we eat, drink, breathe, and where we live.

#### Experts:

Dr. Jim Davie  
Dr. Kirk McManus  
Dr. Mojgan Rastegar

#### Moderator:

Dr. Peter Cattini

Jan. 28, 2013 – 7pm

McNally Robinson Booksellers  
1120 Grant Ave., Event Atrium

RSVP to:

Research\_Communications@  
umanitoba.ca or 204-474-6689

## Experience Research Undergraduate Research Award

### Researcher/Student Meet and Greet

If you might be interested in connecting with a professor in the Health Sciences from the Bannatyne Campus or want to learn about what those professors are doing, join us for this 'one stop shop' opportunity to meet, interview and make your decisions for the award application.

Jan. 9, 2013 – 1 to 7 pm  
MPR, University Centre

Refreshments will be served.

For more information, contact:

Lindsey Troschuk  
204-789-3493

## A gift for life

### How to get the most out of the holidays



Photo by Dan Gwozdz

School of Medical Rehabilitation professor Dean Kriellaars recently received his own gift, one that recognized his efforts to instigate change. He was named the 2012 Dr. and Mrs. Ralph Campbell Outreach Award, which goes to a University of Manitoba staff member who unquestionably demonstrates meritorious service in outreach activities.

#### BY KATIE CHALMERS-BROOKS For The Bulletin

Dean Kriellaars has a gift for everyone this holiday season: some advice on how to put your health first.

Being more festive doesn't have to mean upping your body fat, says the physical therapy professor, who travels across Canada educating health care professionals, coaches, trainers and teachers about healthy lifestyles. Kriellaars has some pointers to help stay – or get on – track while navigating the upcoming storm of parties and shopping trips.

**Be smart about what you put under the tree.** Parents who believe videogame consoles will get their kids moving since the devices come with games that involve dancing or bowling should think again. Research shows that despite good intentions, kids wind up spending more time playing the inactive not the active games. And the physical games become less so as players become more adept. Kriellaars attached heart rate monitors to his own kids to measure the physiological responses of the body and found that "the better you are at the game, the less activity you need because you learn how to cheat the controller." He says, "You can bowl with your wrist as opposed to bowling with a full bowling motion."

It's important to remember that it's not "technology that is making us lazy. It's our attitudes and choices that do,"

Kriellaars says. He lets his kids play video games, but only after they've had adequate exercise. Fitness guidelines recommend kids age five to 17 get 60 minutes of daily exercise at an intensity that makes them sweat and breathe heavier. Only 50 per cent of elementary school kids do so. And by the time they're in middle and high school, that percentage drops to less than 10. Kriellaars' research shows 29 per cent of Manitoba children are overweight or obese. But obesity is just one possible side-effect of being a couch potato. Physical inactivity negatively impacts the development of our brain, heart, bones and muscle. In fact there are over 40 different conditions linked to being sedentary.

**Plan to succeed.** Kriellaars knows it can be tricky to avoid indulging at parties when you don't want to come across as a party pooper. He suggests explaining your good intentions to the host ahead of time – either prior to the party or before a big slice of pie is handed your way. And if you want to up your chances of sticking to your game plan, avoid alcohol. "Or your willpower to not consume is gone," Kriellaars says.

**Don't wait until Jan. 2.** Now is the time to act to improve your health or you're setting yourself back. People can gain 10 pounds between Thanksgiving and the New Year. "I routinely see that," Kriellaars says. The sooner you

can "break up with bad behaviours" the better. These are behaviours that typically go back to our youth. One of Kriellaar's studies of teenage girls age 16 and 17 found that during a night out partying with their friends, drinking alcohol and eating fast food, they consumed an average of 3,500 calories, which translates into one pound of fat. To burn that amount with exercise, you would need to run a full marathon. "The penalty for food is really, really high. People don't realize that," says Kriellaars, noting that 20 intense minutes on the treadmill burns only about 150 calories, what you'd find in a small granola bar.

**Schedule in exercise time.** This is important for adults and kids. Go for a walk as a family after dinner; it's not high intensity but it keeps everyone away from the fridge and cuts back on snacking.

Few kids have the freedom to explore and play today as children did in past generations. Structured activity is the norm and requires greater effort to find out what kids are into. Kriellaars suggests parents have their children bring a friend and try a bunch of different classes – from kickboxing to climbing to yoga – and see what they like best. In doing so, they are giving themselves a gift. "An activity present," Kriellaars says. "Something they can keep for the rest of their lives."