



UBC's
Paralympic
torchbearers



PAGE 8

UBC 2010 Games

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2010 Media Centre

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PHOTO: ADAM ROOTMAN

Paralympics a force for change

CANADIANS SAY the Games are changing attitudes about disabilities. BY HILARY THOMSON PAGE 4

Sledge hockey athlete (above).

Small (mining) is beautiful — Fair trade approach levels the field



PHOTO: MARTIN DEE

Prof. Marcello Veiga has completed a six-year study on mining with the United Nations.

BY ERIN ROSE HANDY

"SUSTAINABLE MINING" may sound like an oxymoron, but considering that all humanity depends on resources that must be either grown or mined, the concept is not self-contradictory, rather, it's imperative.

Professor Marcello Veiga of UBC's Norman B. Keevil Institute of Mining Engineering is promoting a new sustainable philosophy in mining based upon findings from a six-year United Nations study.

Working for three decades as a metallurgical engineer and environmental geochemist for mining

and consulting companies in more than 25 countries, Veiga reached a pivotal point in his life and career when he visited Serra Pelada, a mine 270 miles south of the Amazon River in Brazil, in the 1980s and saw the activity of artisanal miners, individuals who mine or pan for gold using their own resources.

"I used to have the typical industry mentality that artisanal miners were criminals, stealing the gold and polluting the environment," says Veiga. "But when I saw thousands of dirt-covered labourers climbing up rickety ladders with rock-filled sacks

continued on page 8

Celebrate Research Week
March 5 - 14

Marcello Veiga's research will be profiled during UBC's annual celebration of discovery and dialogue. www.celebrateresearch.ubc.ca

More: pages 8 and 9



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IN THE NEWS
Highlights of UBC media coverage in February 2010. COMPILED BY HEATHER AMOS

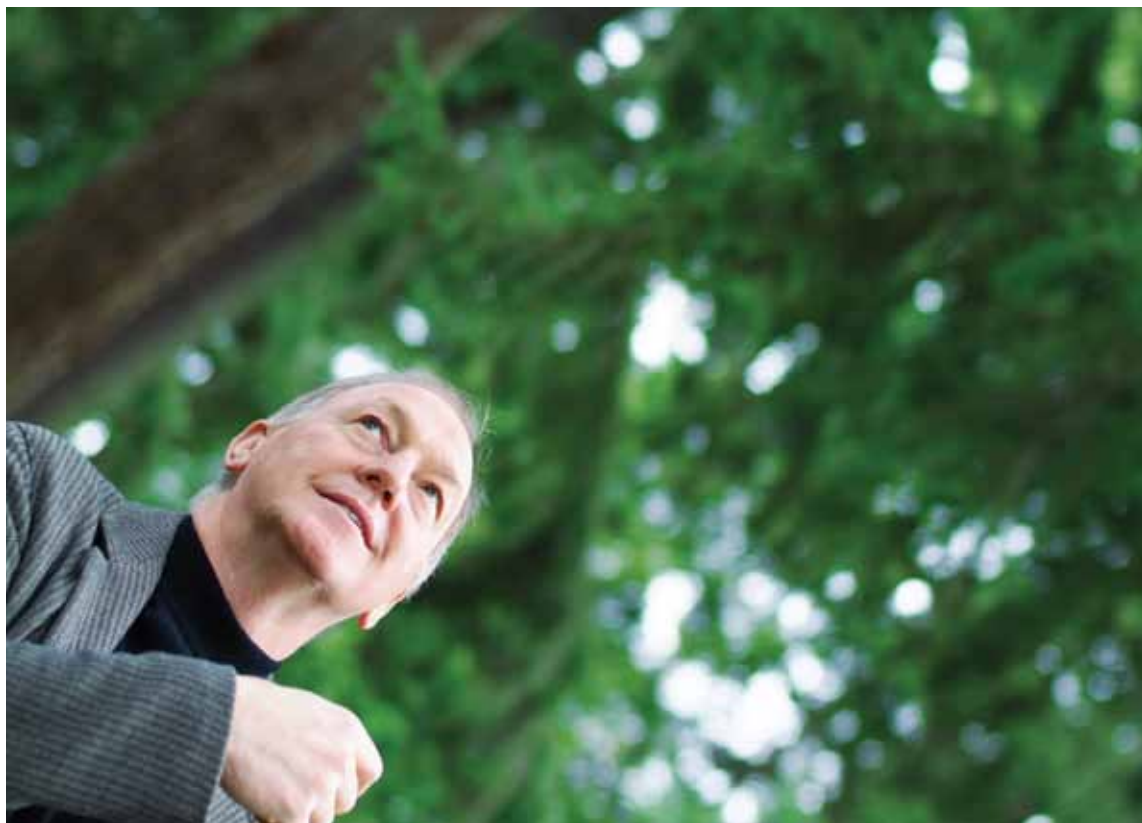


PHOTO: DARIN DUECK

UBC meteorologist Douw Steyn explained the rain on Cypress Mountain to Winter Olympics media.

Canada balances protests and civil liberties

The *New York Times*, the *Guardian*, the *Seattle Times*, the *Boston Globe*, *CBC News*, the *New York Daily News*, the *Globe and Mail*, the *Vancouver Sun* and others, reported on Olympic protests.

Chris Shaw, professor of ophthalmology at UBC and one of the most prominent anti-Olympic activists who participated in the protests, said: "We think everything about the Games as they currently exist is wrong."

Reporters also spoke to **Joe Cutbirth**, a journalism professor, **Michael Byers**, a civil libertarian and political science professor, and a handful of UBC students in their stories.

Debate about Olympic legacies

Reuters, *Agence France Presse* and the *Globe and Mail* reported on the legacies and cost of the Winter Olympics.

Rob VanWynsberghe, the lead researcher of the Olympic Games Impact study, **James Brander**, professor at the Sauder School of Business, and **Tsur Somerville**, a

professor in real-estate finance, discussed their Olympic research in the reports.

Brander said the infrastructure projects are the most important legacies of the Games and the only "bad" project, that could lose money, is the athlete's village. The *BBC*, *CTV* and the *Vancouver Sun* also reported versions of this story.

Vancouver 2010 to Be Warmest Winter Olympics Yet

January was warmer than usual for Vancouver and there were concerns about what this meant for the 2010 Winter Games, *National Geographic* and *CBS News* reported this month.

UBC atmospheric scientist **William Hsieh** discussed the warm weather and El Niño, while UBC meteorologist **Douw Steyn** explained why there had been more rain than snow at Cypress Mountain.

"The temperatures have been higher than normal, so what falls does not fall as snow," said Steyn.

Riefenstahl footage in video causes stir

UBC historian **Richard Menkis** discussed VANOC's use of

footage from a 1936 Nazi financed film of the Berlin Olympics for an official video for their Olympic torch relay, in the *New York Times* and the *Globe and Mail*.

The *Globe and Mail* also spoke to **Ira Nadel**, a UBC English professor, about the controversy. "I was very surprised to see that it appeared in their formal, official welcome to the Olympic relay promo," he said.

Canadian IOC member Dick Pound calls doped athletes 'sociopathic cheaters'

The *Canadian Press* reported on UBC's first Sport and Society lecture about sport, ethics and technology. The lectures are part of a program of dialogues coinciding with the Winter Games.

Dick Pound spoke at the first lecture along with Olympian **Beckie Scott** and UBC's **Jim Rupert**, a professor in Human Kinetics.

Sid Katz was featured in a report about the Sport and Society lectures in the *Vancouver Courier*, and the *Province* and the *Georgia Straight* reported on the second lecture featuring **Stephen Lewis** and **Johann Koss**. ■

UBC REPORTS

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UBC Okanagan researcher wants to turn waste into renewable energy

BY JODY JACOB

A PROFESSOR OF ENGINEERING at UBC Okanagan is working with municipalities, farms, factories and mills to identify effective ways to turn their organic waste into renewable energy — methane — and organic fertilizer.

Cigdem Eskicioglu's research is examining ways to improve energy production from agricultural and industrial waste, while also diverting waste from landfills and reducing pathogens, odour and greenhouse gas emissions.

"In Canada, our waste is not utilized as a resource," says Eskicioglu. "If we can make use of the waste in innovative ways to extract energy and recycle it within our communities, this will take Canada a step closer to achieving its

disintegrate — the highly complex waste sludges from a pulp mill in Quesnel, B.C.

"By disintegrating biowaste into a smaller, simpler form of organics, we can enhance the biodegradation rate, and therefore increase the amount of methane produced," says Eskicioglu.

"If this study reveals high methane potential, then the pulp mill may want to build their own digester, which would give them the ability to use their waste to create energy that could potentially be used in their facility and end up saving them money, while at the same time reducing their carbon footprint."

Eskicioglu is also talking to the City of Kelowna in the B.C. Interior about a more sustainable disposal method for biosolids from the community's wastewater

Eskicioglu's research group develops advanced anaerobic digestion processes for turning organic residues — manure, food processing waste, bioethanol plant stillage, sewage sludge, even the organic portions of garbage — into energy sources and nutrient-rich fertilizer.

Kyoto targets for greenhouse gas reduction."

Anaerobic digestion — a treatment that breaks down organic waste in the absence of oxygen — produces a biogas comprised primarily of methane and carbon dioxide that can be used to generate electricity and heat. Eskicioglu's research group develops advanced anaerobic digestion processes for turning organic residues — manure, food processing waste, bioethanol plant stillage, sewage sludge, even the organic portions of garbage — into energy sources and nutrient-rich fertilizer.

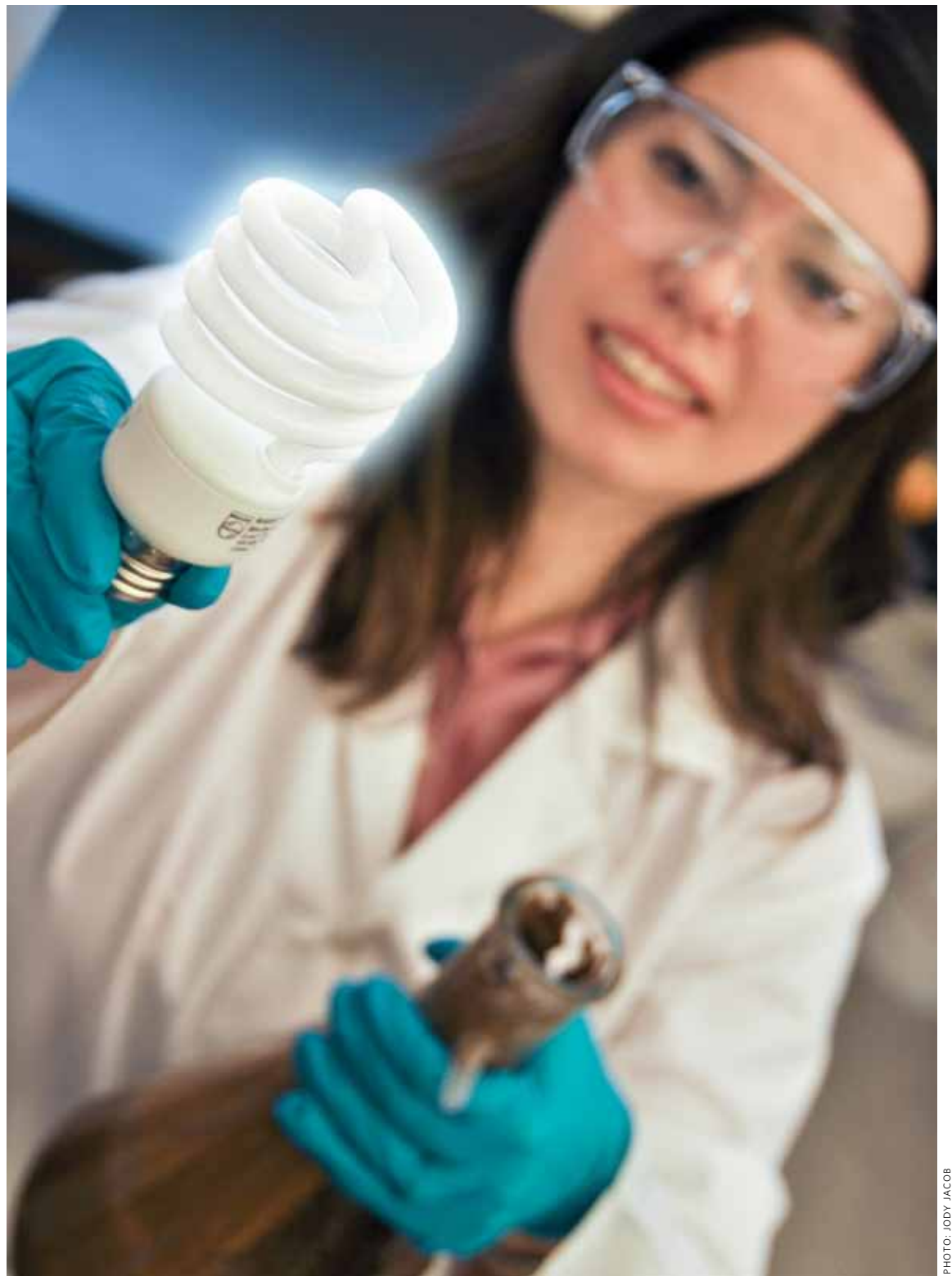
In partnership with the University of Ottawa, Eskicioglu is examining techniques to break down — or

treatment plant.

"Currently, the municipal biosolids are being mixed with woodchips to produce compost, but composting has a large carbon footprint as well as some other environmental issues such as odour," says Eskicioglu.

Eskicioglu hopes to test the concept of co-digesting the biosolids anaerobically with other organic waste available in the region. If the process produces significant methane, the gas could be captured and used to generate electricity, while the now-digested biosolids could be used as organic-rich fertilizer.

Eskicioglu's research is supported by the Natural Science and Engineering Research Council



Assist. Prof. Cigdem Eskicioglu is finding ways to extract energy from waste and recycle it.

PHOTO: JODY JACOB

of Canada. She recently received an additional \$319,962 from the Canada Foundation for Innovation, the B.C. Knowledge Development Fund, equipment vendors, and UBC to establish her new state-of-the-art laboratory.

New equipment will enhance

the lab's ability to disintegrate biowaste using advanced microwave, ultrasonic and mechanical techniques, says Eskicioglu.

"This new infrastructure will help me identify the organic waste suitable for anaerobic digestion in the Okanagan," she says. "If

samples indicate a high potential of methane, we can look at ways of building full-scale digesters to convert this waste into resources and become a more sustainable community." ■

Hero of "Hotel Rwanda" a keynote speaker during International Week — March 15-19

PAUL RUSESABAGINA, a Rwandan internationally honoured for saving more than 1,200 refugees during the 1994 Rwandan genocide, will be the keynote speaker at UBC's International Week (I.Week) March 15-19. The film based on his story, *Hotel Rwanda*, will be screened at S.U.B. on March 16 at 7 p.m.

Breaking Borders is the theme of this year's I.Week which offers a series of international learning and cultural events for the UBC community and provides students with progressive levels of leadership opportunities.

A Hutu, Rusesabagina used his influence and connections as a Kigali hotel manager to shelter members of both Tutsi and Hutu tribes from slaughter. He will tell his story at a free event at the Chan Centre for the Performing Arts on March 17 from noon to 1:30 p.m.

Other I.Week attractions include a Food Fair at the Lhada Student Centre March 15 from 5-7 p.m. and a Volunteer Fair will be jointly hosted with UBC's Alma Mater Society March 15 and 16 at S.U.B. from 11 a.m. to 2 p.m.

This year's I.Week showcases international activities organized by faculties and campus units. A Faculty of Applied Science presentation, "Engineering to make a Difference" highlights engineering research projects with global impact. There will also be a showcase of work by Faculty of Arts Undergraduate Research Award recipients; a workshop on the Ethics of International Engagement and Service Learning, offered by the College of Health Disciplines; and events exploring student engagement with developing countries, offered by UBC's Go Global.

The week will end with a Grand Performance by UBC

students, staff and members of the community at the S.U.B. Ballroom on March 19 at 7 p.m. The event includes musical performances ranging from a guitar/ukulele duet to an acapella singing group and a band called Roman Foot Soldiers that comprises six UBC Indonesian students from various faculties. Dance performances include US hula dancers, Indian dancers and UBC Dance Club.

I. Week attracts more than 3,000 participants every year. More information may be found at www.iweek.ubc.ca

Paul Rusesabagina's presentation has been made possible through a collaboration of I.Week organizers at International Student Development and the International Relations Students Association. Additional support has been provided by the AMS Innovative Project Fund.

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Paralympics a force for change

BY HILARY THOMSON

THE 2010 WINTER GAMES get the credit for prompting public initiatives that help people with disabilities, according to almost 50 per cent of Canadians surveyed in a recent UBC Olympic Games Impact (OGI) study. The survey and study have been conducted under the auspices of the new UBC Centre for Sport and Sustainability.

"In the last decade Games organizing committees have also put together Paralympics Games and this model may have helped raise awareness surrounding disability issues," says Prof. Rob VanWynsberghe, who leads

believed both the Winter Olympic and Paralympic Games increased their knowledge of sports for people with disabilities and their overall acceptance of people with disabilities. Among employers, about one-quarter said their willingness to hire people with disabilities has gone up due to the Games.

"This is very positive because employment rates among people with disabilities are much lower than among the general population, and attitudes of employers constitute a major barrier to employment of people with disabilities," says Lyn Jongbloed, associate professor of Occupational Science and

from Fine Arts to Forestry. It is measuring the impact of Olympic and Paralympic Games over time through a consistent and comparable reporting system. Olympic organizing committees around the world are now required to work with independent research organizations to conduct OGI studies.

Results from the pre-Games research will be compared to post-Games data, and VanWynsberghe estimates the last OGI report will be finalized by December 2010. The research team will make recommendations to VANOC based on their findings, and team members hopes future organizing committees

Among employers, about one-quarter said their willingness to hire people with disabilities has gone up due to the Games.

the UBC OGI Project Group.

For the Sydney Australia Paralympic Games in 2000, the International Paralympic Committee and the International Olympic Committee agreed to a set of shared principles and a further agreement in 2001 protected the organization of the Paralympic Games and secured the practice of "one bid, one city."

The online survey of more than 1,600 Canadians was conducted in December 2009 to measure changes in public and personal awareness and attitudes since the Olympic/Paralympic Games were awarded to Vancouver/Whistler in 2003. The survey is part of the first-ever comprehensive OGI study which VANOC has commissioned to evaluate and compare various pre-and post-Games impacts.

Results showed 41-50 per cent of respondents felt the Games triggered additional accessibility of buildings, sidewalks and public spaces as well as specialized programs and training for athletes with disabilities and government support for disabled individuals.

Also, 32-40 per cent of respondents

Occupational Therapy. Not involved in the OGI research, she comments from her perspective as a therapist who has worked with spinal cord injury and stroke patients and as a researcher interested in the interrelationship between disability and the social, economic and political environment.

The OGI survey found B.C. residents were the least likely to report that the Games had positive personal or public impacts, which researchers attribute to higher levels of opposition to the Games within B.C. compared to the rest of Canada. "Despite the lower response in B.C., we know from other Games that as the competition draws nearer, people's attitudes get more positive as they decide to 'put their best face forward,'" says VanWynsberghe, a sociologist with a focus on sustainability research and a member of the School of Human Kinetics and Dept. of Educational Studies in the Faculty of Education.

The eight-person OGI Project Group includes undergraduates, graduates, post-doctoral fellows and staff in disciplines ranging

will incorporate the results into criteria used to select host cities.

"Now that we know it's possible to measure sustainability for such large events, we want to create a sustainability index for future host countries and sustainability standards for all future Olympic and Paralympic Games," says VanWynsberghe. Social, environmental and economic pre-Games impacts were reported in December 2009 and highlights can be found at <http://www.publicaffairs.ubc.ca/2009/12/04/pre-games-impact-study-for-2010-olympic-winter-games-finds-modest-benefits/>.

The UBC Centre for Sports and Sustainability is a legacy project of the 2010 Olympic and Paralympic Games. Building on UBC's research expertise in sustainability, social development and health, the centre will study the opportunities and impacts of sport and mega sporting events. For more information, visit: <http://www.publicaffairs.ubc.ca/2010/01/07/games-inspire-new-research-centre-for-sport/>. ■



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Paralympic sledge hockey will be played at UBC's Doug Mitchell Thunderbird Sports Centre.



Artist Patricia Richardson Logie has donated a collection of First Nations portraits to UBC Library.

PHOTOS: COURTESY OF PATRICIA RICHARDSON LOGIE

A B.C. painter's portraits of pride

BY GLENN DREXHAGE

A HANDSOME COLLECTION of First Nations portraits that was recently donated to UBC Library by B.C. artist Patricia Richardson Logie is being unveiled on UBC's Vancouver campus this month.

The show will offer art aficionados a chance to view a project that took nearly a decade to complete. "I've waited for years to have them appreciated," says Logie, who lives on the Sunshine Coast with her husband Bob. "It's a thrill for me to see them at UBC, as you can well imagine."

"Patricia brought her skill, her medium and her careful thought to a genre of painting that had often memorialized the most privileged members of society," says Linc Kesler, Director of the First Nations House of Learning and Senior Advisor to UBC President Stephen Toope on Aboriginal Affairs. "She used it to bring a kind of visibility and attention to Aboriginal people who were her contemporaries, but often not yet

at the points of public visibility that some had in their later roles."

During the 1970s, Richardson Logie taught art at UBC Continuing Studies. Indeed, Logie — who was born in Ontario in 1925 — has spent much of her life pursuing artistic endeavors. She studied in London,

England, and her works have been displayed and featured in collections in Canada, the US, the UK and Japan.

She began painting *Chronicles of Pride* in 1982, after becoming frustrated with First Nations imagery that she viewed as clichéd. The project was completed in 1991. "I had to get it done, and it had to be

the way I saw it," Richardson Logie says. "I think it really stems from my father's attitude — that everybody is worthwhile."

Some of the collection's first paintings include portraits of Yvonne Dunlop and Lyle Wilson, who were both students in the

Native Indian Teacher Education Program at UBC. Other subjects include Verna Kirkness, the first Director of UBC's First Nations House of Learning; actress Margo Kane, who is the 2009/10 Aboriginal Distinguished Artist in Residence in UBC's Department of Theatre and Film; Judge Alfred Scow, the first

Aboriginal to graduate from UBC Law; singer, dancer and storyteller Dorothy Francis; Senator and UBC alumnus Leonard Marchand; Guujaaw, President of the Haida Nation; and Nisga'a Chief James Gosnell.

Last November, UBC Library held

a standing-room only event at the Irving K. Barber Learning Centre to celebrate the donation and honour Richardson Logie and her family. University Librarian Ingrid Parent also used the occasion to announce the Richardson Logie Chronicles of Pride Fund, which will help promote and maintain the collection (several

portraits were on display at the event).

"We're grateful for Patricia's donation to UBC Library," Parent says. "Her portraits of Aboriginal role models and community leaders are a wonderful contribution to the University and to our cultural conversations."

Chronicles of Pride is also accompanied by a book (*Chronicles of Pride: A Journey of Discovery*, published by Detselig Enterprises Ltd.), a teacher resource guide and a video that contains profiles of the portrait subjects. These resources are available at various UBC Library branches, including Xwi7xwa Library, the only Aboriginal branch of a university library in Canada.

Most of the collection will be on display from March 8 to March 26 at the Learning Centre Gallery, located on level two of the Learning Centre and adjacent to the library's circulation desk. The entire collection will also be featured on a screen accompanying the exhibit. ■

"We're grateful for Patricia's donation to UBC Library," Parent says. "Her portraits of Aboriginal role models and community leaders are a wonderful contribution to the University and to our cultural conversations."

The danger of Paralympic boosting

BY HILARY THOMSON

AFTER YEARS OF HARD WORK, Dr. Andrei Krassioukov has finally earned admission to the Athletes Village at the 2010 Vancouver Paralympic Games.

But Krassioukov isn't a competitor — he's an internationally recognized expert in spinal cord injury (SCI) and leader of the only research team to be granted access to the Vancouver Athletes Village during the Games.

Krassioukov and research team members will investigate the controversial practice of "boosting." Practiced by some individuals with spinal cord injury (SCI), boosting involves intentionally raising blood pressure to stimulate the body's energy and endurance. Non-athletes with SCI may use boosting to feel more energetic and alert. Paralympic athletes use boosting to win — it can improve performance by up to 15 per cent. Stressing techniques to stimulate parts of the body below the level of the spinal cord injury, and to produce a spike in blood pressure, can range from wearing pressure stockings, to compressing the testicles by sitting on a handful of ball bearings, or blocking a urinary catheter to distend the bladder.

Injury to the spinal cord disrupts control of heart and blood vessels that are normally regulated by the autonomic nervous system, part of the nervous system that provides non-voluntary control to various organs. This disruption — which varies in severity between



Pressure stockings and sitting on ball bearings number among the dangerous practises, says Dr. Andrei Krassioukov.

individuals — means the body cannot properly replenish energy consumed through exercise leading to a drop in peripheral blood flow, sweating, shortness of breath and faintness. This creates significant disadvantages during competition,

leading some athletes to use boosting as a drastic measure to correct functions lost through injury.

Besides creating an unfair competitive advantage, boosting is a dangerous practice. The sudden surge in blood pressure typically seen during boosting is known as

between individuals according to the level and severity of their SCI. Currently, athletes with higher-level injury and significant autonomic function impairment compete directly with individuals with lesser impairment. Athletes have used boosting to close the gap.

developed and tested. He hopes research advances will ultimately eliminate the need for boosting but accepts that individuals with SCI are always looking for ways to improve their functioning.

"I am amazed by my patients' incredible tenacity to achieve what

Practiced by some individuals with spinal cord injury (SCI), boosting involves intentionally raising blood pressure to stimulate the body's energy and endurance.

autonomic dysreflexia and can lead to stroke, heart attack or death. But the International Paralympics Committee (IPC) 1994 ban on boosting has been difficult to enforce.

A physician-scientist at Vancouver Coastal Health's GF Strong Rehabilitation Centre, Krassioukov has studied autonomic functioning in SCI patients for more than 30 years and has collected data from paralympic athletes headed for competition since 2006. During the last five years he has urged the IPC to go beyond the ban to address how differences in autonomic function affect elite athlete performance.

Krassioukov believes that adding autonomic functioning to the athlete classification system that currently measures only motor and sensory functioning will more evenly match competitors and reduce motivation to boost.

"Being allowed to conduct research in the Athletes' Village is an exciting milestone for me," says Krassioukov, an associate professor in UBC's Dept. of Medicine and co-director of the International Collaboration on Repair Discoveries (ICORD), part of Vancouver Coastal Health Research Institute (VCHRI). "It suggests the IPC will consider how differences in autonomic function create inequities in performance and fuel the risky practice of boosting."

Autonomic functioning varies

During the 2010 Paralympic Winter Games, expected to draw 650 athletes from more than 40 countries, he plans to test 50 curling and sledge hockey athletes with spinal cord injury in a Cardiovascular Health Education Clinic in the Village and at ICORD. Volunteers will participate in

they want to do in life — how they not only survive but fully engage in their adventure with a new body."

Krassioukov's work is supported by the Heart and Stroke Foundation of Canada; the Disability Health Research Network; the Craig H. Neilsen Foundation; and the Rick Hansen Foundation.



a 90-minute assessment of autonomic functioning, complete a questionnaire and receive educational brochures about autonomic dysreflexia and risks of boosting.

Krassioukov expects it will be at least four years before his team will provide the IPC with possible guidelines on testing of autonomic functioning in paralympic athletes. Additional data from other paralympic sports must be collected and analyzed and recommendations

VCHRI is the research body of Vancouver Coastal Health Authority, which includes BC's largest academic and teaching health sciences centres: VGH, UBC Hospital, and GF Strong Rehabilitation Centre. In academic partnership with the University of British Columbia, VCHRI brings innovation and discovery to patient care, advancing healthier lives in healthy communities across British Columbia, Canada, and beyond. www.vchri.ca. ■

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WANEK HORN-MILLER – former Olympic athlete, activist, speaker and television personality.
SHARON AND SHIRLEY FIRTH are the first aboriginal women to be represented at the Olympic Games.
VALERIE JEROME was a member of Canada's 1960 Olympic and 1966 Commonwealth Games teams.

MAR 10 8PM 

SPORT AND CHALLENGE
Is Anything Possible?

RICK HANSEN – CC, O.B.C., President and CEO of the Rick Hansen Foundation.
DR. BRUCE MCMANUS – Professor, Department of Pathology and Laboratory Medicine, at UBC.
PAT JARVIS – former Paralympic athlete and member of the International Paralympic Committee.

MAR 13 8PM 

SPORT, LEGACY AND SUSTAINABILITY
Is it Worth It?

DR. BRUCE KIDD – former Olympic athlete and Professor and Dean of the Faculty of Physical Education at the University of Toronto.
DR. JAMES TANSEY is a UBC expert on sustainability, green business, carbon trading and corporate social responsibility. He is tracking the carbon footprint of 2010 Winter Games.
DEREK WYATT – elected Member of Parliament in the U.K. and Chair of the All Party Parliamentary London 2012 Olympic and Paralympic Group.

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Perfectionism and youth suicide

BY HILARY THOMSON

THE HEADLINES ARE SHOCKING, confusing and all too familiar. A teen commits suicide without warning, ending a life full of accomplishment and promise — a seemingly perfect life. But UBC Psychology Prof. Paul Hewitt suggests that a seemingly perfect life could signal the risk of teen suicide.

“Most people don’t understand the toxicity of perfectionism,” he says. “Perfectionists put enormous pressure on themselves, making their lives far from perfect.”

Hewitt and Gordon Flett of York University are conducting a variety of studies to examine the relationship between the need to appear perfect (perfectionistic self-presentation) and suicide, including studies that include youth. They are also testing a model they developed, called the Social Disconnection Model (SDM) that links social disconnection with perfectionism and suicidal thoughts. One study looks specifically at the social disconnection markers of bullying and feelings of social helplessness or never being able to fit in.

“Suicide rates are increasing among youth,” says Hewitt, a registered clinical psychologist. “We urgently need to know more about the mechanisms of perfectionism, how it starts and how it develops. If we are to provide better interventions and targeted treatments, we don’t need more evidence that perfectionism is a problem, we need to know why it’s a problem.”

Fuelled by fears of rejection and abandonment as well as a strong need to belong, be approved of and cared for, individuals with perfectionism do whatever is required to get the acceptance they need. This difficult path is characterized by severe and routine self-criticism, retreat and disconnection from the world as well as frustration, anger, and depression.

Hewitt has been intrigued with perfectionism from the time he was an undergrad at the University of Manitoba in Winnipeg. He has conducted extensive research on perfectionism and its relationship to problems such as suicide, depression, personality disorders, as well as relationship, achievement, and health problems. He also conducts research on the treatment of perfectionism and



Psychology professor Paul Hewitt says a seemingly perfect life could signal the risk of teen suicide.

provides assessment and treatment for individuals with perfectionism problems and trains clinicians in the treatment of perfectionistic behaviour.

A recent study involved working with children and adolescents aged 8–20, to complete a variety of questionnaires and scales that measure: perfectionistic

says Hewitt.

Perfectionist children believe if they are perfect others will like them and won’t abandon them — they can fit in. However, just the opposite happens. The child is seen to be someone outside the norm of the group and therefore a perfect target for bullying. Worsening

the goal of perfection is not tested. For example, an individual may enter a race without having trained sufficiently. When they don’t win first place, they can blame the “failure” on the lack of training rather than their own imperfection.

People who need to appear perfect

aversion behaviours. Their sense of disconnection and alienation from others, the most feared state of the perfectionist, makes them vulnerable to suicide.

“I have worked with extreme perfectionists for many years and I am still surprised by the depth of their pain and the level of their desire to die,” says Hewitt.

Perfectionism is a basic personality style and treatment is intensive and long-term, made uniquely difficult because patients do not want to disclose any problems.

“Perfectionists try to be the perfect patient,” says Hewitt. “Our goal is to help them see and accept who they are under the perfect façade.”

More information about perfectionism may be found on the FAQ section of Hewitt’s website at: <http://hewittlab.psych.ubc.ca/> ■

Striving for excellence can motivate individuals. Striving for perfection can hinder individuals.

behaviours, need to appear perfect, experiences of bullying, social hopelessness and suicidal thoughts and actions. Participants were involved in psychiatric outpatient counseling for anxiety and depression at B.C. Children’s Hospital.

“The perfectionism and suicide connection among teens is especially relevant because of adolescents’ inherent self-consciousness and concerns about social relationships,”

the situation is the fact that teens are known to hide their negative feelings, making them especially vulnerable to depression and suicide.

There is a real difference between needing to be perfect and needing to be excellent, Hewitt emphasizes. Striving for excellence can motivate individuals. Striving for perfection can hinder individuals. It can lead to procrastination to avoid possible failure or unconscious self-handicapping so

are often difficult to be around. They can be hostile, rigid thinkers, and exquisitely sensitive to criticism, earning rejection by others. The phenomenon is called a neurotic paradox — the individual creates the very outcome they so desperately want to avoid.

Hewitt has worked with artists, entertainers, physicians, elite athletes and others who can become paralyzed by their perfectionism and suffer from writers’ block and other

Where you live may affect your weight

BY LORRAINE CHAN

UBC NUTRITION RESEARCHER Jennifer Black has found that B.C. has the lowest rates of obesity in Canada.

“It appears that men in Vancouver have the lowest obesity rates in the nation. For women the lowest obesity rates are in Richmond,” says Black, an assistant professor who joined the Faculty of Land and Food Systems (LFS) this January.

Black conducted a literature review on the distribution of food and obesity in Canada, analyzing data from 28 published studies. She discovered that higher rates of obesity are reported in Canada’s eastern provinces, rural areas and northern Aboriginal communities than those for Western Canada.

Her next step, says Black, is to look at the larger contextual issues for obesity in Canada. “These factors include family income, the availability

of healthy and affordable food and opportunities to be physically active.”

Black is now teaming up with UBC sociologists Rich Carpiano and Nathan Lauster to take a closer look at access to healthy food in B.C. A registered dietitian, Black specializes in social determinants of health and dietary choice. Prior to joining UBC, she worked in low income neighbourhoods of New York City as a nutritionist for the Institute for Urban Family Health. This work inspired her to investigate the large differences in obesity rates among New York City’s neighborhoods.

“It’s not randomly distributed,” says Black. She found that even though obesity rose between 2003 and 2007, New Yorkers were less likely to be obese if they lived in wealthier areas and neighborhoods well served by food stores and fitness amenities. Her findings were recently published in the American Journal of Epidemiology.

A native Torontonian, Black says it was an eye opener to visit neighbourhoods where affordable fruit and vegetables were hard to come by. “It was really tough for many of my clients to make healthy choices, even those with advanced diabetes and heart disease who were very motivated.”

All in all, she says the reasons that influence people’s nutrition and health are myriad and complex. “Not only are we looking at socio-economic issues, but also a person’s attitudes and behaviours about eating, cooking and body weight, and how people are influenced by where they live.”

To probe the Canadian food psyche, Black will be mining the rich data of the Canadian Community Health Survey (CCHS). Black, along with LFS Nutrition Prof. Susan Barr, is developing UBC know-how and research infrastructure to work on CCHS, the first set of comprehensive



Jennifer Black explores the myriad and complex reasons that shape our health and eating habits.

Canadian nutrition data generated in more than 35 years.

“The information the survey generated is enormously detailed, for example, what people ate on weekdays versus what they ate during weekends.”

Released in 2004, the CCHS surveyed more than 35,000 respondents across Canada about their dietary intake, vitamin and mineral supplement use, health risks and behaviours. ■

What's on your mind? UBC celebrates research

BY HILARY THOMSON

ASPIRING ATHLETES can get insider information on maximizing performance at a free March 10 public presentation called **Peak Performance: The Path to Exceptional Athletic Achievement**, as part of UBC's Celebrate Research Week March 5-13.

"Celebrate Research showcases the outstanding work of UBC investigators and stimulates public discussion and learning about issues of the day," says John Hepburn, Vice President Research and International. "Our research accomplishments have consistently placed us among the world's 40 top universities and we're excited to share that expertise with the communities that support us."

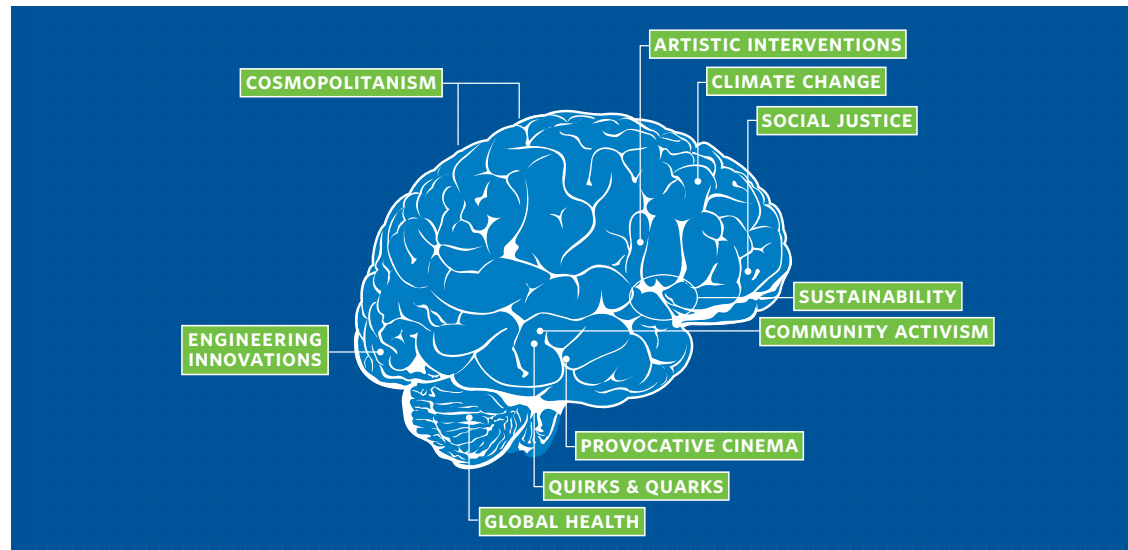
Celebrate Research Week, co-ordinated by the Office of Community Affairs, offers a week of public events that highlight investigation and discovery. Most events are free and take place on UBC campuses and at public venues.

The Peak Performance event is co-moderated by André Picard, *The Globe and Mail* public health reporter, and takes place at SFU Harbour Centre, 12:30-5:30 p.m.

Picard's co-moderator is Prof. Edward Coyle from the University of Texas, Austin, who will outline emerging science surrounding elite performance. Coyle helped train Lance Armstrong following the cyclist's cancer treatments.

"The event is an unusual exploration of the science underpinning athletic superiority and will give new insights as to how the fabric of heart, lungs, muscle, sinew and spirit intersect when medals are won," says Dr. Bruce McManus, director of the Providence Heart + Lung Institute at St. Paul's Hospital which is hosting the event. McManus is also a professor in UBC's Dept. of Pathology and Laboratory Medicine.

Presenters include Dr. Tony Galea, who has worked with golfer Tiger Woods, who will discuss how to speed repair following injury. Gene-doping will



The Peak Performance event will give new insights as to how the fabric of heart, lungs, muscle, sinew and spirit intersect when medals are won, says Dr. Bruce McManus.

be examined by Assoc. Prof. Jim Rupert of UBC's School of Human Kinetics and the biology of performance and role of genetics in elite performance will be explored by UBC Human Kinetics Prof. Darren Warburton and Dr. Andrew Jones from the University of Exeter in the U.K.

Other presentations look at sports psychology and ethical issues in sport, such as how far can we push athletes, both amateur and professional, to perform.

Celebrate Research Week also offers a Café Scientifique that looks at marijuana

and teens, funded by the Canadian Institutes of Health Research. Journalist Ian Mulgrew, author of *BC Bud Inc.: Inside Canada's Marijuana Industry*, hosts informal research presentations, outlines of local initiatives and public discussion at the March 11 Vancouver Café. CBC Radio's Marion Barschel hosts the March 9 Café in Kelowna.

On March 5 and 6, the **Crossroads Conference** sees students from secondary schools across Metro Vancouver meeting with social, environmental and economic leaders

to explore how they can bring about positive change to Vancouver.

UBC OKANAGAN

At UBC Okanagan keynote speaker Ujjayant Chakravorty, Canada Research Chair in Natural Resource Economics, and a panel of regional experts will explore how to "walk the talk" on sustainability. The March 8 event takes place at 7 p.m. at the Kelowna Community Theatre.

March 8-12 lunchtime feature presentations range from genocide

research to examining benevolence and the desire to make a difference. There will also be a March 11, 7 p.m. screening and panel discussion at the Fipke Centre of **65_RedRoses**, an acclaimed documentary about a young woman with cystic fibrosis who awaits a lung transplant.

AWARDS GALA

A highlight of the week, the Celebrate Research Awards Reception at the Vancouver campus, is co-hosted by the Office of the Vice President Research and International. The reception honours the accomplishments of UBC's award-winning faculty researchers as well as mentors of undergraduate research. At UBC Okanagan, there will be also an evening of special presentations, film vignettes and awards featuring Researcher of the Year and Public Education through Media.

MULTIDISCIPLINARY UNDERGRADUATE RESEARCH CONFERENCE

The annual Multidisciplinary Undergraduate Research Conference (MURC) will celebrate the contributions of undergraduate research at UBC. The March 6 conference provides an opportunity for students in any discipline to present their research. Graduate students judge presentations and prizes will be awarded at the end of the conference day at a celebratory gala. This year marks the first time that 13 undergrad investigators from UBC Okanagan will come to Vancouver to present their research at MURC.

UBC consistently ranks among the top three Canadian universities by research funding. In 2008-09, UBC earned more than \$475 million in research funding from all sources. UBC is also among North America's leading universities in technology transfer and many of the more than 130 spin-off companies are based in B.C.

For more information on Celebrate Research, visit www.celebrateresearch.ubc.ca and <http://web.ubc.ca/okanagan/celebrateresearch/welcome.html> ■

SMALL MINING *continued from cover*

on their backs, some carrying bodies, I realized these were desperate people — 80,000 poor and desperate people."

The images drove Veiga to join academia where he felt he could best make a difference in our world. A professor at UBC since 1997, his work focuses extensively on environmental and social issues related to mining and mining communities.

An expert in areas related to artisanal miners, Veiga took leave from UBC in 2002 to work as Chief Technical Advisor of the United Nations

Industrial Development Organization (UNIDO)'s Global Mercury Project in Vienna, which was created to find ways of promoting best practices and preventing pollution caused by artisanal gold miners who use mercury in the mining process. Mercury amalgamates with gold in the ore, and after the two have combined, the mercury is often burned off in an open burner, releasing the vapor into the environment.

According to UNIDO estimates, 1,000 tonnes of the highly toxic substance are released into the environment each

year by artisanal miners.

In this role with UNIDO, Veiga implemented environmental and health assessments of mercury pollution in Asia, Africa and South America. He also introduced procedures to reduce mercury emissions and develop local fabrication of equipment to reduce exposure of miners to mercury vapors and to increase gold recovery.

"This work was very enlightening, and we developed a keen understanding of the sustainability issues related to the environment and human beings," says

Veiga. "But I realized, to make true change, to truly help the people and the earth, there needs to be a profit incentive. And the profit incentive needs to come from a fundamental shift in the mining industry from investing in speculative opportunities to investing in

production of mineral rather than speculation of a motherlode. He proposes that small companies be connected with artisanal miners so that in exchange for a sure mineral deposit, the companies teach artisanal miners best practices, infuse wealth

"When I saw thousands of dirt-covered labourers climbing up rickety ladders with rock-filled sacks on their backs . . . I realized these were desperate people."



Marcello Veiga wants to re-focus mining on sustainable production.

more sustainable production."

Veiga points to the Bre-X scandal as an example of why and how the industry must change. In 1995 Canadian company Bre-X announced that significant amounts of gold had been discovered in Busang, Indonesia. The announcement catapulted the previous penny-stock to a peak of CAD \$286.50 per share. Bre-X Minerals collapsed in 1997 after the gold samples were found to be a fraud.

Veiga promotes what he calls "Small (mining) is beautiful" — a sustainable approach to mining based upon the

into the rural communities and ensure fair trade. As only one in 5,000 mineral deposits found worldwide becomes a mine owned by a large mining company, there are many opportunities to responsibly mine small deposits. This has more social benefits for locals and less environmental footprint.

In association with UBC's Celebrate Research Week March 5-13, Prof. Veiga will present a free public lecture on this topic at UBC Robson Square Monday March 8 at 6:30 p.m. For more information, visit: www.apsc.ubc.ca/celebrateresearch ■

Four ways to combat climate change

BY PROF. ROBERT EVANS

Robert L. Evans is a professor in the Clean Energy Research Centre at UBC. His book, "Fueling Our Future: an Introduction to Sustainable Energy," published by Cambridge University Press, was short-listed for the 2008 Donner Prize.

ON A PER CAPITA BASIS Canada is one of the most energy-intensive countries on the planet, and nowhere is there a more urgent need for action on climate change than here. For too long, however, the debate has been primarily about the impact of climate change, and about emissions targets, and not on how the increasingly ambitious targets might actually be met.

The time has come for action, and to realize that in the broadest terms there are only four ways to reduce our over-reliance on fossil fuels. Simply put, these are; choosing to use less energy, using energy more efficiently, capturing and storing carbon dioxide, and switching from fossil fuels to other primary sources of energy.

The first of these approaches relies on individual action, while the remaining three responses require a more technological approach. Choosing to use less energy just means that we can reduce our contribution to climate change by walking or cycling rather than driving, and by turning down the thermostat or putting on a sweater. This requires changing the attitudes and habits of a large majority of the population, which is a daunting task.

There is a precedent for action, however, with lessons to be learned from the recycling revolution that has taken place in the last two or three decades. While 30 years ago it was only a minority of people who took the trouble to recycle their newspapers, cans and bottles, now it is a mainstream activity. If we care about the planet we should be able to follow this example, and each decide to do something to reduce our daily use of energy. This revolution, like the blue-box revolution, is likely to be led by young people setting an example for the rest of us.

The second approach to reducing fossil fuel consumption, and therefore carbon dioxide emissions, will rely on a dedicated effort to increase energy efficiency. There is not much new technology required for this, since

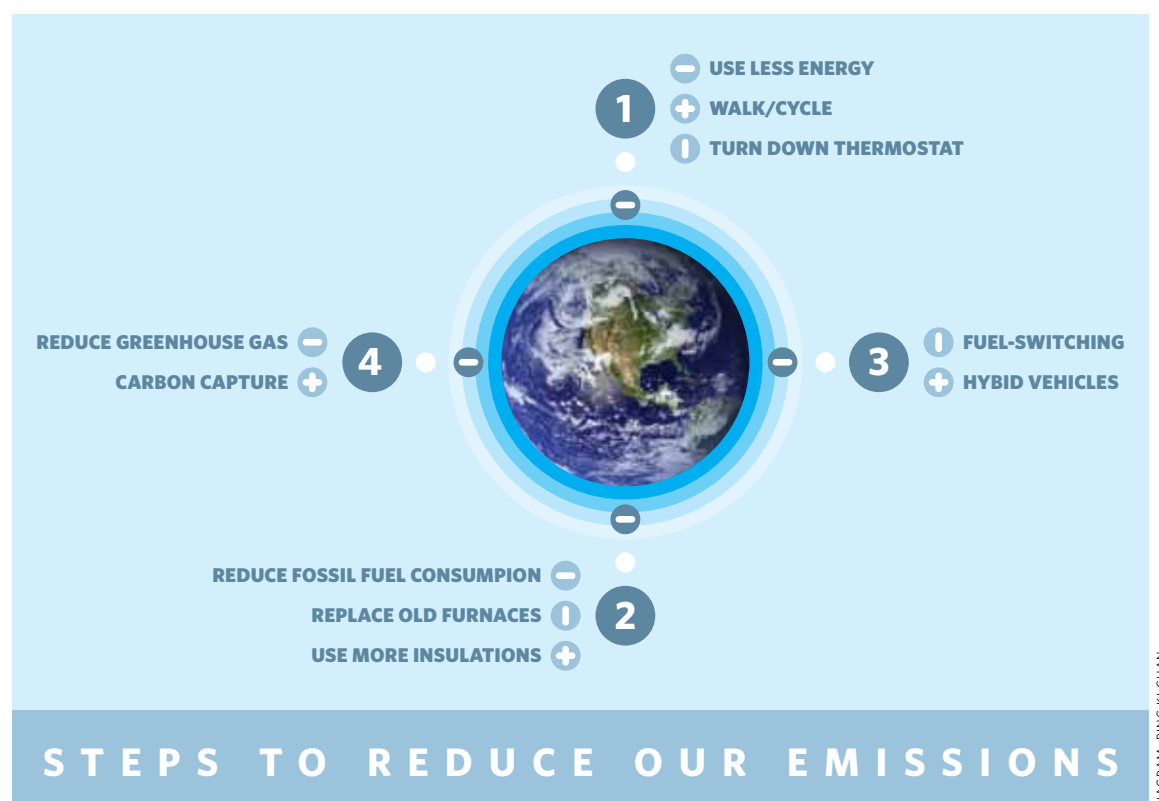
most techniques, such as increasing building insulation, installing double-glazed windows, or replacing old furnaces with high-efficiency units, are well established.

There are often financial barriers, however, since there may be a considerable capital cost, while savings accrue over time. Institutional barriers can also be important, with probably the best example being the landlord-tenant relationship in which a tenant pays heating costs while the landlord pays the capital cost for any improvements to the heating equipment. In this case there is no incentive for the landlord to make improvements while the tenants are powerless to take any action to increase their efficiency of energy use and reduce their costs. In many cases government action through the provision of low-cost loans, or regulations to ensure that landlords make their buildings as energy efficient as possible, is urgently needed.

The third approach to reducing greenhouse gas emissions is carbon capture and storage, or CCS for short. When a fossil fuel is burned all of the carbon is released in the form of carbon dioxide, the principal anthropogenic (human

generated) greenhouse gas. If this gas could be captured and stored underground, then fossil fuel use would no longer be a threat to the climate. Techniques to capture and store carbon dioxide are being studied and several test sites have been established, including one in Saskatchewan being sponsored by the International Energy Agency.

The ability to capture carbon dioxide is well-established, but tends to be expensive because of the need to process very large volumes of gas. In principle, underground storage is also a viable technology, although much more work needs to be done to identify suitable sites and to determine if the carbon dioxide really can be stored underground



permanently and safely.

Although CCS may be suitable for reducing carbon dioxide emissions from stationary processes, such as a coal-fired power plant, there is no practical way to capture and store gases emitted from moving vehicles, ships and aircraft. The transport

With the current generation of hybrid vehicles now on the road, all of the energy to drive the vehicle still comes from the gasoline in the fuel tank. The next step in the evolution of these vehicles will see the introduction of "plug-in hybrid vehicles" with an increased battery

the electricity must be generated from non-fossil fuel sources. In B.C., where some 90 per cent of our electricity is from renewable sources, a dramatic reduction in greenhouse gas emissions could be achieved. This will also require B.C. Hydro to expand generation capacity to support the switch from gasoline to electricity. Fortunately, B.C. has many options for increased use of renewable energy to generate electricity, including both large-scale and smaller "run of the river" hydroelectric plants, as well as the use of wind and tidal power, geothermal energy, and bio-fuels.

These four approaches to reducing greenhouse gas emissions provide a powerful arsenal in the coming battle to combat climate change. We need to ensure that our politicians and BC Hydro planners are fully prepared for the challenges that lie ahead, and encourage them to develop policies and plans to pursue all four approaches aggressively.

In association with UBC's Celebrate Research Week, Prof. Evans will be presenting a free public lecture on this topic at UBC Robson Square on Tuesday, March 9 at 6:30 p.m. For more information, visit: www.apsc.ubc.ca/celebrateresearch. ■

For too long, however, the debate has been primarily about the impact of climate change, and about emissions targets, and not on how the increasingly ambitious targets might actually be met.

sector, which is the main consumer of oil, must then look for other techniques to reduce oil use and therefore greenhouse gas emissions.

Finally, then, the fourth option to combat climate change will rely on new technology aimed at "fuel-switching" away from fossil fuels, which now supply about 80 per cent of global energy needs, to more sustainable options. For example, one promising way to reduce the emission of greenhouse gases from automobiles is to switch to electricity as the main energy "carrier" rather than using gasoline. Hybrid vehicles, which have both a battery and a conventional internal combustion engine, are beginning to show how this might be done.

capacity and the ability to re-charge the battery from an electrical outlet when the vehicle is not in use. The engine will be smaller, and will only be used when the battery needs to be re-charged, or to assist with acceleration or hill-climbing. These vehicles will likely be very popular with commuters since a "fill-up" with electricity will cost the equivalent of about 30 cents per litre of gasoline due to the low cost of electricity and the much higher efficiency of the electric drive-train.

Widespread adoption of plug-in hybrids will then shift the burden of providing energy for transportation from fossil fuels to the electricity system. Of course for this technique to be effective,

UBC's sustainable sports centre

COURTESY OF UBC'S CAMPUS SUSTAINABILITY OFFICE

AS A PARALYMPIC COMPETITION VENUE, the UBC Doug Mitchell Thunderbird Sports Centre will host 20 Paralympic sledge hockey games. The complex was built in the 1960s and is a fitting venue, considering its rich history. Canada's National Hockey Program was born at the arena in 1963, in preparation for the Innsbruck 1964 Olympic Winter games in Austria.

The arena was redeveloped from 2006 to 2008 to rejuvenate and expand the facility in time for the Olympics, and to reflect the shared environmental, social and economic

sustainability goals. Instead of demolishing the whole building, UBC and VANOC kept one ice rink that was still in good shape and upgraded its outdated mechanical and electrical systems.

The new centre has a highly-efficient floor plan inside, and the building site takes advantage of existing road and pedestrian networks and is situated close to public transportation. The centre's designers used the Leadership in Energy and Environmental Design (LEED®) green building rating system as a framework to address sustainability across all environmental performance categories. The facility achieved a LEED Silver performance standard,

meeting VANOC's progressive requirements for sustainability.

In addition to hockey and ice skating programs, the centre accommodates more than 40,000 users monthly through public programs, leagues, special events, concerts and fitness-related programs, to make the most of the facility.

Sports facilities require a significant amount of energy to operate, especially ice rinks and pools. UBC and VANOC found ways to convert the centre into a world-class winter sports facility and meet the building's ice maintenance, ventilation, de-humidification and lighting needs in sustainable ways.

"Typically those are challenges, but

we took them as positives, because we felt there was a lot of opportunity to improve the standards and also be leaders in the development of some of these facilities," says Kavie Toor, Associate Director of Facilities and Business Development for UBC Athletics and Recreation.

One of the highlights of the redeveloped arena is the ECO CHILL® energy system. This new technology recycles all the energy used to maintain the ice surface back into the arena's heating system, making use of waste energy that would normally be flushed out of the building.

The arena also uses electric ice resurfacers, which keep energy use to a minimum and don't impact

air quality. Often referred to as a Zamboni®, an ice resurfacer is typically fuelled by propane. "Not only is there energy wasted when they're running sometimes three times an hour if you're running multiple rinks, but there's also a considerable amount of emissions that go into the playing area and into the stands," Toor says.

To remove moist air from the building and dressing rooms, the arena uses an efficient de-humidifying system that runs about eight to 10 hours a day, compared to the centre's old system that ran 24 hours a day. The building also uses energy-efficient lighting with sensors and control systems that turn lights off when a space is unoccupied. ■



UBC Faculty of Medicine

> Through knowledge, creating health.

Associate Dean, MD Undergraduate Program, Curriculum and Vancouver Fraser Medical Program (VFMP)

The Faculty of Medicine at The University of British Columbia invites applications and nominations for the position of Associate Dean, MD Undergraduate Program, Curriculum and VFMP. The position is open to all applicants, with an anticipated start date of July 1, 2010 or upon a date to be mutually agreed. Remuneration will be commensurate with experience and qualifications, subject to final budgetary approval.

The incumbent will report to the Executive Associate Dean, Education and through the Executive Associate Dean to the Dean of Medicine, and is accountable to the Faculty Executive Committee, the Committee of Department Heads and School Directors, and the Faculty. Under the direction of the Executive Associate Dean, the Associate Dean will provide operational leadership for MD undergraduate curriculum & VFMP. Responsibilities include: overall management of the MD undergraduate curriculum throughout its four (4) year duration; leadership of the planning and implementation of the Lower Mainland component of the MD Undergraduate Program expansion; contribute to the planning and implementation of expansion at the VFMP site; create an environment where support and recognition is provided for faculty and staff in the VFMP; liaison with Department and Division Heads on the contribution of their disciplines and individual members to the Undergraduate medical program; implementation of modified and new program components; plan and implement innovations to foster efficiency and sustainability of the program; annual budget development, as requested by the Executive Associate Dean, Education; The successful candidate will also participate in strategic planning for the overall MD Undergraduate program.

A more detailed position description is available in the Dean's Office for those who wish to review it. This is approximately a half-time position for a one year term with the possibility of renewal, subject to a satisfactory review.

Faculty of Medicine | Dean's Office

www.med.ubc.ca

Applications, accompanied by a detailed curriculum vitae and names of three referees, should be directed to:

Kristin Sivertz, MD, FRCPC
Executive Associate Dean,
Education

c/o Darcie Prosser
#317, Woodward IRC
2194 Health Sciences Mall
Vancouver, BC V6T 1Z3

(or searches@medd.med.ubc.ca
with subject line **AD Curriculum, VFMP**)

Review of the applications will begin on March 31, 2010 and will continue until the position is filled.

The University of British Columbia is Canada's third largest university and consistently ranks among the 35 best universities in the world. Primarily situated in Vancouver, UBC is a research-intensive university and has an economic impact of \$4 billion to the provincial economy.

The Faculty of Medicine at UBC, together with its partners including B.C.'s Health Authorities, provides innovative programs in the areas of health and life sciences through a province-wide delivery model. The Faculty teaches students at the undergraduate, graduate and postgraduate levels and generates more than \$240 million in research funding each year, throughout the province.



THE UNIVERSITY OF BRITISH COLUMBIA

UBC hires on the basis of merit and is committed to employment equity. All qualified persons are encouraged to apply. UBC is strongly committed to diversity within its community and especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, persons of any sexual orientation or gender identity, and others who may contribute to the further diversification of ideas. However, Canadian and permanent residents of Canada will be given priority.

www.ubc.ca & www.med.ubc.ca

UBC Paralympic Torchbearers

BY LORRAINE CHAN WITH
FILES FROM HEATHER AMOS

UBC TORCHBEARERS will be sharing their inspirational stories when the 2010 Paralympic Torch Relay arrives on the Vancouver campus on March 11 near the Thunderbird Arena — home to the ice sledge competitions.

The 2010 Paralympic Torch Relay began its journey on March 3 with a lighting ceremony in Ottawa. Ten sites across the country, among them Quebec City, Toronto, Victoria, Squamish and Maple Ridge, and approximately 600 torchbearers, are welcoming the Paralympic flame.

After UBC's ceremony, the torch relay will move to downtown Vancouver where a 24-hour event continues and concludes around Robson Square. As the torch is extinguished and relit at the BC Place opening ceremony on March 12, it

hometown is going to be incredible. It holds a special significance for me because these athletes have had to overcome so much to be here. And to top it all off, being a torchbearer for the UBC leg of the relay makes this experience even more special because I have so many great memories here, although I'm sure this one will top the list."

SAMANTHA JUNG will be carrying the flame as a media and student representative from UBC. A fourth-year English literature and psychology major in the Faculty of Arts, Jung has been writing frequently about UBC and the Winter Games in her role as a reporter for The Ubysey, one of Canada's longest running student newspapers.

"I am excited that I will get to share my story with not only my close friends, colleagues, boyfriend and family, but with students and the

hard work got us to this point was worth it and for the next few days it was about playing our game because we loved to play and wearing the maple leaf with pride. I am so excited and humbled to play a small part in carrying the flame to the athletes of these Paralympic games and honour all of their years of dedication to their sport."

BRANKO RADMILOVIC, a staff member with UBC's Plant Operations for 13 years, has been participating in the Just Giver Ride for Parkinson's since 2006. Each summer, Branko bikes more than 1,000 kilometres to communities across British Columbia where he engages in public lectures and community outreach projects. His efforts have helped to raise over \$186,000 for Parkinson's Research.

"It means a tremendous amount to me to be able to carry the

"It means a tremendous amount to me to be able to carry the torch for all those that have Parkinson's disease and for those that are affected with a life-altering challenge."

will signal the start of the Vancouver 2010 Paralympic Winter Games.

UBC Reports asked a number of the UBC participants to describe what the Paralympic torch means to them.

KATIE JEANES is an ardent lifelong volunteer whose activities include coaching for Special Olympic Basketball and supporting Right to Play, UBC Rec's Storm the Wall event and Vancouver Adaptive Snow Sports. Keanes graduated from UBC in 2009 with a BHK in Kinesiology and Health Science and minor in Commerce. She currently works as a research coordinator at the Aging, Mobility, and Cognitive Function lab at Vancouver General Hospital's Centre for Hip Health and Mobility.

"Carrying the Paralympics flame that unites the entire world in my

local community. I have been paying close attention to the Olympics and Paralympics for quite some time, and am pleased to take on a more inclusive role in the Games."

JENNIFER KREMPIEN is an MSc candidate in human nutrition at the Faculty of Land and Food Systems. A native of St. Albert, Alberta, Krempien is a five-time Paralympian in wheelchair basketball. Her research focuses on the nutritional practices of elite athletes with spinal cord injuries.

"As an athlete, one of the most inspiring moments of each Paralympic games was to experience the torch being lit. It was a brief moment in time when there was a collective sigh within our team and the understanding that all of the

torch for all those that have Parkinson's disease and for those that are affected with a life-altering challenge."

BONNIE SAWATZKY is an associate professor in the Dept. of Orthopaedics and principle investigator for ICORD, the spinal cord injury research centre. In a wheelchair herself, Sawatzky has overcome a number of personal challenges and is known for her determination. Her research explores the biomechanics of human movement, particularly in children with disabilities.

"As someone who has a disability, carrying the torch symbolizes and celebrates the remarkable abilities that individuals can demonstrate no matter what our challenges are." ■



Katie Jeanes



Jennifer Krempien



Bonnie Sawatzky



Samantha Jung

PHOTO: GERALD DEO, THE UBYSEY

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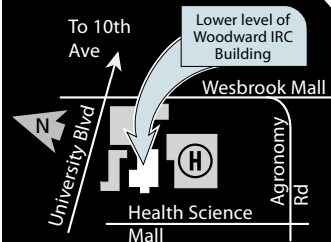
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UBC CELEBRATE RESEARCH WEEK

MARCH 5-14, 2010

JOIN US FOR THE UNIVERSITY OF BRITISH COLUMBIA'S ANNUAL CELEBRATE RESEARCH WEEK.

From artistic interventions, critical dialogues on forestry policy and practices, and the science and ethics behind elite athletic performance to CBC's Award winning Quirks & Quarks Annual Question show, UBC's Celebrate Research Week welcomes the community to participate. Most events are FREE and open to the public, students, faculty, staff and schools. For a complete listing of all events visit WWW.CELEBRATERESEARCH.UBC.CA @UBCComAff

FRIDAY MARCH 5

Sport and Inclusion: Are Major Sporting Events Inclusive of First Nations and Other Groups?

8:00pm-9:30pm

Former Olympic athlete, activist from the Kahnawake Mohawk Territory Waneek Horn-Miller shares her journey to the Olympics and how she helps others achieve their dreams. She is joined in a panel by former Olympians Shirley and Sharon Firth from the Gwich'in Nation and Valerie Jerome.

Tickets \$10. www.chancentre.com

The Chan Centre for the Performing Arts, 6265 Crescent Road

CRIME and ALYSSA: An Evening of Provocative Cinema

7:30pm-10:30pm

These two films provide a powerful showcase of arts-based research that manages to be both thought provoking and deeply moving. Filmmakers in attendance. Free. Everybody welcome.

More information at www.celebrateresearch.ubc.ca.

Royal Bank Cinema, 6265 Crescent Rd

2010 Most Exceptional Escapades In Science High School Student Conference

9:00am-3:00pm

The Michael Smith Laboratories annual Scientific Conference designed for high school students. This event showcases various scientific pursuits, including the opportunity to engage in hands-on activities, as well as interact with prominent scientists.

Dr. Joanne Fox, 604-827-3911, www.bioteach.ubc.ca/highschool-conference-2010

Michael Smith Laboratories, 2185 East Mall

SATURDAY MARCH 6

Multidisciplinary Undergraduate Research Conference (MURC)

9:30am-5:30pm

This 9th annual conference showcases the exemplary contributions of undergraduate research to the UBC community and beyond.

To register www.uro.ubc.ca/share/murc

Jubilee Room, Irving K. Barber Learning Centre, 1961 East Mall

MONDAY MARCH 8

Small (Mining) Is Beautiful - Engineering to Alleviate Global Poverty

6:30pm-8:00pm

How can engineering help alleviate global poverty? Learn how from Professor Marcello Veiga as he presents "Small (mining) is Beautiful." The findings are a result of a six-year project sponsored by the United Nations. Free.

www.apsc.ubc.ca/celebrateresearch,

Robson Square, 800 Robson Street

Forestry in Society: Comparing the UK & BC Experiences

2:00pm-7:30pm Open House/Poster Competition/Lecture in Sustainability

Mr. Tim Rollinson, Director General of the UK Forestry Commission will look back at the UK experience in responding to the changing needs of society and our responses- as well as look forward to the challenges coming over the horizon. Free. Everyone welcome.

2424 Main Mall

Quirks & Quarks Question Show

7:30pm-9:00pm

Each year, Quirks & Quarks solicits questions from you, the listeners, and the community. Ten of the best questions have been pre-selected and will be answered on the show by UBC experts in each area. Join host Bob McDonald live at the Chan Centre. Tickets are free.

Tessa Vanderkop, 604.822.5675, www.chancentre.com

Telus Theatre, Chan Centre for the Performing Arts, 6265 Crescent Rd

TUESDAY MARCH 9

Mental Health Research Matters: Free Public Talk

7:00pm-9:00pm

A free public forum on the latest directions and discoveries in mental health research with three of the Lower Mainland's leading experts. Featuring Drs. Jehannine Austin, Raymond Lam and Christian Schütz. Registration is free but space is limited.

Ashley Biggerstaff, reseduc@cw.bc.ca, www.cfri-training.ca

Chan Centre for Family Health Education, 950 West 28th Avenue

Four Ways to Combat Climate Change - Making a Difference Lecture Series

6:30pm-8:00pm

Energy use, and its impact on the environment, is one of the most important technical, social and public-policy issues facing humanity today. Learn from Professor Evans the "Four Ways to Combat Climate Change." Everyone welcome. Free.

www.apsc.ubc.ca/celebrateresearch

Robson Square, 800 Robson Street

The Killam Discussion - Can Environmental Science Save the Earth?

5:00pm-6:00pm

The inaugural Killam Conversation focuses on the capacity of environmental science to effect robust change among those setting policy. Is there a Two Solitudes existing between the scientific community and those tasked with decision-making? Everyone welcome. Free.

Dr. Rhodri Windsor-Liscombe, rhodri@interchange.ubc.ca,

www.celebrateresearch.ubc.ca

Robson Square, 800 Robson Street

WEDNESDAY MARCH 10

Peak Performance: The Path to Exceptional Athletic Achievement

11:00am-5:30pm

Join leading experts from around the world for an afternoon focused on hot topics in the scientific, ethical and psychosocial complexities underlying competitive sports and the challenges athletes face in reaching peak performance. Everyone welcome. Free.

Leah Lockhart, 604-806-9853, Leah.Lockhart@hli.ubc.ca,

www.heartandlung.ca/peak

Segal Centre, SFU Harbour Centre, 515 W. Hastings St

New Ways to Communicate Climate Change - Speaker Panel & Public Dialogue

5:30pm-7:30pm

Distinguished speakers with unique expertise in climate change communications and behaviour change, will focus presentations on perceptions of climate change and community-based solutions. Everyone welcome. Free.

www.calp.forestry.ubc.ca, picswrkshp@gmail.com

Rm 1500, SFU Segal Graduate School of Business, 500 Granville St.

Amazing Paper: The History and Art of Papermaking

12:00pm-1:00pm

Most people take paper for granted. Learn paper's rich history and its impact on society and understand the manufacturing process with emphasis on sustainability. Free. Everyone welcome.

Kaiser 2020/2030, 2332 Main Mall

Sport and Challenge: Is Anything Possible?

8:00pm-9:30pm

Rick Hansen delivers a keynote address on where we have come and what the future holds for people with disabilities in sport. He is joined by Dr. Bruce McManus and Pat Jarvis (former Paralympic athlete and member of the International Paralympic Committee).

Tessa Vanderkop, 604 822-5675 — Tickets \$10, www.chancentre.com

The Chan Centre for the Performing Arts, 6265 Crescent Road

From Toy Trains to Airplanes: Are We Serious About Safety-Applied Science Making a Difference Lecture Series

6:30pm-7:30pm

From the onset of the industrial revolution until a few decades ago, safety was a topic of great importance. But in recent years, we have become complacent—until a tragedy occurs that is. Explore with Professor Poursartip. Everyone welcome. Free.

Robson Square, 800 Robson Street

THURSDAY MARCH 11

Celebrating the Image

All Day - March 11 to March 14

UBC Visual Art students showcase a series of works produced in our digital courses. Using various media the works attempt a response to the question: What is an image today? Come and be a part of the artistic intervention at Robson Square!

www.celebrateresearch.ca

Robson Square, 800 Robson Street

Let's Talk about Marijuana and Teens (a CIHR Café Scientifique)

7:00pm-9:00pm

Why do more youth in British Columbia use marijuana than anywhere else in Canada? What are the health and social effects? Join in the discussion at the CIHR Café Scientifique. This event is free, but space is limited.

Stephanie Coen, 604-827-4058

RSVP to stephanie.coen@nursing.ubc.ca

Juliet's Café, 1905 Cornwall Avenue

Inhuman Conditions: On Cosmopolitanism and Human Rights

12:00pm-1:30pm

This is one of two public lectures (also see March 12th) on the very idea, as well as the social, cultural and political elements, of cosmopolitanism and human rights, by noted political theorist, Professor Pheng Cheah. Free lunch with RSVP.

Carmen Radut, ccfi@interchange.ubc.ca

604-822-8638

UBC Green College Coach House,

6323 Cecil Green Park Road

Patient -Centred Care is More than Medicine

5:00pm-6:00pm Reception in foyer

6:00pm-7:30pm Presentation, Q&A

Together with health system professionals, Sauder School of Business researchers are developing innovative approaches to improve the patient experience. This is a free event. Pre-registration is required by March 8, 2010.

Jessie Lam, 604.822.8399, www.sauder.ubc.ca

Robson Square Theatre, 800 Robson Street

FRIDAY MARCH 12

Global Health & Community - Based Involvement

6:00pm-8:00pm

Please join us for several thought provoking presentations focusing on the ethics and impacts of global health and community-based involvement. Full refreshments will be provided. Free.

Please RSVP to ghealth@interchnage.ubc.ca.

More information at www.celebrateresearch.ubc.ca

Room C225, Robson Square, 800 Robson Street

SUNDAY MARCH 14

Time Being - A Speculative Documentary on Time

2:30pm-4:00pm

This new film by Chris Gallagher is an epic journey that takes one gently down the stream of consciousness to reveal the puzzle that is time. Everyone welcome.

Tickets will be available in advance online and at the door. For more information: www.vifc.org/home

Vancity Theatre, 1181 Seymour Street



a place of mind

