



# UBC REPORTS

3	Global diseases	4	Carbon footprint	5	Childhood maps	6	UBC teaching survey
---	-----------------	---	------------------	---	----------------	---	---------------------

## Risking the ride to work



More people would jump on their bikes if cycling paths were separated from traffic, UBC Prof. Kay Teschke (pictured above) says.

By BASIL WAUGH

In nine months, more than 1,100 adults have gone to emergency wards in Vancouver and Toronto for cycling-related injuries, according to preliminary findings of a UBC study released for Bike Month.

The study is led by Prof. Kay Teschke of UBC’s School of Population and Public Health, one of 10 UBC researchers participating in UBC’s Cycling in Cities research program, which investigates how to make cities

research shows most cyclists want to be away from traffic. “But that’s challenging, because we are talking about cities that are already built.”

Teschke points to a recent Vancouver program to increase traffic calming on residential street bike routes as an example of a project that has resulted from their work.

Teschke and colleagues from the University of Toronto are tracking all cycling-related injuries that come through emergency wards in two

helps us to better understand what led to the injury, identify problem areas and make recommendations for improving safety,” she says.

The project also surveyed more than 1,400 Metro Vancouver adults about which factors encourage – or discourage – cycling. It found that the majority – nearly 60 per cent – had bikes, but did not use them on a weekly or monthly basis.

Asked about 16 different route types and 73 other factors that could influence cycling decisions, participants ranked riding on busy streets very low, expressing a strong preference for paved off-street paths for cyclists only, traffic-calmed residential streets designated for cycling, and cycling paths separated from major streets by a physical barrier.

If North America hopes to reach cycling rates such as those in Europe and Asia, planners need a paradigm shift, says Teschke.

“If we want to really grow our numbers, we need to focus on the underserved majority who don’t feel comfortable cycling with traffic,” she says, “older people, women, people with children.”

“People who cycle regularly now are a minority,” says Teschke, noting that the typical frequent cyclist is male, aged

25-45. “They may not like their route options, but their threshold for risk is such that they will cycle on pretty much anything.”

Funders for this initiative include Canadian Institutes of Health Research, Transport Canada, Metro Vancouver and its municipalities, the Heart & Stroke Foundation of Canada, the Michael Smith

Foundation for Health Research, UBC’s Centre for Health and Environment Research and the Bridge Program.

Learn about UBC’s Cycling in Cities research program at: [cher.ubc.ca/cyclingincities](http://cher.ubc.ca/cyclingincities).

For more information about cycling at UBC, visit the TREK Program Centre at: [www.trek.ubc.ca](http://www.trek.ubc.ca).

“We hope to show cities how to build pathways that are safer and more convenient.”


bike-friendly.

Working with Transport Canada, the City of Toronto, Metro Vancouver, Translink and other partners, Teschke says the initiative’s goal is to give municipalities the information they need to make the best decisions for bike infrastructure types and locations.

“By assessing routes for injury risks and exploring the factors that make people want to cycle, we hope to show cities how to build pathways that are safer and more convenient,” says Teschke, noting that their

of Canada’s largest cities. Preliminary results show that more than 670 injured adult cyclists went to the emergency wards of St. Paul’s Hospital or Vancouver General Hospital between June 2008 and March 2009. Nearly 450 went to the emergency departments of St. Michael’s Hospital, Toronto General Hospital, or Toronto Western Hospital in Toronto over the same period.

After interviewing the injured cyclists, Teschke and her team retrace their routes and study where the injury occurred. “This



## BIKE ROUTE

### Website helps cyclists find easiest, greenest route

UBC researchers recently launched a new online Cycling Metro Vancouver route-planning tool to help cyclists find the easiest and least polluted route through the region.

Informed by UBC Cycling in Cities research, the website uses Google maps to help riders find their way from place to place while minimizing air pollution, hills and traffic congestion.

Development of the tool was led by Prof. Michael Brauer, UBC School of Environment Health, in co-operation with TransLink.

Plan your trip at: [www.cyclevancouver.ubc.ca](http://www.cyclevancouver.ubc.ca)



Get Your Kids Outside & Active this Summer!  
Check out our 2009 Junior Tennis Camps:

- Junior Developmental Camp •
- Junior High Performance Camp •
- Smash and Swim Camp •
- Futures III Camp •

Looking to get active yourself?  
Check out these daytime adult camps:

NEW!

- Accelerated Beginner Camp •
- Accelerated Intermediate Camp •

604.822.2505  
www.tennis.ubc.ca

**Berkowitz & Associates  
Consulting Inc.**

**Statistical Consulting**

Research Design • Data Analysis • Survey Sampling • Statistical Education

Jonathan Berkowitz, Ph.D.      4160 Staulo Crescent, Vancouver, B.C. V6N 3S2  
Office: 604-263-1508 • Fax: 604-263-1708  
Email: witz1@interchange.ubc.ca

**Accommodation for UBC visitors**

Business  
Guests

Family &  
Friends

**Point Grey Guest House**  
4103 W. 10th Ave. Vancouver, B.C. 604-222-4104  
www.pointgreycastlehouse.com   info@pointgreycastlehouse.com

Catering to the UBC Campus  
and Point Grey community.

Full service & casual catering,  
custom menu planning and  
event coordinating for corporate events,  
conferences, private parties, weddings  
and special events.

604.822.2018  
www.catering.ubc.ca

A division of UBC Food Services

# IN THE NEWS

Highlights of UBC media coverage in May 2009. COMPILED BY SEAN SULLIVAN



PHOTO: RICHARD LAM

Swimmer Annamay Pierse is the CIS Canadian female athlete of the year.

**Ch’nook program looks to engag aboriginal students**  
*The Economist* reported on the Ch’nook Aboriginal Business Education Program. The initiative from the Sauder School of Business at UBC aims to boost aboriginal participation in post-secondary business studies.  
**John Claxton**, director of the program, says although many of the skills needed for business are universal across cultures, Ch’nooks can develop their own unique, successful approach.  
“We start by working to dispel the stereotype that all businesses are identical in terms of the motivators behind business activities,” he says. “This makes it easy for students to see how their values can impact their business practices.”

**Let your mind wander while you work**  
A UBC study has found daydreaming can be good for you.  
*MSNBC, AFP, The Mirror*

and *Le Figaro* were among the international media outlets that seized upon psychology Prof. **Kalina Christoff**’s findings.  
The study, published in the Proceedings of the **National Academy of Sciences**, finds that activity in numerous brain regions increases when our minds wander  
“Mind wandering is typically associated with negative things like laziness or inattentiveness,” says Christoff, of the UBC Dept. of Psychology. “But this study shows our brains are very active when we daydream - much more active than when we focus on routine tasks.”

**Employers discriminate based on names**  
Job applicants with English names have a greater chance of getting interviews than those with Chinese, Indian or Pakistani names, says a new study from UBC.  
*CTV, United Press International, the Globe and*

*Mail, CBC, The Canadian Press* and the *Georgia Straight* reported on the study by Economics Prof. **Philip Oreopoulos**.  
The findings suggest that Canadians and immigrants with non-English names face discrimination by employers and help to explain why skilled immigrants arriving under Canada’s point system - with university degrees and significant work experience - fare poorly in today’s labour market, Oreopoulos says.

**Teens smoke pot to deal with health issues**  
UBC researchers say many teens who smoke marijuana are trying to find a way to cope with mental and physical problems, not aiming to just get high.  
**Dr. Joan L. Botorff** of UBC and her team found that adolescents who use marijuana to deal with depression, grief, stress or anxiety say they were ignored by doctors or found that prescribed treatments didn’t work.  
The findings, reported in *Reuters, Los Angeles Times* and *Fox News*, show that young people need help from adults to find other ways, such as counseling, stress management or social skills training, to cope with difficulties in their lives.

**Pierse named CIS athlete of the year**  
UBC swimmer **Annamay Pierse** was named the CIS Canadian female athlete of the year.  
Pierse earned top female honours at the 17th annual BLG Awards ceremony and received a \$10,000 scholarship to attend a Canadian graduate school.  
“I just came into this year trying to better myself and better my swimming and gave it pretty much my all,” Pierse told *The Canadian Press*.

# UBC REPORTS

Executive Director **Scott Macrae** scott.macrae@ubc.ca

Editor **Randy Schmidt** randy.schmidt@ubc.ca

Designer **Ping Ki Chan** ping.chan@ubc.ca

Principal Photography **Martin Dee** martin.dee@ubc.ca

Web Designer **Michael Ko** michael.ko@ubc.ca

Contributors **Jody Jacob** jody.jacob@ubc.ca

**Brian Lin** brian.lin@ubc.ca

**Derek Moscato** derek.moscato@sauder.ubc.ca

**Sean Sullivan** sean.sullivan@ubc.ca

**Basil Waugh** basil.waugh@ubc.ca

Advertising **Pearlie Davison** pearlie.davison@ubc.ca

Publisher **UBC Reports** is published monthly by:  
UBC Public Affairs Office  
310 – 6251 Cecil Green Park Road  
Vancouver BC Canada V6T 1Z1

NEXT ISSUE: JULY 2, 2009

**UBC Reports welcomes submissions.**  
For upcoming UBC Reports submission guidelines: [www.publicaffairs.ubc.ca/ubcreports/about.html](http://www.publicaffairs.ubc.ca/ubcreports/about.html).  
Opinions and advertising published in UBC Reports do not necessarily reflect official university policy.  
Material may be reprinted in whole or in part with appropriate credit to UBC Reports. Letters (300 words or less) must be signed and include an address and phone number for verification.

**Submit letters to:**  
The Editor, UBC Reports  
UBC Public Affairs Office (address above);  
by fax to 604.822.2684;  
or by e-mail to [randy.schmidt@ubc.ca](mailto:randy.schmidt@ubc.ca)  
or call 604.UBC.NEWS (604.822.6397)

PUBLICATION MAIL AGREEMENT NO. 40775044  
RETURN UNDELIVERABLE CANADIAN ADDRESSES TO CIRCULATION DEPT.  
310-6251 CECIL GREEN PARK ROAD, VANCOUVER, B.C. CANADA V6T 1Z1  
EMAIL: public.affairs@ubc.ca

UBC Reports is printed by Teldon Print Media which is FSC (Forest Stewardship Council) Certified. FSC Certification is a code of practices developed by the environmental movement as if they were the various government agencies that regulate logging, pulp and paper making practices. These environmentally sound practices have been taken out to the industry, adopted where possible and consequently there is FSC Certified paper available today.

Companies operating in all three aspects of the industry have a distinct advantage over those that don’t because FSC Certification is a “chain-of-custody” process that follows the virgin fibre from the forest to the finished paper product. The real value of FSC Certification lies in this ability to track the fibre from the source and audit all the industrial processes used from tree to paper and then finally to brand the finished printed product with the appropriate FSC logo.





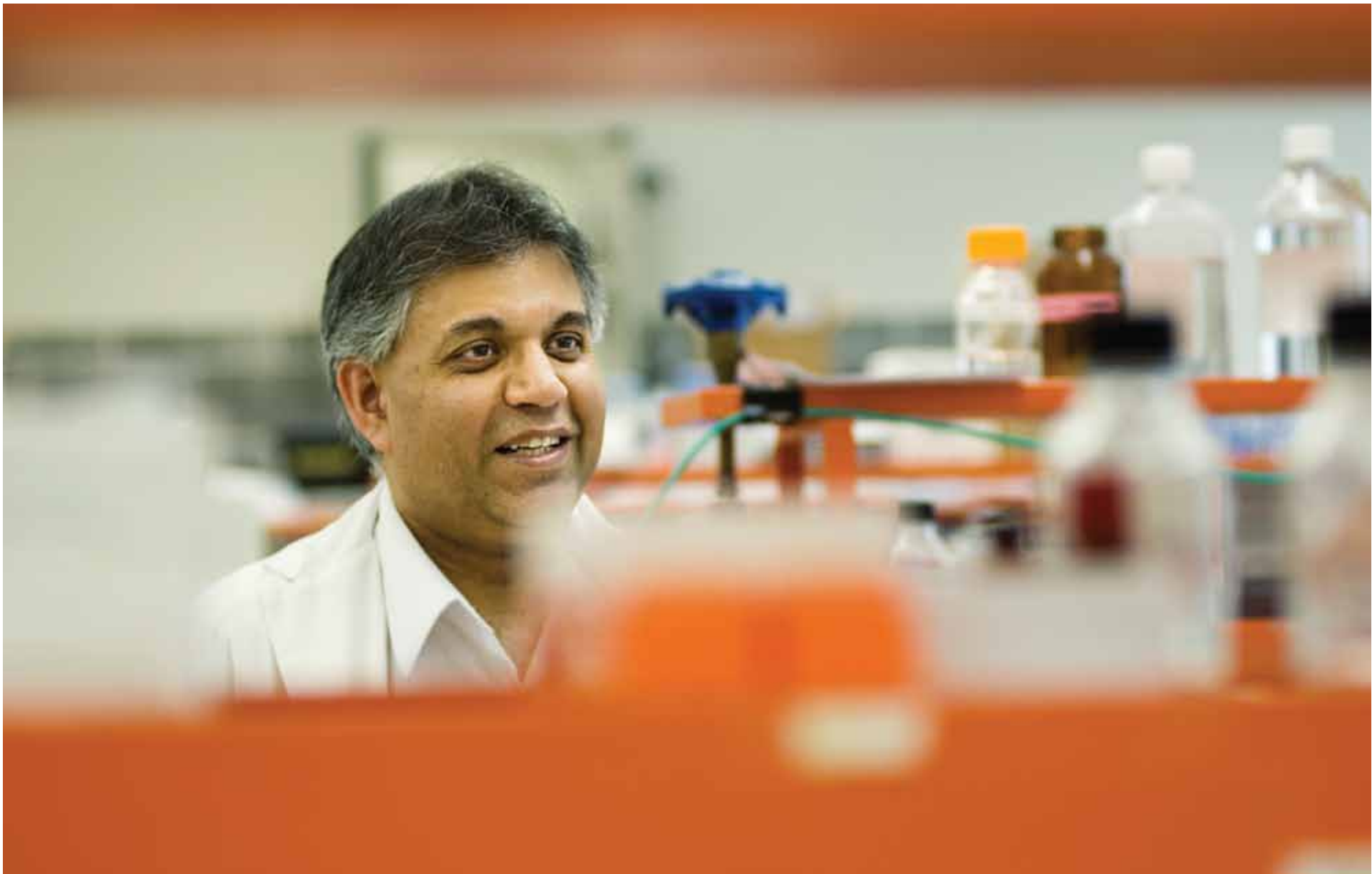


PHOTO: MARTIN DEE

Pharmaceutical Sciences Prof. Kishor Wasan has developed an oral formulation of anti-fungal drug Amp B that could help eradicate Visceral Leishmaniasis in the developing world.

# New funding to study neglected global diseases

By BRIAN LIN

What began as a serendipitous discovery in Prof. Kishor Wasan's lab almost a decade ago may soon help eradicate a painful and fatal disease in the developing world, thanks to an innovative partnership among university, government and industry and a \$600,000 grant towards neglected global diseases.

Wasan, a Distinguished University Scholar and professor in the UBC Faculty of Pharmaceutical Sciences, was studying the delivery of water-insoluble drugs in 2000 when he discovered something new about Amphotericin B (Amp B), a powerful anti-fungal and anti-parasitic agent.

immune system, leading to death. According to the World Health Organization, 1.5 million new cases of VL are reported and close to 60,000 die annually.

In use for more than 50 years, Amp B has been proven effective against VL and blood-borne fungal diseases that affect HIV/AIDS and cancer patients. Currently administered intravenously, access to Amp B is expensive and prohibitive for underserved populations and those in developing countries.

Wasan's oral formulation of Amp B has recently been validated by third-party scientists to be more than 99 per cent effective in animal models with minimal side effects. This work is scheduled for publication in *The Journal of*

Industry Liaison Office and the UBC chapter of the international student group Universities Allied for Essential Medicines (UAEM), the Global Access Initiative – the first of its kind in a Canadian university – works with university researchers and industry partners to provide the developing world with access to UBC technologies. Last year, Wasan's oral formulation of Amp B became the first drug to be licensed according to these principles.

In addition to agreeing to provide the drug at subsidized costs to developing countries, the drug's licensee, Vancouver-based iCo Therapeutics, is co-funding Wasan's Research Chair in Drug Delivery for Neglected Global Diseases with the Canadian Institutes of Health Research (CIHR).

Wasan is putting the \$600,000 award towards hiring graduate students who could help accelerate testing of the drug. "Every minute, three people are infected with this disease and we have the knowledge and tools to stop it," says Wasan, who is also organizing a Neglected Global Diseases workshop to bring together top scientists from UBC who are addressing neglected global diseases that are prevalent in developing countries.

Wasan says his uncle, a physician in Mumbai, has seen first-hand the impact VL has on rural residents in India – and the promise of a drug like Amp B.

"My family finally respects me now," says Wasan jokingly. "They say 'Kishor is doing something useful with his degree.'" ■

**“We were surprised to find that when added to lipids, or fat, high levels of the drug made it into the bloodstream with no renal toxicity.”**

“We were surprised to find that when added to lipids, or fat, high levels of the drug made it into the bloodstream with no renal toxicity,” says Wasan.

That discovery later inspired the development of an oral formulation of Amp B that could greatly increase its effectiveness – and reduce the side effects – in treating systemic fungal infections and Visceral Leishmaniasis (VL). VL, a parasitic disease that is typically transmitted by sand flies in areas with poor sanitation conditions, attacks the liver and spleen and destroys the patient's

*Infectious Diseases*, one of the top journals in the area.

“As any pharmacist would tell you, compliance greatly increases when the drug can be taken orally. This is especially pertinent when we consider the population and regions most affected by VL,” says Wasan. “Now that we've got a formulation of a drug that can be easily administered and is effective in treating the disease, the next challenge is getting it to people who need it the most.”

Enter the UBC Global Access Initiative.

Developed by the UBC

**Set your course for learning this Summer**

Join adult learners in one- to four- week summer institutes. These condensed programs feature outstanding instructors in engaging classes. Over 40 programs are available – from writing to languages to multimedia.

*“This was a fabulous institute. There was a great variety of information – from broad perspectives to tangible take-home processes and information.”*

– Participant, 2008 Summer Institute in Sustainability

**UBC THE UNIVERSITY OF BRITISH COLUMBIA**

**Continuing Studies**

**Find Out More**  
cstudies.ubc.ca/ubcr

**Ready? To move on to the ‘Next Phase’?**

**To Retire? Have you got a Plan?**

**Prepare, learn more.**

**Please call for an appointment**  
**Ed Jackson, B.Sc.**  
*Certified Financial Planner,  
Chartered Life Underwriter*

**604.224.3540, edj@smarrt.com**  
*Free initial consultation,  
references available*

**4524 West 11th Avenue, Vancouver**  
**Retirement Income and Pension,  
Financial & Estate Planning**



# Centre tracks Olympic carbon footprint




James Tansey, associate professor at UBC's Sauder School of Business, leads the school's Centre for Sustainability and Social Innovation. The centre – through the work of recent MBA graduates Jessica Langelaan and Kristina Welch – is tracking the carbon footprint of the Vancouver 2010 Winter Olympics.

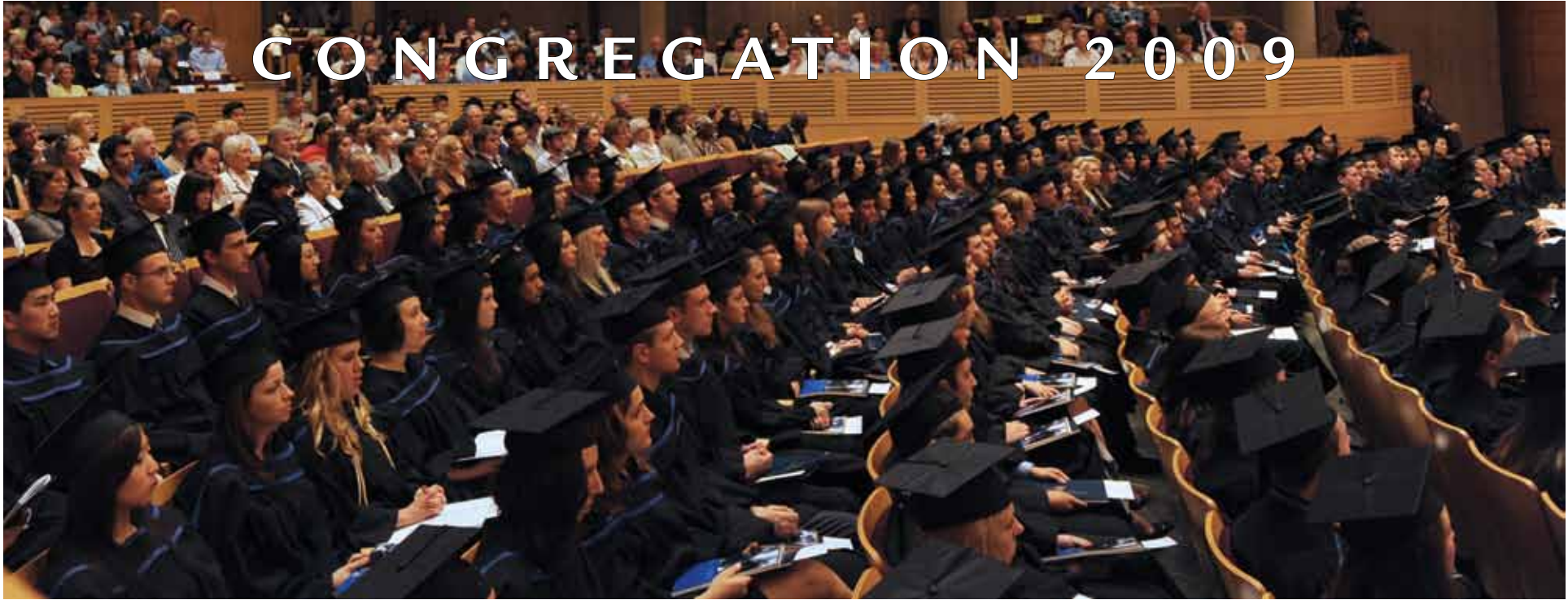
By DEREK MOSCATO

On the surface, it might strike some as, well, an Olympian challenge: Tracking and forecasting the carbon footprint of the upcoming Vancouver 2010 Winter Games. But that's what a pair of recent MBA graduates from UBC – working with the university's Centre for Sustainability and Social Innovation (CSSI) – have been tasked to do. Over the past year, the centre, which is hosted at the Sauder School of Business and led by associate professor James Tansey, has been helping the Vancouver Organizing Committee (VANOC) develop a credible methodology for measuring its carbon footprint. The project is being conducted by MBA grads Jessica Langelaan and Kristina Welch, both of whom now work for the CSSI as

graduate fellows. According to Langelaan, who recently completed her MBA at UBC in strategic management, the scope of such an undertaking is unprecedented for an Olympic Winter Games. "This is the first Olympic Games to look at its footprint from the bid's inception in 2003 through the wrap-up of the Games," she said. In comparison, the carbon footprint measurement of Torino's Winter Olympics only took into account the 17 days of the event itself. But the scope of this undertaking is also significant for other reasons. Welch, who completed her UBC MBA with a specialization in sustainability, notes that most traditional corporations, for example, have had the benefit of starting such an emissions inventory program on a smaller scale, and then ramping up efforts incrementally over time. "But this is a one-shot deal," she says. In developing a methodology to measure carbon emissions, Welch looked at other sporting events with a comparable scale of size and impact – notably the most recent FIFA World Cup hosted in Germany. It provided her with a perspective on what worked – and what could be improved upon. The World Cup's carbon measurement program took into account emission activities taking place within Germany only. By contrast, the 2010 calculation is global, and factors in Games-connected carbon emissions that happen in Canada and internationally. "They had to make assumptions that were right for the time, but now we are able to make a different set of assumptions," said Welch.

There are a myriad of carbon emitting activities that are being measured for the 2010 Winter Games – including the travel of athletes and IOC members, energy used to put on the athletic competitions, and the impact of spectators themselves. There's also the carbon output associated with the journey of the Olympic Torch – whether it's from the caravan of vehicles travelling with it on the road, or the passenger ferries that will whisk it across bodies of water en route to Vancouver. "Anything that is core to the Games is measured," said Langelaan. So what will the 2010 Winter Games' carbon footprint be? At the World Conference on Sport and the Environment in March, VANOC announced an estimate of 300,000 tonnes of carbon dioxide emissions from the Games. And in fall 2009,

thanks to the forecasting work of Langelaan and Welch, VANOC will release an updated forecast of its carbon emissions. "VANOC's comprehensive approach demonstrates they are taking their carbon responsibility seriously," said CSSI director James Tansey. It is expected the 2009 estimate of the Games' carbon footprint will be lower than an estimate made in 2007 by the David Suzuki Foundation, because of ongoing efforts by VANOC to conserve energy and reduce carbon emissions. These include expanding public transit, replacing diesel generators with cleaner hydro power, and tapping into renewable energy sources. "A key piece of this undertaking is that you understand what the footprint looks like, and then you reduce that footprint," said Langelaan. [www.sauder.ubc.ca/cssi](http://www.sauder.ubc.ca/cssi) 



More than 6,800 students at UBC's Vancouver campus graduated this May. UBC Okanagan holds its ceremonies June 5.



# Childhood development maps go Web 2.0

By SEAN SULLIVAN

A unique tool that measures early childhood development in British Columbia is moving to the web to make its data more accessible to parents, educators, policy makers and researchers province-wide.

The UBC-based Early Childhood Development Mapping Project creates maps illustrating data about children’s development and connects this data to the socio-economic characteristics of communities where the children live. The maps demonstrate how children develop differently across B.C.

Leading this project is the UBC-based Human Early Learning Partnership (HELP), a research network of more than 200 faculty members, researchers and graduates from six B.C. universities.

To date, these thematic maps have only been available as PDF files. Now, they’re going online as easy-to-use, interactive maps that users can customize to meet their community, school district and decision-making needs.

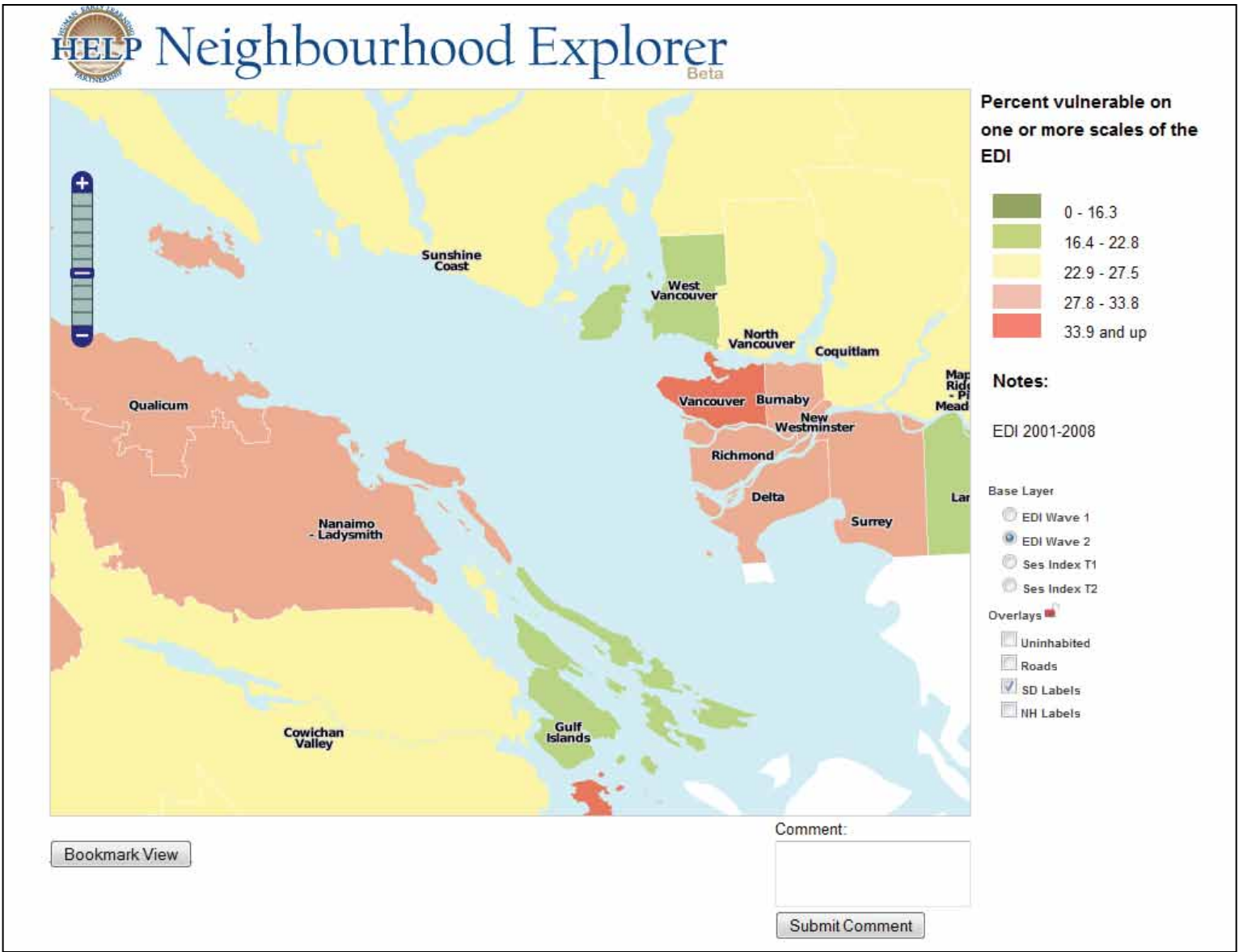
“We’ve developed these maps to make them easier to read and absorb,” says Jay Douillard, Geospatial Technical Lead for HELP’s mapping project. “This tool has the potential to revolutionize the ways in which educators and policy makers approach early childhood development through its accessibility and ease of use.”

HELP’s data comes from its Early Development Instrument (EDI), which measures the state of children’s development when they enter kindergarten.

Kindergarten teachers complete a checklist for each child in their class, creating an overall picture of physical health and well-being, social competence, emotional maturity, language and cognitive development, and communication skills.

By pooling this data at the neighbourhood and school district levels, researchers can see how well communities and governments are supporting young children and their families in the early years. The online maps allow users to see the EDI results combined with the other data.

The maps also illustrate inequalities that emerge over the first five years of life, according to such factors as family income, parental education, neighbourhood safety and stability, neighborhood socio-



New online maps from the Human Early Learning Partnership help show regional differences in early childhood development.

economic differences, and access to quality child care and developmental opportunities.

For example, the maps can show in which Richmond neighbourhoods children are most limited in social development or how residential stability – i.e., the number of families moving in and out -- influences the development of children living in and around Victoria.

“By launching web-based maps, our goal is to bring all this information back into these communities where children are being assessed, and to make it relevant for community champions and government ministries,” Douillard says.

Kathy Basaraba, manager of Children First in Prince George, says HELP’s EDI data has heightened her group’s awareness of the differences that exist between neighborhoods in the community.

“The EDI data gave our community specific information that we used when developing community gardens, Preschooler Health Day screening circuits, and early literacy programs,” Basaraba says. “The EDI also

helped our community receive capital grants that established new early-learning child-care facilities and family resource centres.”

Children First is a community directed initiative that works to improve the health and development of young children (0-6 yrs) and their families.

Douillard, a UBC Geography alumnus, renders all the maps in-house using free, open source software such as Mapnik and OpenLayers.

“The open source software ties in with our philosophy of keeping our research accessible and participatory,” he says.

Users can share the maps, bookmark them, and email links to those specific to their community. Because it’s all online, the yearly EDI results can be rolled out much faster than before.

“Sometimes it’s hard to make the connection between what happens at a neighbourhood level and what happens at a provincial level,” says Douillard.

“Our web-based maps make this information more accessible.” [www.map.earlylearning.ubc.ca](http://www.map.earlylearning.ubc.ca)



## UBC Faculty of Medicine

> Through knowledge, creating health.

Head, Department of Emergency Medicine

The Faculty of Medicine, University of British Columbia invites applications and nominations for the position of Head of the Department of Emergency Medicine. Although it is expected that this position will have UBC □Vancouver Coastal Health (VCH) responsibilities, alternate nonacademic roles and responsibilities may be considered.

We seek an academic leader with strong leadership, interpersonal, and administrative skills who will be responsible for leading and developing the teaching, research and service programs of the newly emerging Department of Emergency Medicine. The successful candidate should have an appropriate knowledge of Emergency Medicine and have broad and proven administrative experience, substantial academic and clinical experience, a proven record of scholarly activity, and a commitment to undergraduate, graduate and post-graduate health education with demonstrated excellence in teaching.

The successful candidate should be a Fellow of the Royal College of Physicians and Surgeons of Canada, the Canadian College of Family Practice (Emergency Medicine) or equivalent. It is expected that the successful candidate will qualify for a full-time appointment at the rank of Professor, with the possibility of Associate Professor, (grant tenure). The term of the Headship is for five years, renewable once upon a satisfactory review.

Salary and rank will be commensurate with qualifications and experience and is subject to final budgetary approval. Anticipated start date is January 1, 2010 or upon a mutually agreeable date.

Faculty of Medicine | Emergency Medicine

[www.med.ubc.ca](http://www.med.ubc.ca)

Application letters, accompanied by detailed curriculum vitae, a teaching dossier, and names of four references, should be directed to:

**Gavin Stuart, MD, FRCSC**  
**Dean, Faculty of Medicine**  
**c/o Darcie Prosser**  
**Room 317, IRC, UBC**  
**2194 Health Sciences Mall**  
**Vancouver, BC V6T 1Z3**

(email: [searches@medd.med.ubc.ca](mailto:searches@medd.med.ubc.ca) with subject line: **Head, Emergency Medicine**)

Closing date: June 30, 2009.

The University of British Columbia is Canada’s third largest university and consistently ranks among the 40 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 \$200 million in research funding each year. It is home to Canada’s first distributed MD undergraduate program.



### THE UNIVERSITY OF BRITISH COLUMBIA

UBC hires on the basis of merit and is committed to employment equity. We encourage all qualified applicants to apply; however, Canadians and permanent residents of Canada will be given priority.

[www.ubc.ca](http://www.ubc.ca) & [www.med.ubc.ca](http://www.med.ubc.ca)

## \$2.5m to establish UBC professorship in rural teacher education

Dr. Donald Rix and his daughter Laurie have donated \$2.5 million to the University of British Columbia to create a first-of-its-kind professorship in rural teacher education.

The Eleanor Rix Professorship in Rural Teacher Education will examine how to best support and equip teachers for the unique challenges presented by teaching in rural communities. This is the largest-ever gift to the UBC Faculty of Education.

“Educating outstanding teachers – the people who train the next generation of British Columbians – is critical,” says Dr. Rix, who is a UBC clinical professor emeritus of pathology. “UBC’s Faculty of Education is a centre of international excellence and we are delighted to provide this support.”



# Calculating Canadians’ exposure to carcinogens



PHOTO: MARTIN DEE

Paul Demers is leading a study that’s examining how and where Canadians are exposed to carcinogens.

By SEAN SULLIVAN

Could where you live or work determine your likelihood of developing cancer? New research from UBC’s School of Environmental Health aims to find out. CAREX Canada, based at UBC’s School of Environmental

Health, is examining how and where Canadians are exposed to cancer-causing agents in our air, water, soil, food and everyday products. “In Canada we really have very little idea how many people are exposed to carcinogens, either in their community or workplace,” says project leader

Paul Demers. In fact, there are no statistics showing how many Canadians are exposed to occupational and environmental carcinogens, how and where they are exposed, and at what levels. “We want to know who is exposed, what they’re exposed to, and how to set policy to

address this,” says Demers, a professor and director of the School of Environmental Health. The project is funded through a \$4.1 million commitment from the Canadian Partnership Against Cancer, an independent agency funded by Health Canada. Data gathered from across the country will be used in a number of ways. It will help policy makers regulate and reduce people’s exposure to cancer-causing substances and provide important data to help guide future cancer research. The first-of-its-kind database will also consider geographic patterns of exposure to carcinogens in Canada, and identify high-risk groups to help

While it’s easy to point a finger at industrial sectors as polluters, there are more silent, discreet ways for substances to threaten communities and individuals. The research will also examine radiation and drugs used in chemotherapy, which can be toxic to health-care workers performing the procedures. Likewise, individuals working in dry cleaning and auto repair could be affected by the products they routinely use. Even schools, where cars may congregate to drop off children each day, can be a dangerous place: traffic-related air pollution has been associated with lung cancer. The group is pulling together data from government agencies

“We really don’t have much data along these lines in any Canadian jurisdiction.”

target prevention efforts. “The impetus behind this is cancer prevention,” Demers says. “We need to target groups that have the highest levels of exposure and know which carcinogens to target if we want to prevent cancer.” Demers and his team are looking at well-known carcinogens such as benzene and asbestos. They’re also considering other substances that have been suspected to be carcinogenic, such as lead – a known reproductive toxin and neurotoxin.

such as Statistics Canada, Environment Canada and the Pesticide Management Regulatory Agency, but also private industry and universities. The end product will be an “incredibly useful tool” for people who are looking at preventing cancer, Demers says. “We really don’t have much data along these lines in any Canadian jurisdiction,” he says. This data will be freely shared with policy makers, researchers and health and safety professionals when the project wraps up in 2012. **R**

# Profs care about teaching: UBC survey

By BRIAN LIN

UBC faculty members care deeply about teaching and learning and most feel they could teach with even greater effectiveness by applying new advances in the scholarship of teaching and learning. This is a key finding of a recent survey commissioned by the UBC Lasting Education, Achieved and Demonstrated (LEAD) Initiative. Conducted by Angus Reid Strategies, the anonymous, voluntary survey was sent to 3,200 faculty members. An impressive 35 per cent responded, far exceeding the pollster’s most optimistic expectations. “To be honest, we were hoping for, at best, a 25 per cent completion rate,” says Angus Reid vice president and UBC alumna Catherine Rogers. “It’s a real testament to our faculty’s enthusiasm for teaching and learning,” says Lorne Whitehead, University Leader in Education Innovation. “It also confirms what we’ve believed all along – that given the opportunity and resources, faculty are very interested in excelling in teaching in the same way their excellence in research has made UBC a world-class

university.” UBC is the first major Canadian university to ask all of its faculty members their opinions about teaching and learning and how it may be improved, according to Walter Sudmant, UBC’s director of Planning and Institutional Research. Commissioned following a recent series of group discussions hosted by the LEAD Initiative involving more than 300 faculty members, the survey aims to better understand how the university can support faculty in making teaching more rewarding for both the teachers and learners. One finding has already triggered a flurry of activities. “Faculty members have told us in both the group discussions and the survey that they’d like to share their experience with their colleagues – both in and outside of their own area of scholarship,” says Whitehead. To that end, LEAD joined forces with UBC’s Centre for Teaching and Academic Growth (TAG) and invited submissions for a special edition of TAG’s *Tapestry* magazine. Submissions quickly filled the pages of the magazine, with 23 faculty members from

diverse disciplines on both the Vancouver and Okanagan campuses sharing their thoughts on engaging students, tips and helpful resources and examples of teaching techniques that have worked in their classrooms. To add a personal touch, all participants included a brief video clip for the web version, available at [www.tapestry.ubc.ca](http://www.tapestry.ubc.ca). Other survey highlights include:

- Faculty members feel there is considerable room for improvement in the undergraduate learning experience, with non-interactive lecturing and large class sizes being the most detrimental aspects of current pedagogy.
- The majority of faculty members, regardless of rank or focus, want to apply new teaching techniques in their work but feel they do not have the tools or access to the latest proven pedagogy to take the classroom experience to the next level.
- Faculty members believe that excellence in teaching should be weighted more heavily in judging their success.

The full survey is available at [www.lead.ubc.ca/angusreidreport](http://www.lead.ubc.ca/angusreidreport) **R**

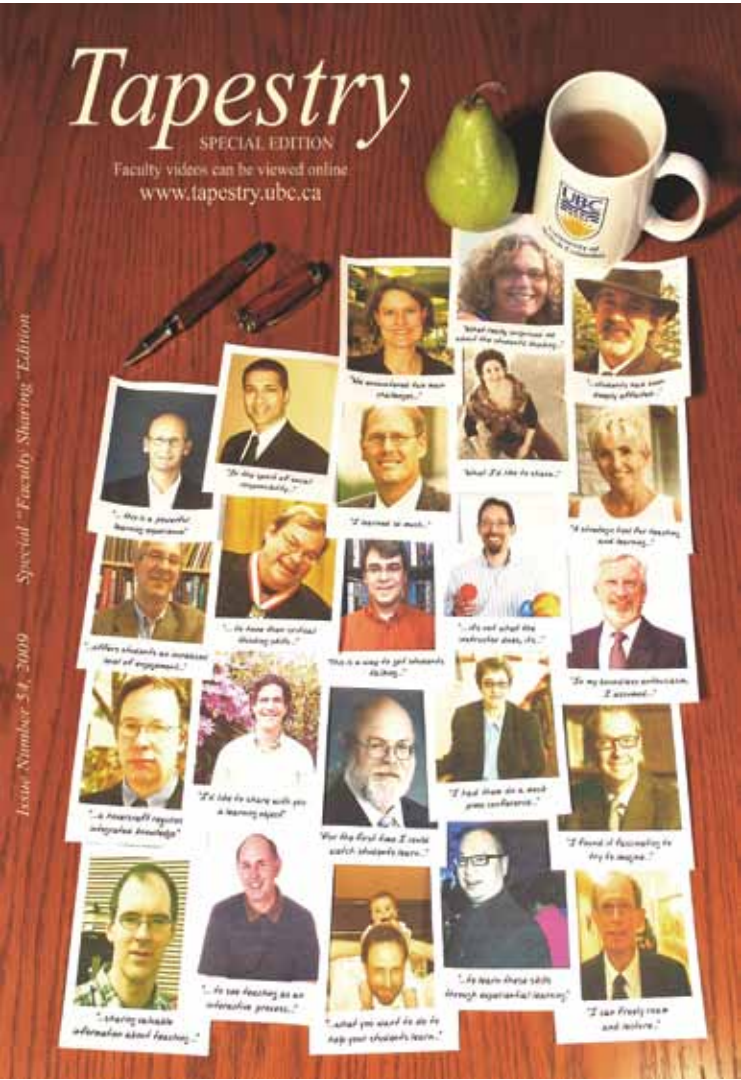


PHOTO: LORNE WHITEHEAD

LEAD joined hands with TAG in creating a special issue of *Tapestry* magazine focused on faculty sharing.



# Honours math degree for 18-year-old

By JODY JACOB

Eighteen-year-old Jason Sewell will receive a Bachelor of Science degree with honours in mathematics at UBC Okanagan's convocation ceremony this month. He's graduating with an overall grade-point average of about 95 per cent, reflecting high academic achievement throughout a post-secondary journey that began when he was just 10.

"My family went to an open house at what used to be Okanagan University College to look around," says the long-time Kelowna resident. "At one of the booths there was a competition to solve a logic puzzle, so I entered it and won. When everyone found out that I was 10 years old, and I was the only one to solve it, I guess it created a stir."

Sewell and his parents started communicating with a small group of math professors about how they could nurture Sewell's talent. At first, the teachers only acted as mentors to him, providing him with advice and guidance. However, by age 12 Sewell was taking his first post-secondary math course, and doing very well.

In fact, as time went on he began taking two or three university courses at a time,



Jason Sewell, 18, has completed an honours degree in mathematics at UBC Okanagan.

and by the age of 16 he had not only completed his high school graduation requirements, but was almost half way through his university degree. In September 2007 he began studying full-time at UBC Okanagan, taking up to six courses a semester to "catch up" to the graduating class of 2009.

"Math has always just made sense to me," says Sewell. "I like it because it explains so much using natural concepts. It is

something I like doing, and have been doing since I was four years old. I know I'm pretty young to be graduating from university, but really the whole process has been a natural progression for me."

Heinz Bauschke, a math professor at UBC Okanagan and Canada Research Chair in the field of convex analysis and optimization, has played a significant role in Sewell's educational journey over the

years, and says Sewell is one of the most talented students he has encountered in his career.

"Jason has extremely strong analytical and problem-solving skills, and I feel he has a very bright academic career ahead in mathematics should he choose to pursue this further," says Bauschke.

Fellow UBC Okanagan math professor Shawn Wang agrees.

"Jason Sewell is an A++

student," says Wang. "He has taken Analysis I and Analysis II with me, and earned 97 per cent and 100 per cent respectively. Analysis has been a hard-core and challenging course in mathematics, which demands a lot of abstract thinking rather than routine calculations. He is the only one who has got 100 per cent in Analysis II. In my opinion, Jason is a truly talented student."

And although the 18-year-old has certainly earned himself a well-deserved summer break, Sewell has no plans to slow down. He has received a Natural Sciences and Engineering Research Council Undergraduate Study Research Award (NSERC USRA) and will be back at UBC Okanagan this summer to work with Professor Bauschke.

In addition, Sewell has received the prestigious NSERC Canadian Graduate Scholarship and intends to take up graduate studies in mathematics, possibly at UBC Okanagan this fall.

After that, the future is wide open.

"Math is mainly something I like to do right now," says Sewell. "I have no great ideas about where I want to go with my career."

"I'm only 18." **R**

## New aboriginal business education accord at UBC

Business deans from universities and colleges across B.C. gathered at the University of British Columbia on May 8 to mark a new era of cooperation aimed at increasing Aboriginal participation in business education.

The Ch'nook Business Education Accord, comprised of 22 post-secondary institutions in B.C., was signed at the UBC Longhouse.

Established by the UBC First Nations House of Learning and the Sauder School of Business, the Ch'nook Aboriginal Business Education program works with a circle of advocates and supporters to raise Aboriginal awareness and interest in post-secondary business education.

For advertising,  
please contact

Pearlie Davison at

pearlie.davison@ubc.ca.

www.mediagroup.ubc.ca

Your UBC creative resource

### Creative Services

photography • medical illustration  
video and media production • graphic design

#### Photography

- award-winning images captured in studio or on location
- featured in UBC Reports, Focus, and more

#### Medical Illustration

- combining technology, art skills and detailed knowledge for a variety of medical disciplines

#### Video & Media Production

- complete digital video and multimedia production from concept to completion

#### Graphic Design

- specializing in design & layout for the academic, educational & healthcare communities

Situated on campus at:

The Media Group  
Woodward IRC Building, Rm B32  
2194 Health Sciences Mall  
Vancouver, BC V6T 1Z3

Email: mediagrp@interchange.ubc.ca  
T: (604) 822-5561  
F: (604) 822-2004  
www.mediagroup.ubc.ca

To 10th Ave  
Lower level of Woodward IRC Building  
Wesbrook Mall  
University Blvd  
Health Science Mall  
Agronomy Rd

**Media Group**

WEST COAST SUITES  
at The University of British Columbia

### Your Home Away from Home

Whether your next visit to the UBC campus in Vancouver is for business or pleasure, we invite you to experience our warm and welcoming suites with all the conveniences at home. All new. Right here.

BOOK ONLINE [www.ubcconferences.com](http://www.ubcconferences.com)  
TOLL FREE 888 822 1030 RESERVATIONS 604 822 1000

## Copies Plus

COPY • IMAGING • CENTRE

### THE BEST COPY & PRINT CENTRE

QUALITY • SERVICE • VALUE

#### Quality Digital Printing and Copying Service

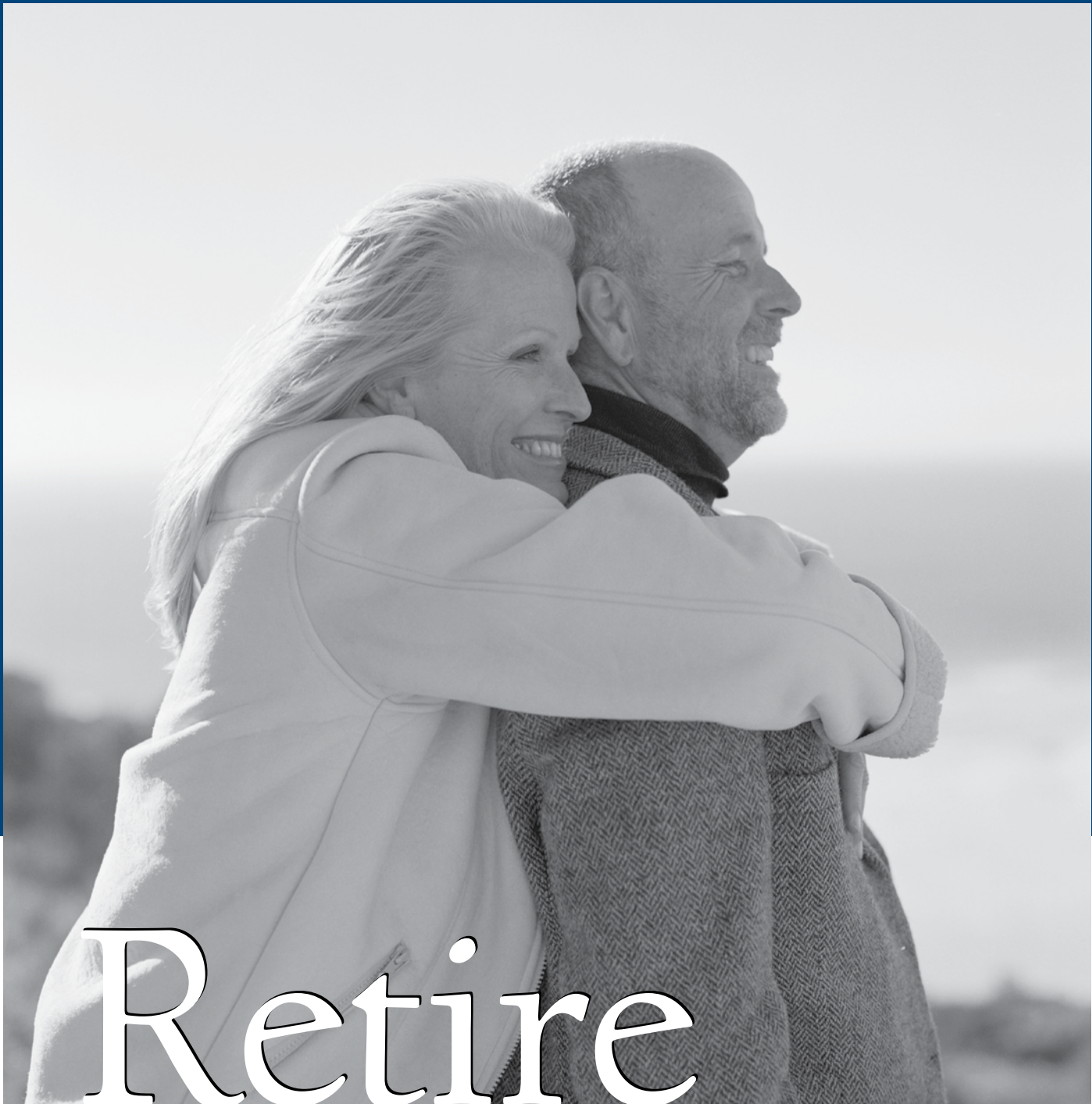
- High Speed B/W & Full Colour • Lamination • Full Colour Posters
- Wide Format B/W Copies, Prints and Scans • Self Serve Copiers • Booklet making
- Coil, Cerlox, Velo & Wire-O binding • Folding ...
- Email your files or ftp your large files to us

Over 20 years of Excellence  
1950 West Broadway  
Open 7 Days Mon-Fri 8am-9pm Sat-Sun 10am-6pm

[www.copiesplus.ca](http://www.copiesplus.ca)  
604-731-7868



SERVING UBC FACULTY MEMBERS FOR OVER 30 YEARS



For over 30 years, UBC Faculty Members have been maximizing their retirement income by *Retiring On Us*.

It works by integrating diverse investment assets and pension entitlements, like OAS, CPP and your UBC Pension, into one coherent plan. Call Clay Gillespie now to define the retirement you deserve. The sooner you begin to plan, the sooner you can make it a reality.

**Clay Gillespie, BBA, CIM, CFP, FCSI**  
**Vice President & Portfolio Manager**  
cgillespie@rogersgroup.com

604.732.6551  
www.rogersgroup.com

OnUs



ROGERS GROUP FINANCIAL ADVISORS LTD  
ROGERS GROUP INVESTMENT ADVISORS LTD, MEMBER CIPF