



Homelessness is everyone's problem

First multi-site randomized trial of housing interventions in Canada

One evening, Julian Somers left his office at SFU's Vancouver campus and strolled down Hastings Street to check out one of the city's new homeless shelters. Somers, an associate professor in the Faculty of Health Sciences, specializes in the treatment of drug addicts and is a member of SFU's Centre for Applied Research in Mental Health and Addiction (CARMHA). Somers was heading to the homeless shelter to understand how it was operating and who was using it. He observed an obvious sense of community among residents and learned that many return each night. "But you sense the absences in their lives, their health needs, post-trauma stress, a longing for opportunities such as a job, a place to live, friends, clothing and food," he says.

Somers is the principal investigator for the Vancouver site of the \$110-million five-city Canadian Multi-site Research Demonstration Project in Mental Health and Homelessness, sponsored by the Mental Health Commission of Canada in partnership with Health Canada. Somers' co-investigators include UBC/Providence Health Care Leadership Chair in Addiction Research Michael Krausz, and UBC Professor/Director of the Centre for Population Health Promotion Research James Frankish. The first randomized trial of housing interventions in Canada of its kind, the project will use a Housing First approach to immediately provide permanent housing to the homeless and the services to support them once they are stabilized, as an alternative to the current system of emergency shelter/transitional housing.

Of the \$23.5-million budget for the Vancouver site, approximately 80% is earmarked for housing and services for the homeless while the other 20% is for collecting data and producing new knowledge. In Vancouver, of 500 participants about 300 will receive rental support for at least two and a half years plus ongoing health support matching their individual needs.

Somers has a personal connection with Vancouver's homelessness problem: his father lived in a downtown eastside hotel with no support, and eventually died from alcohol-related disease. After obtaining a BA in Psychology from SFU, Somers received graduate degrees from the University of Washington in Seattle. At SFU one of his mentors was psychology professor Bruce




Alexander, whose theory of addiction examines the society in which addicts live.

"What do you do when a society is formed around factors other than strengthening communities and finding people a place in those communities?" Somers asks. This is a key question he hopes to answer in the current study, using focus groups made up of the homeless themselves. "Homeless people with mental disorders are grossly disenfranchised. They have no voice and few avenues for



Julian Somers

support," says Somers. What's more, the stigma towards the homeless and mentally ill held by some health care providers can be a major obstacle to better care. Co-investigator Dr. Krausz works at St. Paul's Hospital and he adds, "Our current health care system is designed for integrated people, not to help those at the margins of society." Both he and Somers hope the study will help change this.

Somers believes that if the homeless are given a range of choices, individuals will develop their own array of supports. "As a society we need to build a social scaffolding to reclaim these lost people. A scaffolding of new social ideas, a framework of thought, so people can be guided in their social behaviour and actions. That's the ultimate goal of the study." 

"My dad's story is the same as many others. He was a self-educated Irishman involved in local theatre. He was literate, had a house in Point Grey, and it wasn't just one single thing, but a series of events and missed opportunities that put him on a trajectory terminating in precarious housing, untreated illness, and premature death," says Somers.



Dr. B. Mario Pinto
VP-research

Message from the Vice-President, Research Support for research in the social sciences and humanities

External funding of scholarly research through traditional avenues is biased towards science and technology. Therefore, SFU has augmented its efforts to ensure that scholarly endeavours in the social sciences and humanities not be compromised and be supported adequately. Support for SSHRC small grants and travel grants, support for SSHRC 4A grants on demand, university publication grants, and safeguarding library resources are a top priority. To increase our participation in programs for major projects such as the Major Collaborative Research Institute (MCRI), and

Community University Research Alliance (CURA) program, as well as in social science research funded by the different provincial and federal ministries, support for grant preparation and administration is provided. Beginning in the 2009/10 academic year, 15 new SFU Community Trust Endowment Fund Graduate Fellowships in the Humanities worth \$6,250 each for one semester of study will be granted to doctoral students in the humanities. These fellowships were created in recognition that research in the humanities in general is an essential element of the fabric of a research-intensive university.



Work has begun on the renewal of SFU's chemistry wing, built in 1965. The provincial government and Industry Canada's Knowledge Infrastructure program are jointly funding this \$49.4-million project to bring the facility up to modern, green standards.

On April 8th, the Honourable Lynne Yelich, Minister of State for Western Economic Diversification, announced funding of \$884,106 for SFU's 4D LABS to purchase BC's first advanced mask writing facility. The equipment will accelerate the development of prototypes for potential applications in the health, information and energy sectors. For more information, visit www.4dlabs.ca.



Recent award winners

We have instituted an aggressive campaign to ensure that SFU faculty, staff, and students are nominated for external awards. This campaign has been very effective: in 2008, SFU ranked first among comprehensive universities in faculty awards by Maclean's magazine, and was also highly ranked in the number of students winning national awards. I am pleased to congratulate our most recent award winners:

- Sophie Lavieri, Chemistry - YWCA Women of Distinction Award
- William Davidson, Molecular Biology and Biochemistry - Genome BC Award for Scientific Excellence, LifeSciences BC (with Ben Koop of the University of Victoria)
- Isabelle Côté and Nicholas Dulvy, Biological Sciences - Zoological Society of London Marsh Awards
- Andrew Bennet, Chemistry - Bernard Bel-leau Award from the Canadian Society for Chemistry
- Bob Russell, Mathematics - Society for Industrial and Applied Mathematics Fellow
- Zamir Punja, Biological Sciences - Canadian Phytopathological Society Award for Outstanding Research
- Julian Guttman, Biological Sciences - Canadian Institutes of Health Research New Investigator Salary Award
- David Andolfatto, Economics - Bank of Canada Fellowship
- Vanier Canada Graduate Scholarships. This April, six students were awarded \$150,000 scholarships to pursue PhD studies at SFU. They are Sai Latt (Geography), Kim Reeves (Psychology), Nadine Deslauriers-Varin (Criminology), Alan Cheng (Chemistry), Karen Chan (Chemistry); and Rowan Trebilco (REM).

Public attitudes about genomics

Political scientist examines attitudes to wine technology

Political science professor David Laycock studies political ideologies and Canadian political parties, so why would he be interested in the public's opinion on the science of grapes? "The social and political implications and consequences of scientific and technological innovation are far bigger than people realize," says Laycock, "and they affect us in tremendous ways. Public opinion of scientific innovation is related to the way political ideologies function and get transformed."


Laycock and his team will receive about \$275,000 over three years from Genome BC to study public opinion about wine grape genomics, as part of the WineGen project led by UBC. Investigators in BC, Ontario, New York and New Zealand are perfecting methods using genetic sequences in grapes that code for desirable qualities. For instance, scientists can now analyze a particularly good Pinot Noir to find its exact flavour composition. Then they can determine what genes produce the desirable compounds and what factors cause them to be expressed. One ultimate goal is to have a simple diagnostic testing device that vintners can use in the field. It would give quantitative values for specific flavour combinations each grape possesses even before harvesting.

Genome BC mandates that at least 5% of any grant must go to social science or humanities research to study aspects of how new technologies affect society. "Our project does not have any very controversial innovations such as Genetically Modified Organisms (GMOs)," says Laycock, but nevertheless there are plenty of political consequences that will arise from the new technologies. First there is the subject of how such technological innovations are communicated to the wine industry. How can it be done in a way that is politically benign? Next

there are the potential regulatory barriers and supports. SFU political science professor Michael Howlett is leading a team that is working on these two areas. Laycock is studying public opinion. "We're trying to understand what is the relevant context of perceptions that Canadians have for passing judgement on these diagnostic devices, and the map of perceptions in the Canadian case with respect to biotechnology innovation in general," says Laycock.

Laycock is quick to point out that his research group has no particular interest in whether these technologies are adopted or rejected. "We're not doing PR," he says. Their studies are carefully designed to eliminate any sort of bias. The group is now examining results from their online public opinion poll, recently conducted by Angus Reid Strategies.

One of the outcomes of the SFU research will be a template for studying the political effects and policy implications of scientifically driven technological innovation in any economic sector, such as fisheries and forestry. "Politicians care tremendously how their policies might reflect the public opinion about these new technologies," says Laycock.

The SFU group also includes assistant professor Steven Weldon and post-doctoral fellow Andrea Migone, as well as several graduate students. 



Diane Luckow

Dr. David Laycock is a professor of political science at SFU studying the public opinion of genetic engineering in the wine industry.

UILO Update: Greentech

Local sustainable and green companies have a forum

E lmer Sum, a Technology Manager in SFU's University/Industry Liaison Office, noticed that many of the companies with offices in SFU's TIME Ventures Hub, an incubator for start-up high-tech companies located at the Vancouver campus, were focused on green technologies such as carbon credits and systems to reduce greenhouse gases. Sum asked them how SFU could help. "They said, we need a forum to bring people together with mutual interests in developing green technologies," says Sum. So the Vancouver Greentech Exchange (VGE) was born.

VGE brings together green tech companies, investors, government representatives, service providers, academic researchers, and the media for monthly networking sessions. The first one featured Vancouver mayor Gregor Robinson. "VGE is the place to be for making contacts,

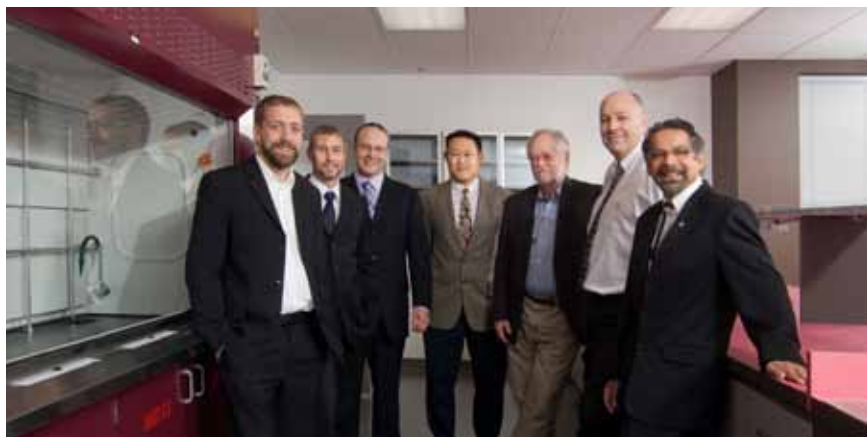


talking business, creating opportunities and developing partnerships in the area of green and clean technology," says Sum. Website: www.sfu.ca/uilo/VGE.html 

The first Vancouver Greentech Exchange drew more than 300 participants.

Medicinal chemistry research

Got an idea for a new drug? Now you can develop it here.



Greg Ehlers, LIDC

SFU and CDRD chemists from L: Robert Britton, Andrew Lewis, Jason Crawford, Peter Chua, Bob Young, Andrew Bennet and Mario Pinto in SFU's new Drug Research Institute.


SFU has a new Drug Research Institute (DRI), part of a regional Centre for Drug Research and Development (CDRD) that offers a full array of services to university faculty, students and staff who wish to pursue the development of new clinical drugs. The DRI is part of a network of facilities at five other institutions including UBC, UVic, UNBC and two provincial health authorities. CDRD CEO Natalie Dakers says, "Unlike other such initiatives, the BC CDRD is a true regional resource."

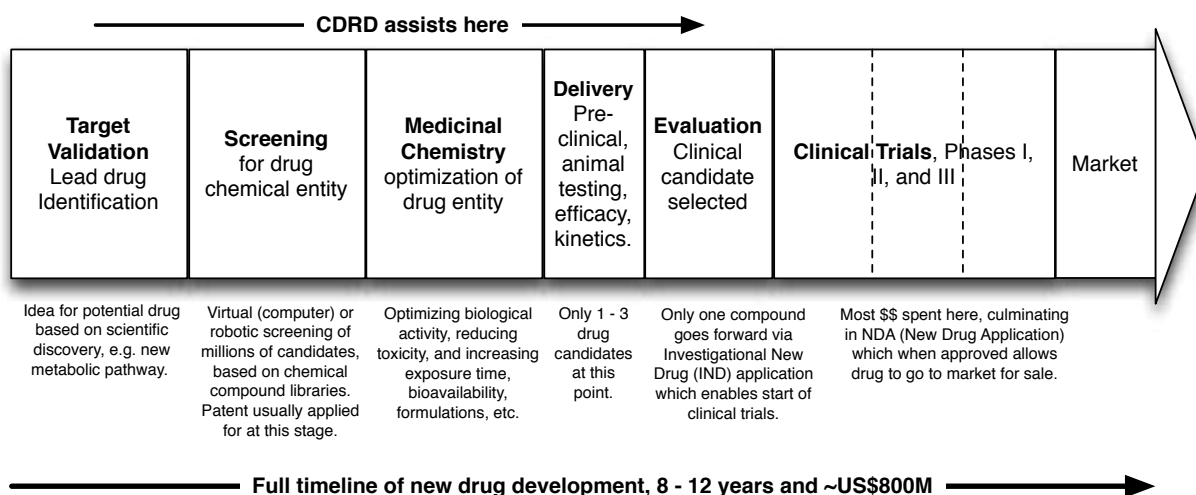
According to Dakers, it was founding director Mario Pinto, SFU VP-research and professor of chemistry, who conceived of this regional network model. SFU's centre focuses on medicinal chemistry and is located in Discovery Parks on Burnaby Mountain. The CDRD also has a pharmacology DRI at the BC Cancer Agency, as well as a commercialization group at UBC that focuses on business development and market assessment for new drugs in the CDRD pipeline.

"Medicinal chemistry is the key for making an interesting observation or active compound into a real therapeutic that has the properties of safety and consistent efficacy expected in the world of modern medicine," says Robert Young, SFU professor of chemistry and co-

director of the CDRD Division of Medicinal Chemistry. According to Young, the DRI will also be an excellent venue for research. "It will be the CDRD's centre for synthetic scale-up, which will allow the initial safety evaluations for drug approval to go forward," says Young. Researchers in the new facility will also be able to study metabolic issues (how and when the drugs are broken down by the body), which can make or break a promising new drug.

The new medicinal chemistry facility at SFU is exciting enough to have attracted one of our own alumni back from the US. Newly hired lab director Peter Chua grew up in Maple Ridge and graduated from SFU in 1992. After obtaining a PhD in Montreal, and working in the US drug industry for almost a decade, he has returned to head the DRI. The prospect of working with CDRD researchers including Young, who was VP of Medicinal Chemistry at Merck Frosst Canada and is a member of the Order of Canada, attracted Chua back to BC. He says, "A scientist can come to the CDRD with a potential drug project. Once approved, the scientist usually pays only for consumables such as chemicals and solvents. The CDRD provides expertise, manpower and instrumentation." At the end, when a promising drug candidate has been found (see graphic below) the commercialization arm of CDRD gets first dibs to negotiate with the scientist for intellectual property rights.

Funding for the SFU facility came in large part from a Western Economic Diversification grant. CDRD arose thanks to successful grants from the Canada Foundation for Innovation, BC Knowledge Development Fund, the Michael Smith Foundation for Health Research, Western Economic Diversification, the BC Ministry of Health, and the National Centres of Excellence for Commercialization and Research. Some funding also comes from drug companies such as Merck Frosst and Pfizer. Profit from commercially successful drugs will go back into CDRD to make it self-sustaining. 



Self regulate or be exposed

Business Admin prof studies practices that lead to failure

On April 2nd, 2009, Suncor, the world's second largest producer of oil sands crude, was fined \$675,000 for failing to install pollution control equipment at one of its plants. In a gratifying turn for academics, the Provincial Court of Alberta applied something new called creative sentencing, which, in part, results in a \$315,000 research project involving SFU assistant professor Stephanie Bertels of the Faculty of Business Administration. Bertels shares the funding with co-investigators Frances Bowen and Harrie Vredenburg at the University of Calgary's Haskayne School of Business. The project will examine the nature of Suncor's violation to develop new best practices for regulatory compliance, as well as exploring the benefits of creative sentencing for improving the organizational learning process.


With plenty of experience in the area of corporate compliance to government regulations, Bertels says, "It's not usually a big event like an oil spill that gets you into trouble. It's forgetting to submit an update report. One little error triggers a whole process that then uncovers other problems."

Bertels points to James Reason's *Swiss cheese model* to explain how a company like Suncor, which generally has a good reputation as a socially responsible corporate citizen, can have such system accidents. Complex systems can be thought of as multiple layers of Swiss cheese. Each layer has holes: if there is enough redundancy throughout the system, the holes never line up to let something bad make it all the way through. Bertels notes that a focus on business efficiency leads



managers to search for ways to reduce redundancies, but this usually means removing one or more slices of cheese, increasing the risk that something will be missed.

The Suncor project is a rare opportunity to get open access to the internal practices of a large corporation. "The impressive thing about this case is not the source of funding, but the access the company is giving us," says Bertels. "The business literature often calls for studies of failures, so this research matters because we have a chance to do just that. What's more, this is a subtle failure. It involves the everyday, mundane, boring practices that it takes to keep people and systems safe."

The SFU Faculty of Business Administration is gaining a solid reputation for their expertise in sustainability. Besides Bertels, several other Business faculty members work in the area of sustainability and corporate responsibility, including Jeremy Hall, Carolyn Egri, John Pelozo, and Irene Gordon. 

Stephanie Bertels is an assistant professor in the Faculty of Business Administration. Before coming to SFU in the Fall of 2008, Bertels spent two years as a postdoc at the University of Michigan in the Erb Institute for Sustainable Global Enterprise and several years in the Burnaby office of Golder Associates as a professional engineer. Her PhD thesis looked at the challenge of ensuring the safety of municipal drinking water systems.

Black history in Canada


Western Europeans were not the only Canadian settlers

While everyone is celebrating the first Black President of the United States, it's not commonly known that the first Governor of British Columbia, Sir James Douglas, the son of a Scottish sugar planter and a free coloured woman in British Guiana, was as black as Barack Obama. SFU history professor Afua Cooper would like to change those perceptions.

Originally from Jamaica, Cooper came to Canada to visit relatives in Toronto in 1980 and never left. Ultimately, she received a PhD in Canadian History from the University of Toronto, and now holds the Ruth Wynn Woodward Chair in the SFU Department of Women's Studies. Her groundbreaking work on gender and slavery in Canada includes a recent book called "The Hanging of Angelique: The untold story of slavery in Canada and the burning of Old Montreal".

Cooper enjoys telling the story of how in 1858 James Douglas encouraged 800 Black Californians being per-

secuted under California's repressive Black codes to migrate to the new colony of Vancouver Island. The 'Black pioneers', as they came to be called, were thus one of the founding groups of BC. She wonders why these and other facts are not in Canadian history texts. "In Canada we have this nationalist history that is ethnocentric, basically about white people. It's preposterous to think that Western Europe and North America have dominated the world for 400 years." Cooper points out that funding is difficult to find for Black history research in Canada, yet Black communities have a strong claim to being included in the Canadian nation-state.

Cooper recently organized a workshop at the Segal School of Business called "Conceptualizing Black Studies". In total, 22 scholars from across Canada, Europe and USA came to discuss how to improve the situation, and whether to import Black education models from the US or Europe or to develop a uniquely Canadian approach. 



"What does multiculturalism really mean?" asks Afua Cooper. "After the clothing, food and festivals, we need to get serious about culture at a deeper level, so that multiculturalism gets infused in places of power: academia, business and politics."

Student entrepreneur news

Venture Connection helps students develop businesses




Dominic Wong

Metroleap partners Alan Juristovski (L) and Milun Tesovic. In May, Tesovic won the 2009 National Student Entrepreneur Championship organized by ACE (Advancing Canadian Entrepreneurship). He will represent Canada at the Global Student Entrepreneur Awards in Chicago this fall.

Venture Labs, part of the Venture Connection hub for all things entrepreneurial at SFU, is an early-stage incubator that provides support for SFU student business ventures, including mentorship and other services. The first company to participate was MetroLeap Media Ltd., an unusual but compelling client because they already had a proven business model. MetroLeap's website metrolyrics.com is the number one site for song lyrics online, and the most visited website operated by a Canadian company.

MetroLeap's creator, Milun Tesovic (23), is a Business Administration student at SFU, as is his partner Alan Juristovski. As a participant in Venture Labs, MetroLeap has benefitted from access to mentors who provide support to the company's phenomenal growth.

Venture Connection manager Janice OBriain says, "We see an increase in student entrepreneurial activity at SFU and know there will be growing demand for Venture Labs." Office space at SFU Surrey (and eventually Burnaby) campuses is provided to student entrepreneurs for a limited time period of 8-12 months. To learn more check out www.sfu.ca/vc/venturelabs. 

Who's new



Courtesy PHS

Bill Barrable is SFU's newest Entrepreneur-in-Residence (EIR), joining other EIRs Doug Blakeway, Phil Holland and Basil Peters, who, through SFU's Venture Connection, are connecting with SFU researchers and their innovations for the purpose of increasing the number and quality of SFU spin-off companies.

Barrable is co-founder and director of Natalus Life Science Capital (VCC) Ltd. He was the chief executive of British Columbia Transplant from 1994 to 2009, during which time BC Transplant was awarded the Canada Award for Excellence from the National Quality Institute. In 2001, he became the founding Chair of the Board of Directors of the Michael Smith Foundation for Health Research. He has been a member of numerous voluntary boards and holds a BA (Honours) from Queen's University, and a Master of Health Science in Healthcare Administration from the University of Toronto. He was previously named one of Canada's Top 40 under 40.



Greg Ehlers, LIDC

Adiam Brhane is SFU's new TIME Centre Program Assistant. Brhane helps organize, market, and implement events and educational seminars; maintains the TIME website; creates marketing communications material; and assists TIME's business centre members. Brhane recently obtained her BA from SFU, and has held co-op positions at BCNET and Public Works and Government Services Canada.




Dale Northey, LIDC

Barry Shell is the new Faculty Research & Library Communications manager responsible for writing *SFU Research Matters*, as well as the *SFU Library Update* newsletter, and various other publications. Shell created one of the first web sites to popularize SFU research in 1994. He also runs www.science.ca, currently the top Google hit for Canadian science. Shell has written four books and did freelance reporting on radio, in magazines and newspapers. His last book, *Sensational Scientists*, won a national book award in 2005. Shell has degrees from Reed College (BA) and UBC (MSc) and sits on the board of the Canadian Internet Registration Authority responsible for .ca Internet names.



Greg Ehlers, LIDC

Deborah Herbert is the new SFU Campus Coordinator for the Pacific Institute for Climate Solutions (PICS). The institute will harness the intellectual resources of BC's four research-intensive universities (SFU, UBC, UNBC and UVic) to develop innovative climate change solutions, seek new opportunities for positive adaptation, and lead the way to a vibrant low-carbon economy.

Herbert will coordinate and facilitate the engagement of SFU researchers and students in PICS activities and initiatives. Deborah brings to her role experience in research management, gained through managing interdisciplinary sustainability research projects at UBC, as well as a background in climate change research. Deborah received her BA in Economics from Carleton University and Master of Arts in Resource Management and Environmental Studies from UBC. 

RESEARCH MATTERS

Published by the Office of the Vice-President, Research
Simon Fraser University
Burnaby, B.C. V5A 1S6
778-782-4152
vprsec@sfu.ca
Expanded stories video clips and much more at www.sfu.ca/vpresearch

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