RESEARCH HIGHLIGHTS @ UNBC

May 2010, No. 2

Please enjoy our second research newsletter. This two-page brief presents a small fraction of the scholarly activities pursued by UNBC's researchers, and we invite you to check our website for more information (http://www.unbc.ca/research/). We look forward to any input you might have: please email Rheanna Robinson, Research Project Officer, at rrobinso@unbc.ca.

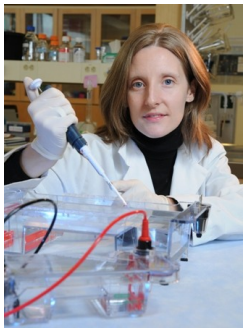
Gail Fondahl, VP Research

Research Highlights:

- Obesity and Type 2 Diabetes
- Pine Beetle Research
- Fulbright Research Award
- UNBC Student Earns BC Cancer Research Scholarship
- HIV/AIDS Research Funded
- New Book on Rural and Small Town Development

En Route to Healthy Northern Communities—A New Laboratory to Enhance UNBC's Research into Obesity and Type 2 Diabetes

Dr. Sarah Gray, Assistant Professor in the Northern Medical Program (NMP), was recently awarded funding through the Canadian Foundation for Innovation —Leaders Opportunity Fund, BC Knowledge Development Fund and the NMP for her project, *Metabolic Health Research Laboratory for the Study of Obesity and Type 2 Diabetes*. The funding will help develop a biomedical research laboratory at UNBC for the study of metabolic diseases such as Type 2 diabetes. In Canada, diabetes affects more than 2 million people, is responsible for 41,500 deaths each year, and incurs annual health care costs of approximately $13.2 billion. Dr Gray's interests lie in how changes in fat contribute to the development of Type 2 diabetes.



Dr. Sarah Gray

Automated DNA Sequencer for Mountain Pine Beetle Genomics Research

To understand how to manage mountain pine beetle outbreaks, we need to understand the genetic variation of this insect. Drs. Dezene Huber and Brent Murray and their teams are assessing such variation by analyzing about 4000 mountain pine beetles collected at over 50 locations in Western Canada. Preliminary work has already revealed significant differences between 'northern' and 'southern' beetle populations. Additional mountain pine beetles will be collected and analyzed this year. These studies, when completed, will represent the most comprehensive analysis of genetic variation in a forest pest system to date. Thanks to funding from the Canada Foundation for Innovation, British Columbia Knowledge Development Fund and Applied Biosystems, UNBC will soon have the necessary equipment to conduct the analysis.

Faculty Member Honoured with Prestigious Fulbright Research Award

Dr. Sascha Auerbach, Assistant Professor of History, has been selected by the Council for International Exchange of Scholars and the US-UK Fulbright Commission to receive a Fulbright Research Award to the School of Laws, King's College London (KCL), one of the top research universities in the UK. During his tenure as a Fulbright Scholar at KCL, which will commence in January 2011, Dr. Auerbach will be conducting interdisciplinary research into the relationship between race, law, and culture in interwar Britain. The research will contribute to his second book, *Armed with Sword and Scales: Law, Identity, and the Culture of the Courtroom in Modern Britain*. Dr. Auerbach is looking forward to working with faculty and students at KCL ,and the opportunities of fostering intellectual and cultural exchange on his trip.

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For further information please contact: The Office of Research, University of Northern British Columbia
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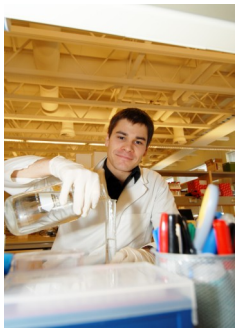
UNBC Student Wins BC Cancer Research Studentship

Dustin King, an Ojibway First Nation undergraduate student who was raised in **Burns Lake**, won a prestigious Studentship from the BC Cancer Agency to conduct molecular biology research at UNBC this summer. He will carry out cancer research under Chemistry professor Dr. Chow Lee, investigating how certain RNA molecules create conditions conducive to the spread of the disease in the body. King has designed molecules in the lab which inhibit a protein interaction that promotes cancer, and can decrease the spread of cancer. The research is expected to be completed this summer, and results published in an academic journal in the fall. King looks forward to mentoring and having outreach opportunities with other Aboriginal students when he begins graduate school at UBC in September 2010.



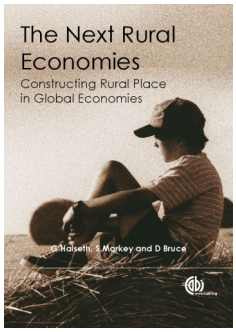
Dustin King

HIV/AIDS Community-Based Research Program Funded

Heather Peters, an Associate Professor of Social Work at the **Quesnel** campus, was recently awarded a Canadian Institutes of Health Research (CIHR) grant. The funds from this grant will be used to explore hidden illicit drug use from the view point of drug users and their service providers, while researching the use of harm reduction education in northern and rural BC. The goals of the research are to: reduce the incidence of HIV by increasing drug users' knowledge of harm reduction activities; link illicit drug users to services; document and analyze barriers to health and social service access; and recommend health policy, social policy, and service delivery changes to improve access to services, thus reducing the risk of HIV.

A New Vision for Rural and Small Town Development

A new book, *The Next Rural Economies,* is the result of a workshop held at UNBC two years ago that brought together rural and small-town experts from seven countries along with more than 60 officials from northern BC to share thoughts on the future of rural development. A unifying theme was to look beyond natural resource endowments and the challenges of isolation and distance, to focus on the unique attributes of particular communities and regions. "What emerged from the discussion was that northern BC is exceptionally well-placed with its abundance of assets and its understanding of the issues," says Dr. Greg Halseth, a Geography professor and Canada Research Chair in Rural and Small Town Studies , who was the lead for the workshop and resulting book. "What we still need, however, is more attention on mobilizing our assets in support of local aspirations." As part of the ongoing effort to connect communities with local research, UNBC's Community Development Institute is presenting a number of talks in northern BC communities.



The Next Rural Economies