

## RESEARCH HIGHLIGHTS @ UNBC

January 2010, No. 1

Greetings! In order to better communicate some of the highlights of UNBC's research to our elected representatives and others, we are initiating this newsletter. We hope to offer an update of key stories regularly, and welcome any comments on how to make this brief more useful to you. Thank you for your continued support of UNBC!

Gail Fondahl, VP Research

## Research

## Highlights:

- New CRC Joins UNBC
- UNBC Cancer Research Draws International Attention
- CRC In Climate Prediction Renewed
- Community Sustainability: A Northern First Nation On A Mission
- Informing Sustainability Planning
- Research Resources Expand At UNBC
- UNBC Researcher Named Humanitarian Hero

### New Canada Research Chair focused On Community Well-Being Joins UNBC

A better understanding of how waterways influence the health of communities, economies, and the world is the focus of UNBC's newest Canada Research Chair (CRC). Dr. Margot Parkes was recently named CRC in Health, Ecosystems, and Society. Originally from New Zealand, she comes to northern BC to examine the effect of changing ecosystems on the well-being of communities, with a focus on water as a common resource for livelihoods, food security, culture and economies. Her work will bring together organizations, communities and researchers involved in health and water governance in the northern Fraser River Basin, which includes Prince George, Burns Lake, Fort St. James, Fraser Lake, McBride, Valemount, and Vanderhoof.



Dr. Margot Parkes

### UNBC Cancer Research Attracts International Attention

Researchers at UNBC, in collaboration with scientists in Italy and the United States, have brought attention to a discovery in molecular biology that may have significant implications for the treatment of cancer. Led by Biochemistry and Molecular Biology professor Dr. Chow Lee, the group has been investigating factors related to the growth and aggression of cancer cells. Recently, they have focused on a naturally occurring enzyme known as APE1. "This research has the potential to be very beneficial for the treatment of cancer and other maladies. If nothing else, it could mean having to rewrite chapters in biochemistry and molecular biology textbooks. Local residents can take pride in the fact that research being conducted in their own backyard is making a difference in the world," says Dr. Lee.

### Canada Research Chair Continues Work Climate Prediction and Predictability—Potential To Improve Resource Management

Understanding and predicting seasonal to inter-annual climate variation is of great practical importance to a number of Canadian industries, including agriculture, fisheries, and hydroelectric generation. Building on his achievements from his first term as CRC, such as the development of two improved El Niño prediction models, Dr. Youmin Tang will continue to pursue his goals of improving climate prediction and estimating the uncertainty of such prediction thanks to the recent approval of his second term. His research promises to hold important outcomes that will assist in the decision-making processes for the management of water resources, agriculture, forestry, fisheries, power utilities, and other climate-sensitive sectors of the Canadian economy. Funding from the Canada Foundation for Innovation will allow Dr. Tang to acquire a computing laboratory essential to his research.

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### A Northern First Nation On A Mission Toward Community Sustainability

The recent UN Climate Change Conference in Copenhagen has reinvigorated discussions around global ideas such as "carbon offset systems," and "cap and trade." But how can we funnel these large-scale ideas into small-scale local action? Wondering how a small, rural community can best tackle the process of becoming greener, the Stel-lat'en First Nation recently approached environmental scientist and UNBC Canada Research Chair in Northern Hydrometeorology Dr. Stephen Déry to help find answers for their community of Stellaquo, west of Fraser Lake. The project, supported by the federal government's *ecoACTION* initiative, and a fellowship by the Canadian Research Network *Mathematics of Information Technology and Complex Systems*, was successfully kicked off in December, when community members brought their enthusiasm to reduce emissions to the first of a series of community workshops.



Eddison Lee Johnson, Dr. Stephen Déry, and Stel-lat'en Forestry Coordinator Stacey Naziel (L to R) near the community of Stellaquo

### Informing Sustainability Planning In Prince George

Political scientist Dr. Tracy Summerville is leading a team of researchers on an initiative to integrate Future Forest Ecosystems scientific predictions into community planning and governance. The goal of the project, supported by the Future Forest Ecosystems Scientific Council, is to enhance communication among researchers studying long-term climate change risks, community members and local government. With northern communities facing challenges ranging from economic restructuring to climate change, the research will also inform Prince George's long-term sustainability plans.

### Research Resources Expand at UNBC

UNBC's Northern BC Archives at the Geoffrey R. Weller Library now holds the archival records of The Honourable Iona Campagnolo, P.C., O.C., O.B.C., former Lieutenant-Governor of British Columbia and UNBC's Founding Chancellor. The archival records encompass textual and photographic materials documenting her personal and career-related activities from the 1950s onward. The records detail Campagnolo's early broadcasting career and political activism in Prince Rupert, her involvement with non-governmental organizations, and include personal writings, speeches and certificates related to her career in public service.



The Honourable Iona Campagnolo

### Dr. Chris Opio Named Humanitarian Hero

Dr. Chris Opio's work to provide clean water wells to villages in his native Uganda has been recognized by *Verge Magazine*, which named him one of its 14 Global Heroes for 2009. Dr. Opio is an Associate Professor of UNBC's Ecosystem Science and Management Program.

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