A Newsletter for UNBC Alumni and Friends

Fall 2005

Research

UNBC attracts the best and the brightest to become one of the top universities in Canada

Reeling in Research: Page 2 Canada Research Chairs: Page 3

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Survival of the Fittest

UNBC grad Julia Gerlach on her life-changing encounter in the woods

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Watch Your Language

Professor Margaret Seguin Anderson fights to keep a voice alive

Back Cover

UNBC student Masresha Berhanu

UNBCUpFront



April, 2005 - Premier Gordon Campbell announces government funding for the NSC.

Northern Sport Centre Consortium

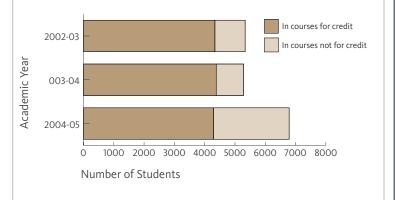
A group of companies has been identified to design, build, and operate the new Northern Sport Centre, which will be a public facility owned by UNBC and located on the Prince George campus. The consortium is comprised of Giffels Design-Build Inc. and Giffels Partnership Solutions Inc., Chernoff Thompson Architects, NORR Limited, Leisure Recreation Group, and Western Industrial Contractors Ltd. of Prince George. Construction of the Northern Sport Centre is expected to begin in the spring. For more information, visit www.unbc.ca/nsc.

Teaching & Learning Centre

Renovations to the Geoffrey R. Weller Library are complete, and construction of the new Teaching & Learning Centre is now underway. The building will house classrooms, offices, and research space.

Student Enrolment

About 6,800 people participated in UNBC courses during the entire 2004-05 academic year – the highest number ever. This includes students registered in degree programs (for credit) and those in Continuing Studies courses (not for credit).



UNBC Goes Wireless

In addition to having one of the most advanced fibre-optic telecommunications networks of any university, UNBC now has wireless internet access and network connectivity in most lecture theatres and common areas at the Prince George campus. The University is also examining ways to incorporate wireless technology in classrooms to enhance the learning experience. wireless.unbc.ca

The Education Economy

A study led by Initiatives Prince George (IPG) and the Downtown Business Improvement Association has determined that the annual local economic impact of the College of New Caledonia and UNBC is \$721 million. Conducted by UNBC Economics student Tara Bogh, the study assessed the impact of wages, student spending, institutional spending (including research), and alumni earnings. Recognizing the strength of the education economy, UNBC has partnered with IPG to establish an office in downtown Vancouver that will help to market Prince George as a centre for business, tourism, and education.



On the Cover Masresha Berhanu

"I came to UNBC from Ethiopia in September by way of the WUSC (World University Service of Canada) student refugee program. I'm pursuing a science degree with a joint major in Math and Physics, and in my spare time, I love to watch movies and play soccer.

In the future, I plan to play a part in the development of the *Unified Field Theory*, a movement among many scientists to tie the fundamental forces of nature (nuclear, electromagnetic, gravitational, etc.) into a single, comprehensive set of equations. Some people call it the *Theory of Everything*, as it could potentially unlock all of the secrets of nature and change our perception of the world to an extent that can't even be imagined today.

I am very grateful to the students, faculty, and my WUSC committee, who have all made it possible for me to come to Canada and pursue my dreams."

Reeling in Research

In recognition of his vision for research and its contributions to society, Max Blouw has received the 2005 Science and Technology Champion of the Year award from the BC Innovation Council. The avid fisherman would say UNBC has only just skimmed the surface of what's possible in northern BC.

Who is Max Blouw?



is title is Vice-President Research, but it might as well be Research Champion. Max Blouw took the helm of UNBC's research enterprise eight years ago, and over that time, UNBC has become one of the most researchintensive small universities in Canada, with research contributing huge dividends to the classroom environment at UNBC and to the businesses and communities of northern BC.

www.unbc.ca/research

Accomplishments

- When Max was appointed to lead the Office of Research in 1997, the University was attracting about \$3 million in annual research funding, mostly from provincial and federal sources. Today, UNBC attracts about \$10 million.
- A national study of universities conducted last fall showed that UNBC was second among all small universities in Canada for its research intensity.
- This past spring, Max hosted the governing council for the Natural Sciences and Engineering Research Council of Canada (NSERC), which annually awards close to one billion dollars in research funding.



Canada Research

stablished by the Government of Canada in 2000, the Canada Research Chairs program provides universities across the country with new funding to attract researchers and make the institutions world-class centres for research and development. UNBC has been a big player in the program: among Canada's two-dozen small universities, UNBC has the second-highest number of Canada Research Chairs.

Greg Halseth
Rural and Small
Town Studies

Greg is developing a socioeconomic assessment of small one-industry towns, focusing on their economic viability in the face of growing urbanization. This work led him to create the Northern BC Community Development Institute (CDI) at UNBC, a research institute that focuses on two fundamental issues for communities in northern BC: community capacity and community development. His local research has led into major national studies of the New Rural Economy.

Greg came to UNBC in 1994 and has been a Canada Research Chair since 2002.

2 Russ Dawson Avian Ecology

> Russ is studying issues of evolution and ecology in northern forests. In particular, he is examining birds such as swallows, bluebirds, and kestrels and how their reproductive success provides an excellent indication of the overall health of the environment. Russ's techniques on measuring the response of birds to environmental degradation will continue to be useful in efforts aimed at protecting wildlife habitat while engaging in resource management.

Russ came to UNBC in 2000 from McGill University and the University of Saskatchewan.

Joselito Arocena Soil and Environmental Sciences

With the help of sophisticated equipment (such as electron microscopes), Joselito studies the mineral composition of soil samples from around the world. He researches the geochemical principles of soil mineral transformation, soil formation, the sustainable fertility of forest soils, and the role of fungal species in breaking down and formulating soil minerals. Ultimately, healthy forests are dependent on productive soils.

Joselito came to UNBC in 1994 and was appointed as the University's first Canada Research Chair in 2001.



Chairs at UNBC

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Dezene Huber Forest Entomology and Chemical Ecology

The goal of Dezene's research is to better understand the chemical warfare that occurs between insects, such as the mountain pine beetle, and the trees and plants upon which they feed. When a pine beetle attacks a tree, for example, it is literally bombarded by a toxic chemical cocktail as well as the tree's resin as it tries to flush the beetle out. How do insects insulate themselves against this attack? The answer may lead to new approaches in forest pest management.

Dezene came to UNBC this year from the University of California in Davis.



Stephen Dery Northern Hydrometeorology

Stephen studies the effects of climate change in the polar regions of the Northern Hemisphere, where global warming is already having a significant effect. That trend is expected to continue: over the next century, the temperature increase in the Far North is predicted to be higher than any other region on earth. His research focuses on hydrometeorology, the study of rising air temperatures on the water cycle. Much of his research will be based at UNBC's Quesnel River Research Centre.

Stephen came to UNBC this year from Princeton and the prestigious Lamont-Doherty Earth Observatory at Columbia University.



Kevin Hutchings
Romantic Studies:
Environment, Culture
and Representation

Kevin argues that our presentday perspectives on the environment, culture, and First Nations can be traced back to the literature of the Romantic Period (c. 1780-1850). The nature poets of this era championed, for the first time, ideals related to conservation, preservation, and environmental ethics. Kevin studies writings by European and other authors about Canadian environments and peoples, and he examines rare and often neglected texts written by nineteenthcentury First Nations authors. His research is helping to explain the history of Canadian environmentalism.

Kevin came to UNBC in 2000 from the University of Western Ontario.



Youmin Tang
Climate Prediction
and Predictability

Youmin's research uses sophisticated numerical models and mathematical tools to predict seasonal climate and put confidence limits on the predictions – a significant new approach among researchers in this field. Previously, he has developed ENSO (El Nino Southern Oscillation) prediction models with the knowledge that more accurate seasonal climate prediction is of vital importance to various sectors of the economy: agriculture, forest management, fisheries, tourism, and power generation.

Youmin came to UNBC this year from New York University's world-renowned Courant Institute of Mathematical Sciences.





I am not getting up every morning feeling grateful to be alive, but rather I am grateful to have so many wonderful people around me.

consider myself fortunate to have worked in some of the most beautiful areas in and around northern BC, from the interior to the ancient rainforests on the Northwest coast. My love of the outdoors led me to complete a bachelor's degree in Resource Recreation and Tourism. I worked in the field for a number of years, but I recently made the big decision to go back to school to become a nurse.

Just this past spring, I decided, for the very last time, to accept a job offer doing Silviculture work (forestry) in Fort Nelson, an area of BC I had never seen. Some tough outdoor work was perfect since I was also training hard to qualify for Ironman Canada again – a race I hadn't competed in since 2002. The weeks in Fort Nelson flew by and it was already the end of May when an accident suddenly changed my life.

Like every day, a group of us were dropped off by helicopter in a remote cut block in the forest. It was early afternoon when either a noise or instinct caused me to turn around. I found myself looking into the eyes of a black bear, only about five metres away. Shocked, I yelled at him and struggled to reach my bear spray, but he charged and knocked me to the ground. I ended up belly down, dousing both of us with the bear spray. It didn't have any effect. Over the next few minutes all kinds of things happened: I tried frantically to radio my co-workers, I screamed a lot, I managed to get to my feet and bonk the bear on his nose with the empty spray container - but he pushed me down again. He ripped flesh from my head and upper arms, and punctured and scratched my legs considerably. I was conscious the whole time, but I don't remember feeling pain... that came later.

Hearing my screams, my co-workers came running and my friend Debbie fired some gun shots in the air and scared the bear away. Our helicopter arrived within 15 minutes and I was flown to the University Hospital in Edmonton where I endured the first of five surgeries that would take place over the following two months.

It was the time spent in the hospital that allowed me to think about my future. My accident and the experience in the hospital futher encouraged me to pursue a career as a nurse. I applied and was accepted into the new Nursing program in Terrace, where I had lived and studied before. Terrace is the place I want to be at this point in my life.

I got to meet so many wonderful people who helped to change my life for the better. Words cannot describe how much I appreciate the support from family, friends, the incredible hospital staff, other athletes, and even people I had never met! Since the accident, I am not getting up every morning feeling more grateful to be alive, but rather I am grateful to have so many wonderful people around me.

I am working on a photo album that will contain all of my photos since I started my job in Fort Nelson at the beginning of May. The title of the album will be "The Best Summer of My Life".

P.S. I recently completed my first half-marathon since the accident and completed it in a reasonable time. The best summer of my life had not ended yet...



Julia Gerlach

Julia came to Canada from Germany in 1996 and is an accomplished athlete, having even competed in the Ironman triathlon in Hawaii. She graduated from UNBC in 2003 with a Resource Recreation degree and is now in the Nursing program in Terrace.



UNBCAlumni



Alumni News & Events

Alumni Board of Directors 2005

President Gord Brownridge
Vice President Ryan Schroeder
Treasurer Karl Penner
Recorder Darren Ditto
Directors-at-Large Helen Domshy

Zane Robison
Matthew Thomson
Jay Graham
Todd Jordan
Trevor Stach
Mike Reed

All UNBC alumni are invited to attend Association Board meetings. Elections for the next executive will be held in May.

New Scholarship

The Association is pleased to announce that Western Chartered Financial Inc. is establishing two new scholarships for UNBC Athletics.

Golf Tournament Success

This year's Annual UNBC Alumni Association Charity Golf Tournament raised \$16,000 for bursaries and UNBC Athletics. The Association thanks all volunteers, sponsors, and title sponsor Western Chartered Financial Inc. for their support.

UNBC Ambassador Program

UNBC Alumni who want to share their university experiences with prospective students are invited to apply to be a UNBC Ambassador.

Contact the Alumni Association

Vicki Pilot, Alumni Association Office alumni@unbc.ca or (250) 960-5873

www.unbc.ca/alumni





UNBC Grads: Where are they Now?

UNBC Nursing grads are staying in Northern BC. Northern Health hired 48 of 58 nursing graduates from UNBC's Class of 2005.

Karen Went (BSc Wildlife Biology '02) is an Adult Educator for the Nunavut Arctic College Learning Centre in Kugluktuk, NU.

Jamie Campbell (BA International Studies '00) is a Policy Officer for the Human Rights Program, Department of Canadian Heritage, in Ottawa, ON.

Jeffrey Anderson (BA General '05) is a Maritime Surface and Sub-Surface (MARS) Officer in the Royal Canadian Navy, stationed in Esquimalt, BC.

Christine Russell (BA English '01) is the Communications & Quality Analyst for the City of Prince George, BC.

Olivia Lestideau (BSc Psychology '05) is a Youth Care Worker for Eagle Nest Community and Aboriginal Services in Prince George, BC.

Tina Finan (BComm Accounting and Finance '02) is the Director of Finance for CP Ships in London, England.

Melvin Paul (BA First Nations Studies '05) is a Natural Resources Assistant and Community Fisheries Representative for the Canim Lake Band in Forest Grove, BC.

Patricia McClelland (MEd Education '03) is an instructor at the Northern Lights College in Fort St. John, BC.

Patrick Lucas (BA Environmental Studies '03) is a Community Planning Facilitator for CUSO Lao in Lao's Oudomxai province.

Lisa Walker (BSc Forestry '01) is an Executive Forester with Geoterra Integrated Resource Systems Ltd. in Smithers, BC.

Heather Smith (BA Anthropology 'oo & MSc Community Health 'o4) is a Northern Medical Program student at UNBC.

Ali Brost (BSc Natural Resources
Management '04) is a Park Ranger in
Tombstone Territorial Park in the Yukon.

Nicole Robson (BA International Studies 'oo) is a Probation Officer in Williams Lake, BC.

Cheyenne Lawrie (BSc Wildlife Biology '03) is a Project Coordinator for the Bluenose Coastal Action Foundation's Roseate Tern Recovery Project in Halifax, NS, and is pursuing a master's degree in Resource and Environmental Management at Dalhousie University.

UNBCGiving

UNBC Donations

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University of Northern British Columbia 3333 University Way Prince George, BC V2N 4Z9

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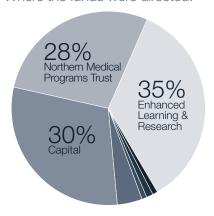
Web: www.unbc.ca/giving

An Endowment Leader

For a young and still relatively small university, UNBC has managed to build a significant endowment fund in its short history – and donors and government are to thank. By the end of December, 2004, the University had an endowment fund of \$35 million; in the top half among all universities in Canada. In fact, among Canada's small universities, only three have endowments larger than UNBC, and all of them are more than 150 years old!

Last fiscal year, UNBC raised \$5.8 million, its most successful fundraising year ever.

\$5.8 million
Where the funds were directed:



1%

Student

Success

1%

Other

Purposes

4%

Student

Awards

1%

Library &

Archives



Giving to UNBC

Supporting UNBC can be as simple as going online. Visit the Giving website at www.unbc.ca/giving.



The Brownridge Family

Brian and Jackie Brownridge, seen here with President Jago at September's donor recognition dinner, have a long history with UNBC: their two sons are both UNBC graduates (Gord is currently the President of the UNBC Alumni Association) and they have given generously to the University by supporting the Adopt-an-Athlete program and establishing three student awards.

05-06 Annual Campaign

September's donor recognition dinner marked the start of the o5-o6 Annual Campaign, which is being led by Charles Jago in his final year as president of UNBC. The goal of this year's campaign is to raise \$300,000. To contribute, please contact the Office of University Development or visit www.unbc.ca/giving.

Donations to the NMPT

Council Chambers in Terrace was filled to overflowing in August as Alcan announced the largest contribution to date for the Northern Medical Programs Trust (NMPT). The company's \$500,000 investment recognizes its commitment to help ease the shortage of rural doctors in northern BC. Alcan's donation is also helping to offset the local pledges of communities from Prince Rupert to Prince George.

EnCana Corporation, one of North America's leading oil and natural gas producers, made a \$150,000 contribution to the NMPT in April. Its donation brings the amount raised by BC's Northeast region, including Fort Nelson, Fort St. John, Hudson's Hope, Taylor, and Dawson Creek, to just under \$500,000. The region's total pledge amount is \$918,000.

On the same day the NMP's first students celebrated the end of their first-year exams, BMO Bank of Montreal announced a contribution of \$150,000 to the NMPT. Over the years, BMO has supported UNBC's initial capital campaign, equipment for genetic research, an aboriginal scholarship fund, and construction of the Bentley Centre.



Frontier of Science

rofessor Stephen Rader spearheaded the first conference that brought together scientists from around western Canada who study RNA, a nucleic acid in our bodies that transmits our genetic information. About 50 scientists attended the conference, which was held at UNBC. The keynote speaker was Dr. Olke Uhlenbeck, past president of the International RNA Society and RNA researcher since 1970.

As part of his research at UNBC, Stephen is determining how RNA molecules are spliced together to create different genetic combinations. Errors in the splicing process are believed to be responsible for diseases such as cancer and cystic fibrosis.



Helping Russia

Political Science professors Gary Wilson and Bill Kennedy are developing new courses aimed at improving the skills of government officials in Russia's Far East, as part of a larger project on sustainable economic development. International Studies professor Heather Smith is also involved.

Preserving the Gitksan Culture

Seven students in Hazelton have completed a Developmental Standard Term Certificate in First Nations Language and Culture, which qualifies them to teach Gitksan language and culture courses in elementary or secondary schools. The Gitksan Language Society teamed up with UNBC to offer the program, which also involved the Northwest Community College. The Society anticipates that the program will be able to ladder into UNBC's Bachelor of Arts or the Bachelor of Education programs.



Arriving with a Cause

UNBC student Michael Pullinger is a cancer survivor. He came to UNBC from Australia this year, but he didn't arrive by car or airplane - instead, Michael rode his bike from Vancouver, an eight-day, 800 kilometre trip that allowed him to conquer a personal challenge and raise more than \$1000 for the Lance Armstrong Foundation.

People in the News

UNBC's researchers are making news. In 2004-2005, they received \$10.1 million in funding for 256 research projects. In fact, a National Post survey placed UNBC in the top 20 among all universities across Canada for its research intensity.



Shinerama 2005

Biochemistry and Molecular Biology student Crystal Marko organized the annual Shinerama fundraiser for Cystic Fibrosis, which was held in September. Shinerama is Canada's largest postsecondary school fundraiser involving students at more than 55 university and college campuses. Students take to the streets to shine shoes, wash windows, or polish cars in exchange for a donation to the Canadian Cystic Fibrosis Foundation. UNBC's Shinerama event raised \$13,000 this year.

New Health Research Networks

Supported by the Michael Smith Foundation for Health Research, a new BC Rural and Remote Health Research Network is headquartered at UNBC. The network is providing some initial funding to establish new research projects, expand access to research assistants, and disseminate research results online. UNBC faculty are also involved with new research networks on aging and occupational health.



Parents with FASD

Fetal Alcohol Syndrome Spectrum Disorder (FASD) is among the most common developmental disabilities of our times, but the amount of information about adolescents and adults who are affected by FASD remains a mere trickle. For her graduate degree in Psychology, Velma Abraham studied the needs of adults who face the dual challenge of parenting and living with FASD. She found that even though one million Canadians over the age of 15 may have FASD, services and supports such as transportation, child care, social benefits, and housing, are not specifically developed to meet their needs.

Fraser River Sockeye Tagging

UNBC's Rick Holmes and the Department of Fisheries and Oceans have set up a radio telemetry station at the Quesnel River Research Centre in Likely to monitor the migration of sockeye salmon into the Quesnel River drainage. About 400 radio tags were first implanted in the Lower Mainland. The information obtained through the tags will help improve the management and conservation of Fraser River sockeye.



UNBC's Iron Man

Northern Medical Program professor Geoffrey Payne participated in the Penticton Ironman in August. The race involved a 3.8 kilometre swim, a 180 kilometre bike ride, and a 42 kilometre marathon run. Dr. Payne is also a recent recipient of a New Opportunities Fund Award, which provides federal funding to support acquisition of research equipment.

Connecting with Japan

In May, UNBC President Charles Jago received a visit from Professor Mitsuhiro Iwasaki of the Gakushuin Women's College, a division of Gakushuin University in Japan. Gakushuin University is working with UNBC to develop an English Language Studies program designed to attract students to Prince George. The renowned University has educated the present Emperor, the Crown Prince of Japan, and other children of nobility.



Celebrating Poetry

UNBC First Nations Studies professor Paul Michel helped organize one of the largest creative writing and aboriginal storytelling festivals in Canada, which was recently held at UNBC. The annual "Just West of Unruly" creative writing festival expanded this year to include the second annual Poetry Train and the first UNBC Aboriginal Writers and Storytellers Festival.



Margaret Seguin Anderson

Margaret has studied Tsimshian culture and the Sm'algyax language since 1978. She lives in Tsimshian territory in Prince Rupert, and is a First Nations Studies professor at UNBC. To view the Sm'algyax Talking Dictionary and the Visible Grammar templates, see: http://web.unbc.ca/~smalgyax

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9	Fill out this form and mail to:
Name: New Address:	Office of Communications University of Northern British Columbia 3333 University Way Prince George, BC V2N 429
Phone:	
Email:	Online
Are you a UNBC Graduate? Yes No	Email: communications@unbc.ca Web: www.unbc.ca/alumni

Visible Grammar

By First Nations Studies Professor Margaret Seguin Anderson

simshian totem poles, canoes, masks, bentwood boxes, baskets, horn spoons, and similar objects from BC's north coast are proudly displayed in museums across Canada; if a fire or flood threatened these treasures, we'd expect the government to do what was necessary to keep them safe for future generations. Ironically, while the great museum collections were being amassed, the government was busy doing everything it could to destroy a far greater cultural treasure – Sm'algyax, the language of the Tsimshian people, is critically endangered, along with all but a handful of the other 60 languages indigenous to Canada.

I joined UNBC in 1992 as the Chair of First Nations Studies and in 1994, I moved to Prince Rupert to coordinate UNBC's programming and outreach in the region. Being here has allowed me to focus on a real passion: working with other linguists and Tsimshian educators to help preserve and strengthen the Sm'algyax language.

The biggest barrier for adults trying to gain fluency in indigenous languages is getting beyond single words. For fluent speakers of a language, grammatical structures are like familiar landmarks, guiding them as they express the beauty of their language and their land. For adult learners however, unfamiliar grammatical patterns can seem more like landslides than landmarks – learners can acquire vocabulary fairly easily, but when they try to put words together into sentences their efforts are so frequently rejected that many learners give up in frustration. Fluent speakers can't help much – they are no more able to explain the patterns of their languages than most of us would be able to explain the finer points of English grammar. This is a huge problem because while government policies aimed at eliminating them have been reversed, most of the 60 indigenous languages of Canada are in danger of being lost as living languages because they have not been passed on to new generations of speakers.

Our approach involves having students *see* how their language is put together as well *hear* how it's used in traditional stories. For example, this year, I've finished 14 user-friendly grammar modules and a new text for adult learners. The modules present grammatical patterns as colour-coded templates that clearly illustrate how sentences are put together. Making grammatical patterns visible in this way gives learners the tools to build their language skills successfully; they can practice and reinforce each pattern using colour-coded flash cards.

Another project has been the *Sm'algyax Living Legacy Talking Dictionary*. Our team has recorded CDs of fluent Sm'algyax speakers telling traditional Tsimshian stories. Some of these recordings were made during my early visits to Hartley Bay in the 1970s, preserving the voices of some who have since left us. We have also breathed new life into archival texts – some nearly 100 years old – and voiced them in Sm'algyax for the benefit of future generations.

Finding a new way to help learners is the most rewarding aspect of teaching for me, and as a student told us at the conclusion of a recent immersion course: when we use our language, it's alive and we're stronger.