UNIVERSITY OF NORTHERN BRITISH COLUMBIA

94-2009

since the grand

opening

A Magazine for UNBC Alumni and Friends – Fall 2009

# Forests are also about people

> UNBC and the TI'azt'en First Nation collaborate on a ground-breaking research and education program at North America's largest research forest. See page 3

# UpFront

#### Fall Semester **Student Numbers**

UNBC enrolment this semester is virtually identical to last year, but comes on the heels of a summer session that saw the University break the 2,000 student mark in the summer for the first time. In fact, the University saw a 12.8% increase

in the summer semester, due in part to a large increase in the number of international students who visited the campus for English language courses.

#### Convocation 2009: **Big News in Terrace**

UNBC's 16th graduation was a highlight for Terrace and for the entire Northwest region. The community hosted UNBC's largest regional convocation ceremony ever, with 54 students crossing the stage to receive UNBC degrees or

certificates. Among those graduating was the first group of locally trained nurses, who attended classes in Terrace from throughout the region. There were nine grad ceremonies and nearly 900 grads in 2009.

### On the Cover

#### John Prince Research Forest

Thomas Alexis, Chief of the Tl'azt'en First Nation, UNBC's Vice President of Research Gail Fondahl, and recent Masters graduate Diana Kutzner, are just a few who have benefited from the unique research and educational partnership between the University and the community at the John Prince Research Forest north of Fort St. James.





#### **Campus Infrastructure Projects** Focused on Energy

Over the past decade, hard hats, safety vests, and steel toe boots have been almost as common on the Prince George campus as iPods and backpacks. It's true again, as construction is underway on a pair of projects funded by the provincial and federal aovernments.

One project has seen excavators digging a trench through the middle of the Agora Courtyard in preparation for new pipes that will make heating and cooling of the campus more efficient. The creation of these new infrastructure "loops" will reduce the load on the UNBC power plant and cut down on energy consumption as a result.

The other project is occurring to the west of the main campus buildings and will result in the building of a new facility to house a biomass gasification system that will reduce UNBC's consumption of natural gas by around 85%. This new system will utilize wood residues from logging and sawmills to produce a synthetic gas that will be burned to produce heat for the main campus. It will also serve as a platform for research and public education.

The two projects have attracted more than \$20 million in funding from the Knowledge Infrastructure Program, the Innovative Clean Energy fund, and the Public Sector Energy Conservation Agreement. Both will be operational by 2011, although they have already attracted considerable national interest. Even the federal Minister of Natural Resources visited the campus to see the work underway for herself as UNBC continues to re-invent itself as a model for energy efficiency and bioenergy.

#### Bioenergy Underway

While the gasification system is more than a year away from being operational, the University's I.K. Barber Enhanced Forestry Lab is already being heated with wood pellets as part of a pilot project funded by Western Economic Diversification in partnership with the Wood Pellet Association of Canada. The project is supporting research that is comparing wood pellets to natural gas in terms of energy production, cost of operation, and emissions.

# 15 Years of Growth

### This year UNBC celebrates the 15<sup>th</sup> anniversary of its grand opening.

Just as a tree grows out from its centre, so has UNBC. Whether it is the campus buildings built around the central Agora Courtyard or the network of regional campuses, UNBC has seen remarkable growth over the past 15 years. Imagine what the future has in store!

1995 - Charles Jago appointed president 1990 – BC Government passes the UNBC Act, officially creating the University Year One 1992 - 70 students enroll in the "QuickStart" program 1994 – first graduates 1994 - Queen Elizabeth II officially opens the PG campus 1994 - 1,400 students register in the first full year of operations 1998 - UNBC debuts at 9th place in the Maclean's magazine ranking of Canadian universities 2005 - Economic impact of UNBC and the College tops \$700 million



### Today

2009 – first UNBC building heated with bioenergy

> 2009 - George Iwama installed as President

1999 - first varsity action for the UNBC basketball teams

> 2007 – Opening of the Northern Sport Centre

2001 - UBC and UNBC create the Northern Medical Program

> 2008 - UNBC tops \$100 million in research funding to date

> > UPDATE Fall 2009

# A Living Laboratory

Collaborating with scientists and conducting our own research is providing new and exciting ways to embrace the future.

n 1994, a Memorandum of Understanding was drafted between the Tl'azt'en First Nation (pronounced "Klazden") and the University of Northern BC. With that, the John Prince Research Forest (JPRF) was born.

Situated 50 kilometres north of Fort St. James, the JPRF lies between Lakes Chuzghun (Tezzeron) and Tesgha (Pinchi) in traditional Tl'azt'en territory. At 13 thousand hectares, it is the largest research forest on the continent (more than 32 times the size of Stanley Park) and the only one that is jointly managed by a university and a First Nations community.

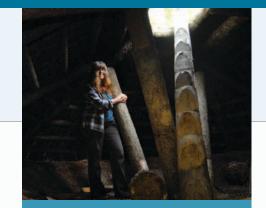
"It is a unique place in many respects," says Forest Manager Sue Grainger. "It is a kind of living laboratory where the blend of traditional and western scientific approaches to conservation and resource management

provides opportunities for unique collaborations between the University and the local First Nations community."

One of the research projects that exemplifies this opportunity is the UNBC-TI'azt'en First Nation Community University Research Alliance (CURA) project. Research in CURA focuses on co-management, environmental monitoring, traditional ecological knowledge, cultural education, and aboriginal ecotourism. Management of the research is shared between Tl'azt'en and University participants, with Tl'azt'en members acting as co-researchers and co-authors on all of the studies. Researchers have produced dozens of publications: journal articles, booklets, DVDs, and technical reports - all for the benefit of research and the Tl'azt'en people.

"The Tl'azt'en community developed the research questions they wanted the University to answer," says Gail Fondahl, UNBC's Vice-President of Research, and the project's first Principal Investigator. "And they were interested in more than academic publications: they wanted products and opportunities they could use in the long run. Recently, our researchers have become more reliant on Tl'azt'en knowledge as well. The goal is to revitalize the environmental connectivity of local people while demonstrating a progressive method of forest management."

Researchers have equipped Tl'azt'en hunters, trappers, gatherers, and fishers with survey tools so they can collect their own environmental data as they participate in traditional activities on the



JPRF Manager Sue Grainger inspects a traditional TI'azt'en pit house.

land. The data is then used by Tl'azt'en and University researchers to understand environmental change in the area, improve forest management, and contribute to sustainability.

"The Tl'azt'en have a deep knowledge of environmental monitoring, sustainability, and resource management," says current Principal Investigator Pam Wright. "Pinchi Lake had a mine beside it – how do you determine its environmental impact? A typical researcher might take water samples, and examine the mercury level in the lake's fish, but forests are also about people. Tl'azt'en researchers want to know about the human element: Are the fish safe to eat? Do they still taste good? How is the such as Aboriginal Tourism."

We have had dozens of UNBC students and young Tl'azt'en youth working, researching, and learning together.

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Tl'azt'en Counsellor Bev John conducts a course on traditional Tl'azt'en forest values

ecosystem across the territory affected?" Tl'azt'en Chief Thomas Alexis says the project has been a real benefit to his community. "We have had dozens of UNBC students and Tl'azt'en youth working, researching, and learning together. Our young people gain education and work experience and learn about culture and values. They also learn ways to be more sustainable, and how to manage industries

The University students work under the tutelage of the Tl'azt'en elders as well as their UNBC professors. Many are headed for careers in resource management, planning,

research, education, or outdoor recreation and tourism management.

"We have been able to open up more than 30 kilometres of ancient trails, and reconstruct traditional pit houses and caches, but this isn't just about our history," says Chief Alexis. "Collaborating with scientists and conducting our own research provides new and exciting ways to embrace the future.'

#### Location & Facts

- 1. Prince George 2. John Prince Research Forest
- At 32 times the size of Stanley
- ies 40 minutes north of Fort St. nal Tl'azt'en terri
- y and a First Nations

2

#### **UNBC**Alumni



UNIVERSITY OF NORTHERN BRITISH COLUMBIA ALUMNI ASSOCIATION

## Alumni News **Q** Events CX

This year's Alumni Homecoming was a great success. We brought together alumni, current students, faculty, staff, and community members for a variety of sophisticated, educational, and fun filled events, many of which sold out well in advance. Mark your calendars for next year's Homecoming, September 24 & 25, 2010.







### ginal 6

#### A Few Fond Founding Memories...

Of her time at UNBC. Diana Gilbert (who now lives in Thunder Bay, Ontario) remembers drawing a portrait of the Honourable Iona Campagnolo, UNBC's founding Chancellor. Campagnolo, the first female Lieutenant-Governor of British Columbia, recently donated her archival records to UNBC. Margaret Bathy remembers naming the University newspaper after the way the hill above

**UNBC** Alumni

George Forrest (BSc. Chemistry '01) is an Oral Surgeon with the Canadian Forces. He was recently selected to begin residency at the University of Texas in Houston and is scheduled to graduate in 2013.

Sarah Carr-Locke (MA. Anthropology and History '04) has been Assistant to the Director of the Museum of Anthropology at UBC for the past three years. She plans to begin her PhD studies in the Fall of 2010.

Benjamin Damm (BSc. Computer Science '04) is a Senior Software Engineer with Silver Spring Networks, a leading developer of wireless networks. He lives in California.

University Way kept crumbling over the

edge of the road. Today, "Over the Edge" is

still the University's student-run newspaper

and Margaret's son recently graduated from

was often the only student attending UNBC

graduation in the University's history with 54

graduates. Stedham is now a kindergarten

her alma mater. Kari Stedham recalls she

classes in Terrace. This year, the Terrace

campus celebrated the largest regional

teacher and lives in Quesnel.

Kiraniit Sidhu (BSc. Computer Science '04) lives in Redwood California and works in nearby Palo Alto at the head office of Facebook. "I have been working at Facebook for two years now," says Sidhu. "It has been an amazing time."

### A Northern Collaboration

UNBC grad Cathy Ulrich collaborates with her University to provide quality health care for Northern BC.

#### "

The learning and interaction with the students and faculty at UNBC taught me to think at a different level," says Cathy Ulrich, a 2009 recipient of one of UNBC's "Alumni of the Year" awards. "It enhanced my knowledge of leadership, health care systems, and northern and rural health issues."

Cathy Ulrich has a unique perspective on how to meet the health care needs of northerners. After obtaining a Nursing degree from the University of Alberta in 1981, Ulrich worked as a health care practitioner across the north of western Canada before settling in BC.

Ulrich, who was born in Medicine Hat, worked in Terrace for ten years in areas of increasing responsibility before accepting the position of Regional Director of Community Health Services in Prince George at the Northern Interior Health Unit. It was also in Terrace that she became aware of UNBC's then newly-created master's degree program in Community Health Sciences.

"At UNBC, I learned from the best," says Ulrich. "The high quality instruction and research facilities gave me the tools I needed to be analytical, and increased my understanding of the type and variety of health services that are possible in the North."

Soon after graduation, she was named Vice President of Clinical Services at Northern Health, where she says she came to the table armed with the knowledge and experience gained at UNBC.

"Northern Health and UNBC enjoy a fantastic collaboration. The University educates nurses, health practitioners, social workers, psychologists, and physicians, while Northern Health provides placements for many of these students. This ensures that as many as possible remain in the North," says Ulrich. "We work with their first-rate researchers to gain the new knowledge and new approaches we need to ensure a dynamic and responsive system to provide for the needs of northern people."

Cathy Ulrich became President and Chief Executive Officer of Northern Health in 2007. As one of five health authorities in BC, Northern Health provides health services to nearly 300,000 residents of northern BC.

#### **UNBC**Alumni

### At UNBC, I learned from the best.

## H MAIN ENTRANCE

#### **UNBC** Donations

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Phone: 250-960-5750 Toll-free: 1-866-960-5750 Email<sup>.</sup> advancement@unbc.ca

We are located in Room 1065 on the main floor of the Administration building.



These UNBC grads recently completed their first year of studies in the Northern Medical Program.

#### Medical Program Successes

Six years since the start of the Northern Medical Programs Trust (NMPT), the number of communities that have fulfilled their pledges has grown to one dozen. Dawson Creek and Hazelton are the latest to reach their fundraising targets, pushing the total raised to date to over \$6 million. In fact, Dawson Creek's contribution to the NMPT in the summer was the largest received from a municipality outside of Prince George. The NMPT is providing about \$70,000 in student in May attracted more than 60 mayors awards this year, mostly supporting medical students who are completing placements in rural communities.

# Giving

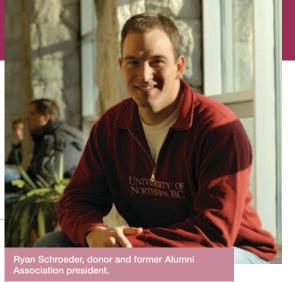
#### The Endowment Roller-Coaster Volatile is the understatement of the year

when describing the recent performance of financial markets. Unfortunately, UNBC's endowment fund has not been immune. By the end of the last fiscal year in March. the endowment fund – interest from which supports nearly 200 awards per year – had lost nearly 17% of its value. These returns, coupled with the need to preserve the capital in perpetuity, prompted the UNBC Board of Governors to reduce the annual pay-out from the endowment. To date, the University has withdrawn 5% of the market value of the endowment to fund student awards; going forward, the rate will be 3.5%.

The reduced spending rate is not affecting students this year. To make up the difference, some donors have increased their support and the University is dipping into its privately donated discretionary fund, built from annual donations to address areas of greatest need. For more information about the revised endowment fund policy, contact the Advancement Office.

#### Investing in a New North

The Northern Development Initiatives Trust (NDIT) is supporting UNBC's efforts to strengthen the connection between researchers and the economic development of the region. The idea of the New North Foundation was unveiled in January and has caught on with communities throughout the region. In fact, a workshop on the topic and councilors. The NDIT has provided up to \$20,000 to support the New North Foundation feasibility study.



#### Giving...and Getting

Ryan Schroeder has had a relationship with UNBC at multiple levels: student, employee, Alumni Association president, donor. His current employer, TELUS, also has a long history of supporting UNBC. Today, they're maximizing their support for UNBC by working together. Ryan has been making monthly donations to UNBC since 2004 and has been part of TELUS's matching program for the past year. Under the arrangement, every dollar Ryan donates to UNBC is matched by TELUS. Other major employers with matching grant programs include Spectra Energy, BMO Bank of Montreal, and Rio Tinto Alcan.

"The matching grant program is a huge incentive to donate to UNBC, but I was a donor before I started working for TELUS," says Ryan, who is a graduate of both the Computer Science and MBA programs. "A number of us Computer Science alumni created a scholarship because we could really appreciate the needs of students. It feels good to know you're helping people out."

#### Filipino Student Award

It took them four years of fundraising, but the Prince George Filipino-Canadian Association has created a \$10,000 endowment fund to support UNBC students of Filipino descent. The announcement was made at a celebration to mark the 111th anniversary of independence for the Philippines; a fitting way to mark the past by investing in the future.

#### www.unbc.ca/giving

#### **UNBC** Donors: Making a Difference

# Sowing the Seeds for a **Prosperous Future**

#### 15 years ago, northern BC changed forever," says Graeme Johnstone, reminiscing about the grand opening of the University in 1994. Shortly after, he started an annual tradition that he continues today: supporting UNBC and its students. "In making contributions to UNBC over the last 15 years, my late wife and I decided in the beginning that – while all options are important - it is, first and foremost, necessary to get students to enter the University."

Graeme attended Cambridge University in the years immediately following World War II. "I was fortunate that I had an ex-service grant, a County grant, and my own savings so that when I graduated, I owed nothing. That doesn't really seem to be possible anymore: the costs are so high that virtually all graduates are saddled with large debts."

Yet, it is precisely those graduates who will have a tremendous effect on the continued

We wanted to give students every opportunity to make a difference in their communities.

economic, cultural, and social development of the northern region. Graeme himself is a case in point. Long before the 100 mile diet and farmers' markets were all the rage, Graeme was a dairy and crop specialist in northern BC, working with farmers and researchers on sustaining local food production. It was his university education that gave him the opportunity to be the district agriculturalist based in Smithers and make a significant contribution to supporting local farmers over more than 40 years. "Today's university students are the ones

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who will have to address the food security issues of tomorrow," says Graeme, but UNBC grads will be involved in issues beyond agriculture. "My wife and I believed that the students who remained at home through their university education would end up being a far more sophisticated group,

capable of analyzing their actions and taking responsibility for them. We wanted to give them every opportunity to make a difference in their communities, and not permit lack of finances to be a criterion for attending our university."

#### 15 Years of Awards

- By 1994, there were 30 endowed student awards created.
- In the following 15 years, another 320 awards have been established.
- An investment of a dollar a day since 1994 would now be worth \$10,545.



### A Dream Fulfilled

rince George resident Judy Polysou always had a dream of becoming a high school counselor. This was why, nearly twenty years ago, she drove down to Pine Centre Mall to make a donation to help facilitate the building of a new, northern university to be based in her city. A few years later, a severe health scare made her realize it was time to act on her dream – and that she was glad she made her donation. In May, 2008, at age 52, having attended UNBC part-time while working and raising two children, Judy received her masters degree in Education. Judy is currently a Counselor at College Heights Secondary. Both her kids attend UNBC.

#### **PICS Picks**

Three grad students at UNBC were among 22 researchers to receive new or extended fellowships from the Pacific Institute of Climate Solutions (PICS). Graduate Student Alex Schare was awarded a fellowship for his research into the relationship between air traffic and

climate change in BC. Previous recipients Ian Picketts and Kathryn Hrinkevich received additional funding for their work studying the climate change adaptation of BC municipalities and pine beetle outbreaks, respectively.



#### **Genome Project**

Researchers at UNBC are studying the Mountain Pine Beetle, its relationship to the pine trees it attacks, and the fungal pathogens that help the insect overcome a tree's natural defenses. The goal of the work is a better understanding of how to predict where potential

supplies of bioenergy feed stocks may be located. The project is part of an inter-university study funded by Genome Canada, Genome BC, and Genome Alberta.

# People in the News

#### **UNBC** Hero

Consider the story of Rose Higgins: Dropped out of school in Grade 6. Married at 14. Two children by 15. Caring and providing for a husband felled by a stroke at 30. An education never seemed in the cards - that is, until she found UNBC's new Business Leadership



Certificate Program in Quesnel. "Getting the certificate gave me a new love for learning," says Rose, who co-manages the Barkerville Campground. "Graduation was the best day of my life."



#### **River Water** Fluctuations

Research by UNBC Environmental Science and Engineering professo Stephen Déry has verified that global warming is causing significant variations in the volume of water flowing in Canada's northern waterways. A recently

published study led by Dr. Déry and partners at Princeton University indicates that global warming is causing river flows to intensify. "If rivers are the veins of Canada, we're having some pretty dramatic blood pressure fluctuations." says Dr. Déry.

#### Rally 4 Recovery

When UNBC Social Work student Tara Levis lost a friend to anorexia nervosa, she combined her grief with her passion for road biking and Rally 4 Recovery was born. Levis rode from Prince George to Maple Ridge in BC's Lower Mainland to increase public



awareness of eating disorders as a serious issue affecting today's young people. There, she also volunteers for the Looking Glass Foundation, an organization advocating the Canadian government to fund a residential treatment facility for people who suffer from eating disorders.

#### Nursing Award

UNBC Nursing grad Lisa Sam scored a major achievement this past summer. She was selected by Health Canada among 1,200 nurses working on reserves to receive an award of excellence. She is working at the Nak'azdli Health Clinic in Fort St. James, BC.







#### **Rising Stars**

UNBC Biochemistry and Molecular Biology student Chris Uy took home first place in his category at the Rising Stars of Research competition at UBC matching the success of Gareth Hopkins who placed first in the contest's "Discovery" division in 2008. The

competition is limited to 100 of the top undergraduate researchers in science and engineering from across Canada.

#### Max Blouw Honoured

UNBC's founding Vice President of Research, Dr. Max Blouw, who was instrumental in securing a research centre near the community of Likely, BC, was honoured on August 8th by having the centre renamed the Dr. Max Blouw Quesnel River Research Centre.





#### Inuit Food Security

UNBC postdoctoral fellow Sonia Wesche took home second prize at an International Health Conference for her presentation on the impact of climate change on Inuit food security. Dr. Wesche is a Research Associate in UNBC's Community Health Sciences Program.

#### **Final**Word

### Looking Forward

Written by: George Iwam

A n anniversary is a time to reminisce, but also a time to look forward. Although my experience at UNBC is still limited, it has been rich enough to predict nothing but the best.

Today, UNBC is grounded in the things that matter to the North and to our global society. In 15 years, the world will be warmer, security will be a larger issue, food will be scarcer, economies will be even more global, renewing energy sources will be imperative, and the North will be more important than ever. This is the world our University and graduates will inhabit.

I have initiated a new University planning process to ensure we set off in the right direction. Let us consider the next 15 years and what might be in store.

To start with, UNBC has the potential to be the first carbon-neutral university in Canada but getting there is up to us.

We currently have more than 7,500 grads. Within 15 years, we will pass the 20,000 mark. Imagine how their

enthusiasm, commitment, and knowledge will change the region and the world. One of our grads could be the Prime Minister of Canada.

We will have created a world-class Wood Innovation and Design Centre. The supporting academic programs, such as Engineering, the Fine Arts, and perhaps Architecture, will showcase this region as a global contributor of lumber and a major centre of inspiration for how to optimize value from the forest.



Bringing home a provincial title and successfully hosting a national championship within barely a year makes me confident that the rafters of the Charles Jago Northern Sport Centre will boast at least one national championship banner within fifteen years time.

This past year, the University was named one of Canada's "Research Universities of the Year" by the National Post and

> Ottawa Citizen. We also placed among the best in BC according to the Globe and Mail's University Report Card. Maclean's had us at number two among 22 primarily undergraduate universities nationwide. If they expanded their categories to include partnerships, First Nations participation, and community

economic development, I am confident we would place first in each new category and overall.

These are just a few great things I know we can achieve.

So where do you want this university to be?

Please visit www.unbc.ca/plan and give your ideas. The decisions we make today must continue to make us respected, relevant, and responsive to the needs of society.



**George Iwama** holds a PhD in Zoology from UBC where he was a professor for 15 years. He comes to UNBC after spending two years as the Dean of Science at Carleton University. Dr. Iwama was officially installed as UNBC's fourth president on October 16, 2009.



UPDATE is produced by UNBC's Office of Communications in April and October and printed on 100% recycled paper. www.unbc.ca/update

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