

# UPDATE

A Magazine for UNBC  
Alumni and Friends  
– Spring 2018

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Discovering a new water treatment solution,  
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Synthetic Biology Club students Brendan Reiter,  
Keanna Woidak and Jared Pritchard were part of a  
UNBC student-led research team that earned a bronze  
medal at the International Genetically Engineered  
Machine competition in Boston. Read more about their  
success on Page 10

# Local Leadership, Global Influence



**A message from UNBC  
President and Vice-Chancellor  
Dr. Daniel J. Weeks**

Recently I had the opportunity to congratulate some exceptional student leaders in our community. These students, pictured below, spent eight months developing their leadership, communication, event planning, and conflict resolution skills. Their final projects included opioid crisis awareness training, conducting a student survey regarding financial aid processes, and producing videos to educate our community about reducing disposable coffee cup use and how to properly dispose of same.

These topics collectively are an example of the type of wide-ranging education and research that takes place at UNBC, all fostered by individual leadership skills and traits.

UNBC's leadership was noted recently as we were selected to play a leading role in the B.C.-led Canada's Digital Technology Supercluster Initiative. This project is meant to spur new regional, national and global economic opportunities that address the productivity, health and sustainability challenges facing Canada and the world. We are among six B.C. post-secondary institutions (joining Simon Fraser University, the University of Victoria, the University of British Columbia, Emily

Carr University and the B.C. Institute of Technology) that will collaborate with national corporate and high-tech industry leaders the likes of TELUS, Microsoft, Teck, Canfor, Shoppers Drug Mart and Providence Health Care. We all share a vision to position Canada as a global digital technology leader.

Projects such as this point to UNBC's ongoing evolution as a University, and as a global player in the post-secondary world. While we continue to maintain and cherish our standing as being "In the North, for the North," we know we can fulfill that expectation by being more engaged on the global stage. That's why projects such as the digital supercluster excite me, and why announcements such as being ranked amongst the top four per cent of universities worldwide by Times Higher Education help our community imagine even greater accomplishments.

I know we will continue to be noted amongst the global community for our efforts, and that our reputation and standing around the world will only improve. This focus will strengthen our capacity to be an outstanding University "In the North, for the North and the world."



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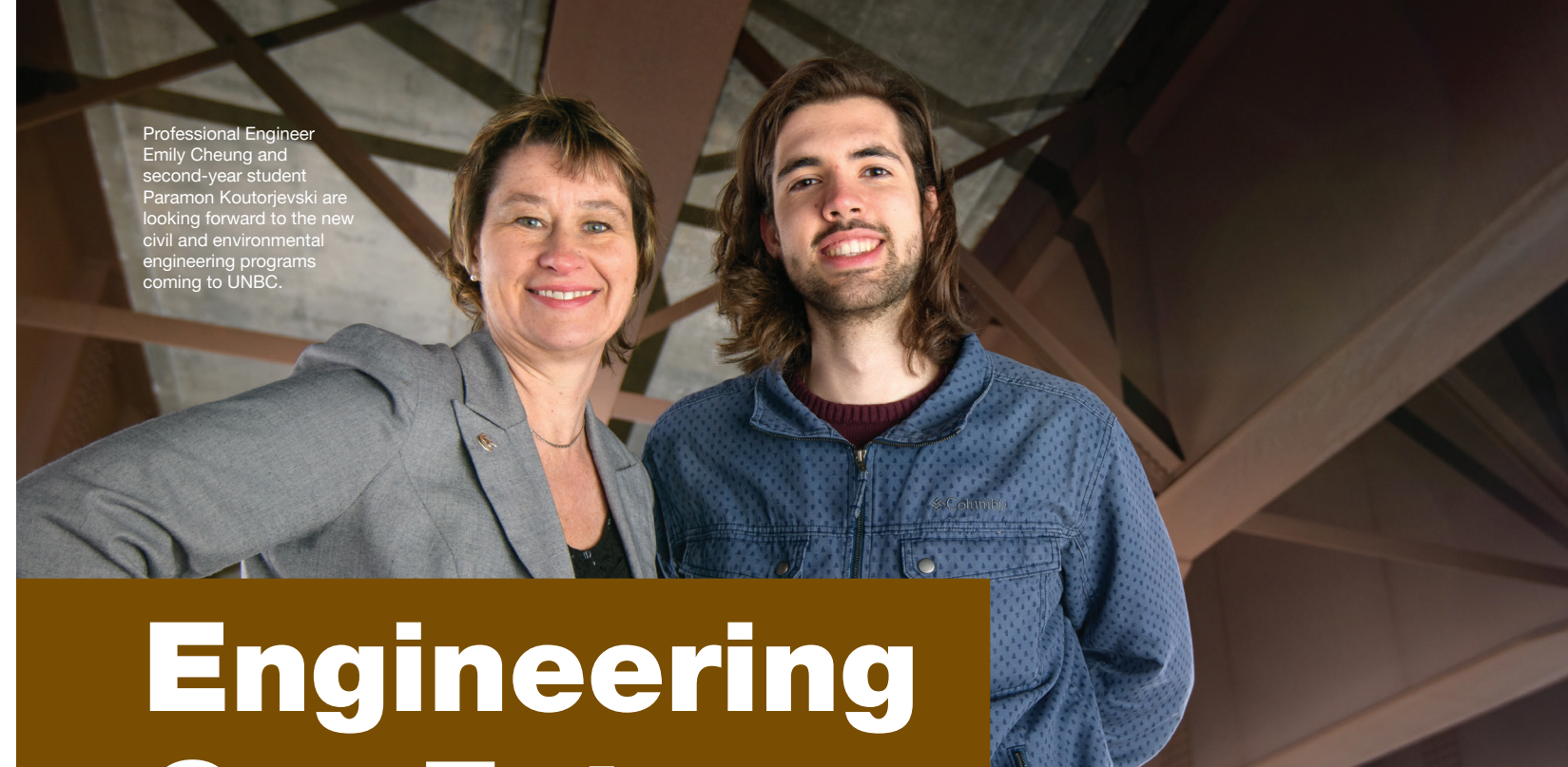
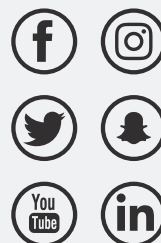
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Professional Engineer Emily Cheung and second-year student Paramon Koutorjevski are looking forward to the new civil and environmental engineering programs coming to UNBC.

## Engineering Our Future

**New civil, environmental  
engineering programs  
coming to UNBC**

An infrastructure system spans Northern B.C., serving as the backbone for commerce, industry and communities. It's the product of a remarkable engineering profession—one that will soon be fed the next generation of engineers from UNBC.

In January, B.C.'s provincial government announced startup funding for a new, UNBC civil engineering program as well as a stand-alone environmental engineering program. The two programs combine to have 280 seats and will enable students to complete all four years of an engineering degree in the North for the first time.

Currently, UNBC and the University of British Columbia offer a joint environmental engineering program, which sees students complete their first two years of study at UNBC's Prince George campus, their next two years at UBC's Vancouver campus and their final semester back at UNBC. That joint program will continue, but students will soon have the option of completing the entire program in the North.

For Emily Cheung, the corporate engineering manager at DWB Consulting Services in Prince George, the new programs cannot come soon enough. Cheung has hired many UNBC graduates in the past and teaches as a sessional instructor in the program.

"The culture, the topography, the geography and the geology is different in the North," she says. "It is very important to have students who understand the region and know why we do things the way that we do."

"We're really excited that we're going to be able to hire graduates out of this program," Cheung adds. "We know the students are going to get a great education here and that they will be prepared to meet the challenges of working as an engineer in the North."

DWB Consulting Services and other engineering firms across the North are constantly looking for engineers to join their teams. The new UNBC programs are expected to launch in 2019 and

produce 70 new graduates a year beginning in 2023.

"Having undergraduate engineering programs at UNBC is key to the success of our firm and other firms in the region," says Cheung. "We actually have to turn work down in our busy seasons because we don't have enough qualified people to fill the positions."

And current UNBC engineering students are excited about the program's future prospects as well.

"When the first civil engineering students start their journey at UNBC, I know they will receive the unconditional support and guidance that I, and all of the other engineering students, received when we came here," says second-year environmental engineering student Paramon Koutorjevski. "When they see and feel the marvelous community that I felt when I arrived on campus, they will know that UNBC is the right place for them."

Timberwolves Hungry for More after record-setting 2017-2018; each team qualifies for Canada West playoffs.

#### Men's Basketball

Gritty squad knocks off Winnipeg for first UNBC Canada West playoff victory.

#### Women's Soccer

Program records in goals for & goals against lead to first CW playoff berth.

#### Men's Soccer

TWolves cut goals against in half, make first playoffs in program history.

#### Women's Basketball

First UNBC team to make back-to-back Canada West post-season appearances.



# Digital Depository

**Donation propels digitization of hundreds of historical documents**

Meticulously digging through the trove of material at the Northern B.C. Archives and Special Collections takes planning, patience and persistence.

Archival research can be equal parts challenging and exhilarating; challenging to pore over old land survey maps and delve into correspondence, but exhilarating to find those nuggets of information that connect key aspects of a research project.

An anonymous contribution to the Northern Leadership Campaign allowed the archives to create the Northern B.C. Digital Collection, putting 204 books and pamphlets, 84 maps, and 148 newspapers online, strengthening the University's research and teaching excellence. The new collection is free and accessible to the general public.

"This is part of a long, ongoing series of projects to make our holdings more accessible to our students and faculty, particularly at our regional campuses," says Head of Archives and Special Collections Ramona Rose. "Many of the special collections were books and map material that were only accessible to students and faculty at the Prince George campus."

Among the digitized material is one of the archive's oldest holdings, a first edition of Alexander Mackenzie's 1801 book *Voyages from Montreal*. The book details Mackenzie's travels throughout what is now British Columbia and includes interesting annotations and colour maps.

**"This is part of a long, ongoing series of projects to make our holdings more accessible to our students and faculty, particularly at our regional campuses."**

History Professor Dr. Jonathan Swainger and his students have accessed *Shoulder Strap*, a magazine produced by the British Columbia Province Police beginning in the 1930s.

"What's so nice about having something like *Shoulder Strap* on hand is that students are provided the means to read these depictions produced by the police without having the intervening voice of a scholar pointing out particular

details," Swainger explains. "Thus the student's curiosity and interest drives their research."

With hundreds of documents available, there is plenty of information for researchers to chew on. But this is just the beginning and a second phase is

already underway, thanks to another contribution from the same private foundation.

"We've received requests from community researchers asking if additional rare print holdings will be digitized, such as city directories," Rose says. "So we see many opportunities for this online portal to become an ongoing resource for Northern B.C. research work."

# Health Care Check Up

**UNBC alumnae, faculty contribute to *The Lancet's* report on Canadian health care**

When *The Lancet* began preparations for a special series about Canada's universal health-care system and its role in global health, the medical journal's executive editor, UNBC graduate Dr. Jocelyn Clark, turned to her home university for expertise on Indigenous perspectives.

The result? Dr. Nadine Caron, an affiliate UNBC faculty member with the Northern Medical Program, along with First Nations Studies and Education Professor Dr. Margo Greenwood and NMP Associate Professor Dr. Sarah de Leeuw, also a UNBC graduate, contributed to a landmark series in one of the world's oldest and best-known medical journals.

The report, the first of its kind for *The Lancet*, was commissioned and edited by Clark, who earned a Master of Science in Community Health Science and is based at the journal's editorial office in the UK.

"My UNBC education combined multidisciplinary First Nations Studies and Gender Studies with community health training, and set me up with the critical perspectives needed to tackle contemporary issues in health at home

and abroad," says Clark, *The Lancet's* executive editor. "When commissioning and developing *The Lancet's* first ever series on Canada, I was determined to make visible the health and rights of Indigenous peoples in Canada, and to ensure the perspectives of Indigenous scholars and advocates were well represented."

This led her back to UNBC, and the expertise the University has nurtured in these areas over more than two decades.

"This special series highlights many of Canada's remarkable achievements in health care, while also identifying existing challenges, potential solutions and new opportunities for innovation and reform," Greenwood says. "We must develop constructive collaborations and identify strategies to address contemporary realities."

Greenwood, who also serves as the academic lead for the National Collaborating Centre for Aboriginal Health (NCCAH) at UNBC, joined de Leeuw and NCCAH research associate Nicole Lindsay in authoring a

commentary titled *Challenges in health equity for Indigenous peoples in Canada*.

"This special series raises complex issues about health inequality for Indigenous peoples in Canada. It will take courage and tenacity to address these challenges by changing power imbalances, building relationships and focusing on holistic care," de Leeuw says.

Caron co-authored one of the two main articles in the series and was part of a panel discussion at the series launch in Ottawa in February.

She also worked with Prince George-based photographer Philomena Hughes to produce a photo essay that was part of the series.

"How successfully Canadians address social cohesion at home will form the foundation for an expanded role internationally," says Caron, who co-authored the paper titled *Canada's universal health-care system: achieving its potential*. "Canada's capacity and credibility as a global health leader derive directly from how well diversity is championed at home."



Dr. Margo Greenwood



Dr. Nadine Caron



Dr. Sarah De Leeuw

## Rooting for Clean Water

### ***Moringa tree root powder has potential as a water treatment solution***

One by one, Dr. Chris Opio and Chandehl Morgan carefully remove trees from one-gallon buckets.

The Moringa trees, reaching heights of 1.11 metres, have been growing in pots of well-drained soil for seven months in the I. K. Barber Enhanced Forestry Lab at UNBC's Prince George campus.

Opio, an Ecosystem Science and Management Professor, and Morgan, a graduate student, gently brush the soil from the roots, cut them from the trunk of the trees and wash them in a stainless-steel sink.

The researchers peel the root bark and put them in a 70C oven to dry. Once dry, the roots are ground into a fine powder.

It's tedious work, but it's the valuable root powder they're after. Opio and Morgan want to determine whether the Moringa roots can purify water by reducing the bacteria and turbidity, or cloudiness.



**“Access to clean water is so important and it is a great privilege to research this water treatment method.”**

The *Moringa oleifera* tree is native to Northern India, but common in the tropical and sub-tropical regions of Asia, Africa, and Latin America.

Known as a miracle tree, it gets its moniker from the many uses of all its parts. It’s antimicrobial, anti-inflammatory and nutritious, and has been used to treat typhoid and fecal coliforms in water, while also serving a role in many traditional medicines.

After two years of careful exploratory research and study, Opio and Morgan have discovered that the Moringa tree root powder can kill most *E. coli* bacteria, up to 87 per cent, in contaminated water.

The initial results mean that Moringa root powder has the potential to be used as a point-of-use water treatment, said Morgan. Further research will be needed, both to optimize the method and test treated water’s palatability.

It’s an important finding that could have significant national and global impacts. A water treatment solution, once optimized and approved, could be developed for use in at-risk communities, such as rural First Nations in Northern B.C. and across Canada that do not have access to traditional water treatment, and where their remote location makes installing traditional systems difficult and expensive.

It could further be applied in developing countries, or as a response during emergency situations, says Opio.

“The global impact of addressing the issue of contaminated water with Moringa root

powder will have started with research here, conducted at UNBC,” Opio explains. “UNBC facilities and resources went into every part of this project, from growing trees to

analyzing bacteria in water. It wouldn’t have been possible without our local research facilities.”

The Moringa trees were grown in the Enhanced Forestry Lab by John Orlowsky and Doug Thompson, while data was collected in the Northern Analytical Laboratory Service with the help of Dr. Hossein Kazemian, Erwin Rehl, Lon Kerr and Charles Bradshaw.

Funding for the research came from the Northern Uganda Development Fund’s Special Fund, a UNBC research grant, Dr. Opio’s professional development fund and a research grant from Dr. Saphida Migabo.

Lack of access to safe drinking water is a significant issue; the United Nations and World Health Organization reports that 663 million people live without access to safe water. Lack of access to clean water and sanitation conditions results in the spread of diseases and the death of more than 840,000 people each year. Waterborne diseases disproportionately affect those in marginalized societies.

For Morgan, the opportunity to conduct cutting-edge research on such a vital topic as water security was exciting and rewarding.

“Exploring properties of Moringa roots that had never been tested before meant I had the chance to develop new methods and discover something that is not only scientifically exciting, but also has the potential to help people in a very practical way,” she said. “Access to clean water is so important; it’s a great privilege to research this water treatment method.”

Before the exploratory research can be proposed as a water treatment, more tests need to be done. While Morgan and Opio were able to kill 87 per cent of the *E. coli* in the water, they want to see that number reach 100 per cent.

Moringa production companies in the U.S. and Uganda are interested in the research and the potential application and collaboration the future may hold.



## Research into using Moringa tree root powder as an effective point-of-use water treatment began in April 2016 at UNBC.

The tests revealed that the water treated with the roots had an acceptable pH and electrical conductivity. The root powder did not have a significant impact on the turbidity, or cloudiness, of water.

Some of the methods used to determine if the root powder could kill *E. coli* bacteria include the following.

- Once in its powder form, the Moringa roots were tested in the Northern Analytical Laboratory Service on campus to determine its chemical components.
- The Moringa roots are high in five macronutrients: potassium, phosphorus, magnesium, sodium and calcium.
- Water that had powdered Moringa root added to it was also tested to determine what elements the roots released into the water. It was compared both with the Canadian guidelines for drinking water quality, and with the elements present in milk.
- Using water contaminated with *E. coli* bacteria collected from a pond on a farm north of Prince George, Opio and Morgan developed methods to test if the Moringa has any impact of bacteria in water.
- The root powder was dissolved in clean, distilled water to create a Moringa root solution. The solution, in various concentrations, was added to the contaminated water to see if it had any impact on purifying the water.
- The beakers sat for one hour, then several parameters of water quality were tested including acidity (pH), electrical conductivity, turbidity (or cloudiness), and presence of bacteria.

**Researchers discovered the Moringa root powder was able to kill up to 87% of *E. coli* in the water.**

# International Recognition

Students shine at global events



If there was any doubt that UNBC students continue to make a name for themselves on the international and national stage, it was erased by a group of student scientists in Boston in early November.

UNBC's Synthetic Biology Club captured a bronze medal at the iGEM (International Genetically Engineered Machine) competition for their research and development attempting to find solutions to combat the MRSA bacteria strain.

The strain is known to health professionals as a superbug. It's a big problem in hospitals worldwide and is resistant to even the strongest antibiotics.

Working in the lab since January 2017, the students' work has included using a technique called gene silencing to stop production of toxins or resistant proteins in the

superbug without its bacteria strain. UNBC was one of 80 schools to win a bronze medal at the international synthetic biology competition. It's the largest of its kind worldwide, and featured 310 undergraduate teams from around the world, including the likes of Harvard University and the Massachusetts Institute of Technology, who also won bronze medals, and Oxford University. Canada's Green University was among 13 teams from Canadian universities and high schools participating in the event.

"The feedback we received from the judges was that they were really excited about the angle we took with the research," said co-captain Brendan Reiter. "They really liked the project.

"I'm absolutely thrilled with the bronze medal and we'll continue to strive to improve the project."

## UN inspires students

Karista Olson hopes to one day work at the United Nations. Her goal was partially inspired by her participation as a delegate at the United Nations Peacebuilders Conference in Vancouver in November.

Olson was part of a delegation that included fellow UNBC students Jen Baddeley, Dara Campbell, Ana Saenz and Lluvia Lopez. They gleaned valuable insight into how the UN operates and the complexities Canada faces to move forward in terms of youth, peace and security.

Due to their participation in that forum, that same group of students attended the Canadian International Model United Nations session in Ottawa in March, where they joined students from across the country in debating real-world issues and developing deeper understanding of UN processes and mechanisms.

# Melting Away

Tracking the demise of a western Canadian ice sheet

During the last ice age, British Columbia and other parts of Western Canada were encased in a massive ice sheet kilometres upon kilometres thick. When the climate warmed up, the ice melted causing ocean levels to rise dramatically.

Now, new research led by Canada Research Chair in Glacier Change Dr. Brian Menounos has revealed that the ice sheet melted much earlier than previously thought. Menounos teamed up with 14 co-authors from five countries to produce a paper titled *Cordilleran Ice Sheet mass loss preceded climate reversals near the Pleistocene Termination* published in the journal *Science*.

Menounos is the first UNBC researcher to be the lead author in the prestigious journal, and the findings help inform scientists who are studying climate change and melting glaciers today.

"Our work builds upon a rich history of collaborative research that seeks

to understand when and how quickly the Cordilleran ice sheet disappeared from Western Canada," Menounos says. "Projected sea level rise in a warming climate represents one of the greatest threats to humans living in coastal regions."

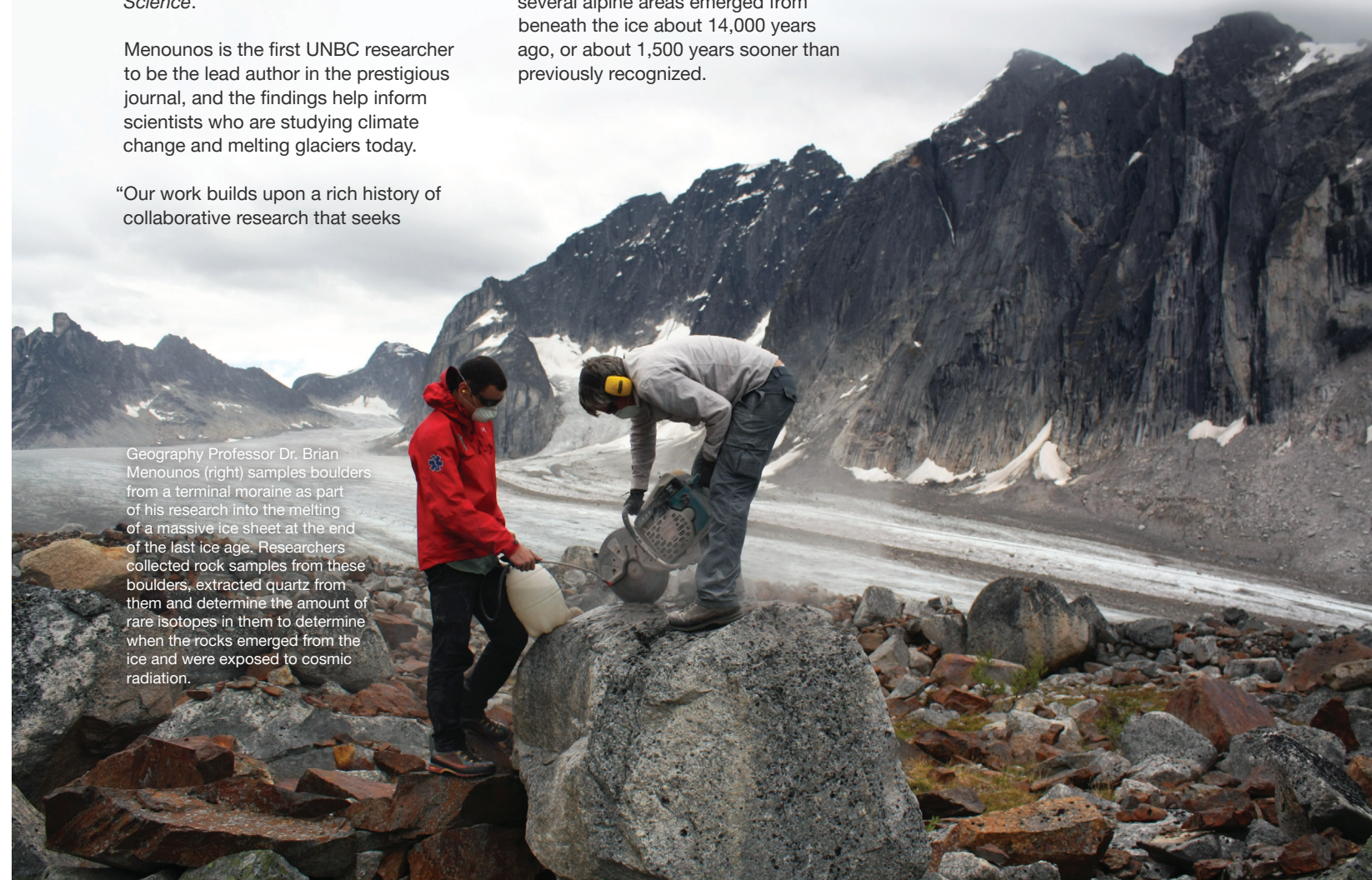
Menounos and his team used surface exposure dating – a technique that measures the concentration of rare isotopes that accumulate in quartz-bearing rocks exposed to cosmic rays – to determine when rocks first emerged from beneath the ice.

The researchers demonstrated that several alpine areas emerged from beneath the ice about 14,000 years ago, or about 1,500 years sooner than previously recognized.

Their work also revealed that the ice sheet decay was complex, partly due to the presence of mountainous terrain, but also because Earth's climate rapidly switched between cold and warm conditions during the end of the last ice age.

"Our findings are consistent with previous modeling studies that show that abrupt warming can quickly melt ice sheets and cause rapid sea level rise," Menounos says.

Geography Professor Dr. Brian Menounos (right) samples boulders from a terminal moraine as part of his research into the melting of a massive ice sheet at the end of the last ice age. Researchers collected rock samples from these boulders, extracted quartz from them and determine the amount of rare isotopes in them to determine when the rocks emerged from the ice and were exposed to cosmic radiation.



## Learning Lessons from Immigration

In his new book *To Belong in Buenos Aires*, Assistant Professor of History Dr. Benjamin Bryce explores how German immigrants to Argentina created their own institutions to adapt to their new country while at the same time maintaining important links with their homeland. This work can inform discussions about immigration today elsewhere in the world.

## Northern Leadership

Political Science Professor Dr. Gary Wilson was appointed President of the Association of Canadian Universities for Northern Studies (ACUNS). Established in 1978, ACUNS, through its member institutions, promotes northern and Arctic research and education in Canada throughout the circumpolar North.

Through the Canadian Northern Studies Trust program, ACUNS administers more than \$1.4 million in research and travel funding every year for undergraduate and graduate students, and post-doctoral fellows based at Canadian institutions.

## Payne named VP Research and Graduate Programs

Dr. Geoff Payne, a founding faculty member of the Northern Medical Program who has spent almost 15 years teaching, conducting research and providing service at UNBC, was named the University's new Vice President Research and Graduate Programs in March.

## The Physics of Curling

Physics Professor Dr. Mark Shegelski collaborated with University of Alberta Earth and Atmospheric Sciences Professor Dr. Edward Lozowski to come up with a comprehensive formula to describe the curl of a curling stone. The formula was presented in a paper published in the journal *Cold Regions Science and Technology* earlier this year.

## Rashid Named to Multicultural Advisory Council

Social Work student Hira Rashid is lending her voice and personal experience to promote multiculturalism and combat racism as one of the newest members of B.C.'s provincial Multicultural Advisory Council. The 12-member council provides advice to the cabinet minister responsible for multiculturalism.

# UNBC Stories

Our students, faculty, alumni and staff are making headlines for their work on campus and in the community. To learn more about these stories, please visit our website.

[unbc.ca/newsroom](http://unbc.ca/newsroom)

## Exchange Helps Russell Connect to Indigenous Culture

First Nations Studies student Devin Russell was one of 19 university students from across Canada who received the Queen Elizabeth II Diamond Scholarship through the Cross-Cultural Indigenous Knowledge Exchange program in 2017. The program is a partnership between UNBC and Te Whare Wānanga o Awanuiārangi, a Maori education institute in New Zealand.

## Engineering Professor Named Canada Research Chair

Engineering Associate Professor Dr. Thomas Tannert is UNBC's new Canada Research Chair in Hybrid Wood Structures Engineering. Tannert, who teaches in the Master of Engineering in Integrated Wood Design Program, seeks to identify challenges and provide solutions to the structural design of tall wood buildings, exploring many facets of engineering, including seismic performance, the ease of constructability and wood connections.

## Former B.C. Premier Topic of New Book

Political scientists Dr. Jason Lacharite and Dr. Tracy Summerville edited a new book on former B.C. Premier Gordon Campbell titled *The Campbell Revolution? Power, Politics, and Policy in British Columbia*. The book examines specific public policy examples and asks whether Campbell led a revolution or simply rode a wave of change that had begun years before he came to power.

## Hemingway Leads B.C. Poverty Reduction Forum

Dawn Hemingway, Chair of UNBC's School of Social Work, is co-chairing B.C.'s Advisory Forum on Poverty Reduction.

The forum members represent multiple sectors, including poverty advocates, people with lived experience, Indigenous people, academics and experts, along with representatives of the labour and business communities. They will provide insights and guidance across a wide range of topics, including poverty causes, priority actions, policy advice and more.

## Language Revitalization Recognition

Language is a critical building block for society, something that needs to be preserved, nourished and used for a culture to thrive.

Assistant Professor of First Nations Studies Edōsdi - Dr. Judy Thompson understands the fundamental importance of language revitalization to Indigenous communities. Edōsdi, which literally translates to "someone who raises up pets and children," and can be interpreted as "someone who is a teacher," recently received a 2018 Confederation of University Faculty Associations of British Columbia Distinguished Academic Early in Career Award for service to her community.

"Language can be healing for people," Edōsdi says. "It is important for us to have safe spaces for our Elders to use our language with each other and to be teaching the next generation of Tahltan speakers."

For nearly six years, Edōsdi has worked with her nation as the director of Tahltan language and culture. Her academic research has informed Dah Dzāhge Nodēsīdē, the Tahltan language and culture council. The name translates to "we are speaking our language again," and the group has celebrated many successes, including the creation of two language nests, where children between the ages of six months and four years of age are immersed in the language.

"It has been amazing to see the impact of the language nests the past four years," Edōsdi says. "When I go there and visit and get to see the toddlers understanding and speaking our language, it is very powerful."

Edōsdi was also the editor of an alphabet book, *Dah Dzāhge Ešigīts*, which translates to "we write our language." The book features Tāltān words and phrases with accompanying artwork by three Tahltan artists.



# Modern Technology, Inclusive Cities

**Computer Science graduates discovering solutions for urban challenges**

UNBC Computer Science graduates Han Wei Chan (left) and Ashish Sachdeva (right) discovered a novel solution to make public transit in Metro Vancouver more accessible. They enlisted former UNBC student Brad Zdanivsky (centre) to ensure their system to open fare gates is user friendly.

Technology is transforming the way we live and a pair of UNBC Computer Science graduates want to ensure everyone has the chance to benefit.

Ashish Sachdeva and Han Wei Chan formed Vancouver-based tech startup Hyperlight Systems with the goal of creating smarter cities, including eliminating barriers that continue to exist for people with disabilities.

“I have a passion for using technology to solve complex urban problems,” Sachdeva says. “But when we come up with solutions, we need to be inclusive in every way.”

Case in point is the company’s elegant solution to a challenge facing TransLink, the public transit provider in Metro Vancouver.

In 2016 TransLink launched a new fare payment system and installed fare gates at SkyTrain and SeaBus stations across its network. Some transit users with mobility challenges soon discovered that the fare gates didn’t work for them because without the use of hands they couldn’t tap the fare cards to open the gates.

That’s where Hyperlight came in with the idea of using Radio Frequency Identification (RFID) sensors above the fare gates and providing RFID cards to transit users with disabilities. When they approach a fare gate the sensor detects the RFID card and the gate opens automatically, enabling the passenger to access the transit system independently.

The Hyperlight team engaged Brad Zdanivsky, a former UNBC Computer Science student, to test the gates. Zdanivsky was in his first year of studies at UNBC in 1994 when he sustained spinal cord injuries in a car crash that resulted in him becoming a quadriplegic.

“The whole point for the user is that the interface is invisible,” says

Zdanivsky, who now uses SkyTrain on a daily basis.

TransLink launched the universal fare gate access program in January and is installing sensors at stations across its network throughout the year. Zdanivsky is testing each

## “When we come up with solutions, we need to be inclusive in every way.”

new installation to ensure the user experience is consistent.

It was the most high-profile success to date for Hyperlight, which has its roots in Computer Science and Business Professor Dr. Waqar Haque’s lab at UNBC.

Both Sachdeva and Chan studied under Haque’s supervision, gleaning insights both in the classroom and by working on projects with external research partners.

Sachdeva, an international student from India, came to UNBC to research software applications and big data as a master’s student. Chan, from Maple Ridge, travelled to Northern B.C. as an undergraduate student keen on learning more about computer hardware.

“They are two very different kinds of people in terms of their interests, but their interests come together very nicely,” says Haque. “It’s gratifying to see graduates achieve success in the private sector.”

Working on research projects at the graduate and undergraduate level gave Sachdeva and Chan a taste of what it’s like to work and collaborate with external clients.

“It’s not only a core computer science degree, you get real-world experience,” Haque says of opportunities his lab provides to students. “You look at applied problems, not textbook problems. I think that combination of academics and experience is what makes my

students really valuable as they begin their careers.”

Sachdeva was also inspired by the scholarship opportunities available.

“The financial support offered by UNBC changed my life,” Sachdeva says. “It made it possible for me to earn my master’s degree and gain the knowledge and experience to accelerate my career.”

Like many of the graduates of Haque’s lab, both Sachdeva and Chan got their first jobs at Northern Health after graduation. They reunited in Vancouver a couple of years later to found Hyperlight.

The company has already grown to include 14 employees and continues to expand. They are working to improve accessibility across the world and preparing to launch their next product “hands-free elevators” to further increase accessibility at transit stations.

“We are working on improving mobility experiences for everyone and implementing our solutions in other cities in Canada and around the world,” Sachdeva says. “It’s a solution to a local challenge that could have a global impact.”



# Sharing Circle

## Louie returns to Northern B.C. as first Aboriginal Scholar in Residence

For a short while at least, Dr. Dustin Louie returned home—home to his traditional territory and familial roots in Northern B.C.

UNBC's first Aboriginal Scholar in Residence, an educator from Nee Tahí Buhn and the Nadleh Whut'en of the Carrier Nation of Central B.C., is a member of the Beaver Clan. He maintains a busy schedule as an assistant professor at the University of Calgary's Werklund School of Education, teaching courses related to Indigenous education, social justice and educational philosophy.

Between January and April, Louie crisscrossed Northern B.C. visiting communities, connecting with Indigenous students and engaging with faculty members.

"It is a great honour to serve as UNBC's Aboriginal Scholar in Residence," Louie said. "As a Carrier Academic who grew up in Prince George, Fraser Lake and Burns Lake, this opportunity carries additional significance."

The Aboriginal Scholar in Residence Program is a component of UNBC's Aboriginal Service Plan, funded by the British Columbia government. That plan's goals include: increasing access, retention, completion and transition opportunities for Aboriginal learners; strengthening partnerships and collaboration in Aboriginal post-secondary education; and increasing the receptivity and relevance of post-secondary institutions and programs for Aboriginal learners, including providing support for initiatives that address systemic barriers.

Louie graduated from Lakes District Secondary School in Burns Lake and holds a Bachelor's degree in Canadian History, a Master's degree in International Relations and a PhD in Educational Leadership. All these connections and expertise have provided Louie the opportunity to have a profound impact.

"I feel fortunate to give back to Indigenous students, hear the voices of Indigenous communities, share guest lectures on campus, and collaborate in the Indigenous work of UNBC."



# Class Notes

Be part of class notes: visit [unbc.ca/alumni](http://unbc.ca/alumni)

## 1997

**Jocalyn Clark (MSc Community Health Science)** recently commissioned and edited a series on Canada's health system and global health role for *The Lancet*. Following her PhD at University of Toronto, Jocalyn has embarked on an editorial career that has included the *British Medical Journal*, *PLOS Medicine* and now *The Lancet* in London, UK as Executive Editor.



## 1998

**Megan Klammer (BScN)** is a Clinical Nurse Specialist for Island Health in Victoria.

## 1999

**Alan Bone (BComm Finance and Marketing)** is a Partner in Sander Rose Bone Grindle LLP, an accounting firm in Fort St. John.

**Michael Bosdet (BSc Chemistry)** is the President of TSGI Corporation a full-service scientific research and experimental development firm in Calgary.

## 2001

**Georgina Lloyd (nee Nelson) (BA Environmental Studies)** has worked for the public service for more than 15 years in policy development and delivery of scientific and northern programs. Georgina is now the Senior Director, Consultation and Accommodation at Indigenous and Northern Affairs Canada in Ottawa.

## 2000

**Errin Evans (BSc Environmental Planning)** is the Business Administrator for Cortez Family Dentistry in Cortez, Colorado.

## 2003

**Irene McKechnie (BSc Biology and MSc NRES Biology 2010)** is the Manager of the Okanagan Science Centre in Vernon.

**Irlanda Price (BSW and MSW 2010)** is the Associate Vice-President of Student Development for Medicine Hat College.

## 2004

**Kelly Dunn (nee Plamondon) (BSW)** is recovering from multiple surgeries to remove a large posterior

brain tumor. Until her diagnosis she was the Director of Family and Social Development at Saulteau First Nations. Her journey has been difficult, but she is resilient and hopes to continue her advocacy work.

**Lynda Price (Cert. First Nations Public Admin and BA First Nations Studies 2011)** recently spoke at UNBC's Aboriginal Alumni Speaker Series on her education journey from the Weekend University to receiving her law degree in 2015.

## 2005

**Christina Boddy (nee Stumpf) (BSc Biology)** is the owner of Rhodanthe Corporate Services in Toronto.

**Natalie Viney (BScN)** is a Public Health Nurse for Northern Health in Prince George.

## 2007

**Myles Poulin (BSc Biochemistry and Molecular Biology)** is an Assistant Professor of Chemistry and Biochemistry at the University of Maryland in College Park. His lab research examines the role of exopolysaccharides in bacterial infections.

**Joe Landry (BSc Biochemistry and Molecular Biology)** is a Trade Commissioner for Global Affairs Canada in Ottawa.

## 2008

**Colin Park (BSc NRM Wildlife and Fisheries)** just moved to his hometown of Brentwood Bay with a new job, new house and new baby boy, after 15 years in Prince George. He works for the BC Ministry of Environment and Climate Change.

**Dani McIntosh (BA Resource-Based Tourism and MA NRES 2013)** is an Environmental Impact Assessment Officer with Parks Canada. Dani is based out of Cochrane, Alta.



## 2009

**Stephanie McCullough (BComm Marketing)** is a Financial Analyst with SunSelect Produce in Burnaby.

**Philippe Thomas (MSc NRES Biology)** is a Wildlife Toxicologist with Environment and Climate Change Canada. He leads the hunter/trapper-harvested wildlife component of the joint Oil Sands Monitoring Program and is also in charge of the Arctic Seabird Monitoring Program, working near Resolute Bay, NT.



## 2010

**Aydin Maxfield (BSc Biology)** is the Land Management Officer for the Bay of Plenty Regional Council in Rotorua, New Zealand.

**Mikyla Young (BA English)** is the Children's Program Co-ordinator for the Grande Prairie Public Library.

**Cori Ramsay (BA English)** was recently acknowledged as one of the top 40 under 40 by the Prince George Chamber of Commerce. She recently gave a talk about the living wage at TEDxUNBC. Cori works for Integris Credit Union as a Communications Officer.

**Corbin Greening (BA First Nations Studies & Political Science and MA First Nations Studies 2015)** is studying law at the University of Victoria. After graduating, Corbin moved to Prince Rupert and Hartley Bay to work as a Treaty Analyst with Gitga'at First Nation.

## 2011

**Spencer Greening (BA First Nations Studies)** is a PhD candidate at Simon Fraser University where his research revolves around his deep connection to the Gigat'at First Nation, elders, territories, and the self-determination and decolonization of Indigenous peoples.



**Alexander Reed (BComm General Business and Marketing)** recently joined West Coast Canning as the Sales Guy. This unique mobile canning company for craft breweries was started by fellow alumni **Kevin Pederson (BComm 2007)** and **Matt Leslie (BComm 2011)** four years ago.

**Weronika Sroczynski (MSc Psychology)** is the Research Ethics Co-ordinator at the Ontario Shores Centre for Mental Health Sciences in Toronto.

**Autumn Chilcote (MEd Counselling)** is currently pursuing a Doctorate in Clinical Psychology at Duquesne University in Pittsburgh.

**Colleen Hutchings (MA Disability Management)** has relocated to Denver, Colorado for a new role with ReedGroup. Colleen is now the Vice President of Operations and Clients Services.

## 2012

**Carol Bob (BEd Secondary Education)** teaches Grades 10-11 mathematics in the Coast Mountain School District.

## 2013

**Aleah Johnson (Cert. Traditional Environmental Knowledge and BA Environmental Studies)** is an Aboriginal Support Worker for School District No. 57 in Prince George.

**Serena Lundquist (BScN)** is a Registered Nurse with Alberta Health Services in Edmonton specializing in Complex Medical Detox.

**Jae Waller (BFA)** recently launched her debut fantasy novel, *Call of the Right: Flight*. The book was an extension of a term project for her ENGL 471 class. Jae lives in Melbourne, Australia.

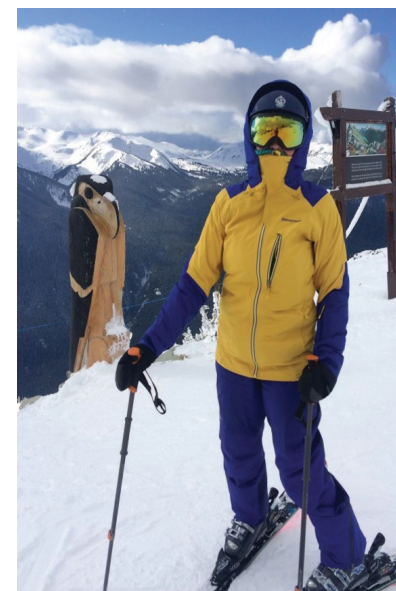


## 2014

**Reeanna Bradley (MA Gender Studies)** is a Senior Consultant with Loft9 in Seattle.

**Brenda Drazdoff (BSW and MSW 2017)** works for Interior Health in Oliver, B.C. She is the facility social worker specializing in dementia care in extended care facilities.

**Shannon McGinty (BSc NMR Outdoor Rec & Conservation)** is the Recreation Director for Sunchaser Vacation Villas at Fairmont Hot Springs in the Columbia Valley, B.C.



## 2015

**Jennifer Fraser (BA Women's Studies and BSW 2017)** is a Healthy Families Worker with the Yukon Government.

## 2016

**Josh Haskins (BSc Computer Science)** is an Application Technical Analyst with Northern Health.

**Hasib Nadvi (BPL Northern & Rural Community Planning)** is a Planner with the City of Williams Lake.

**Melanie Anderson (BA Environmental Studies)** spent the last year in Ghana working on women's agricultural projects with Crossroads International and in Greece as the Program Co-ordinator for FoodKind.



## 2017

**Chantel Kozachenko (BA Environmental Studies)** is working on her Master of Arts degree in Geography at the University of Guelph.

**Anthony Yecyec (BComm International Business and Marketing)** is the Communications Manager for the Prince Rupert and District Chamber of Commerce.

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