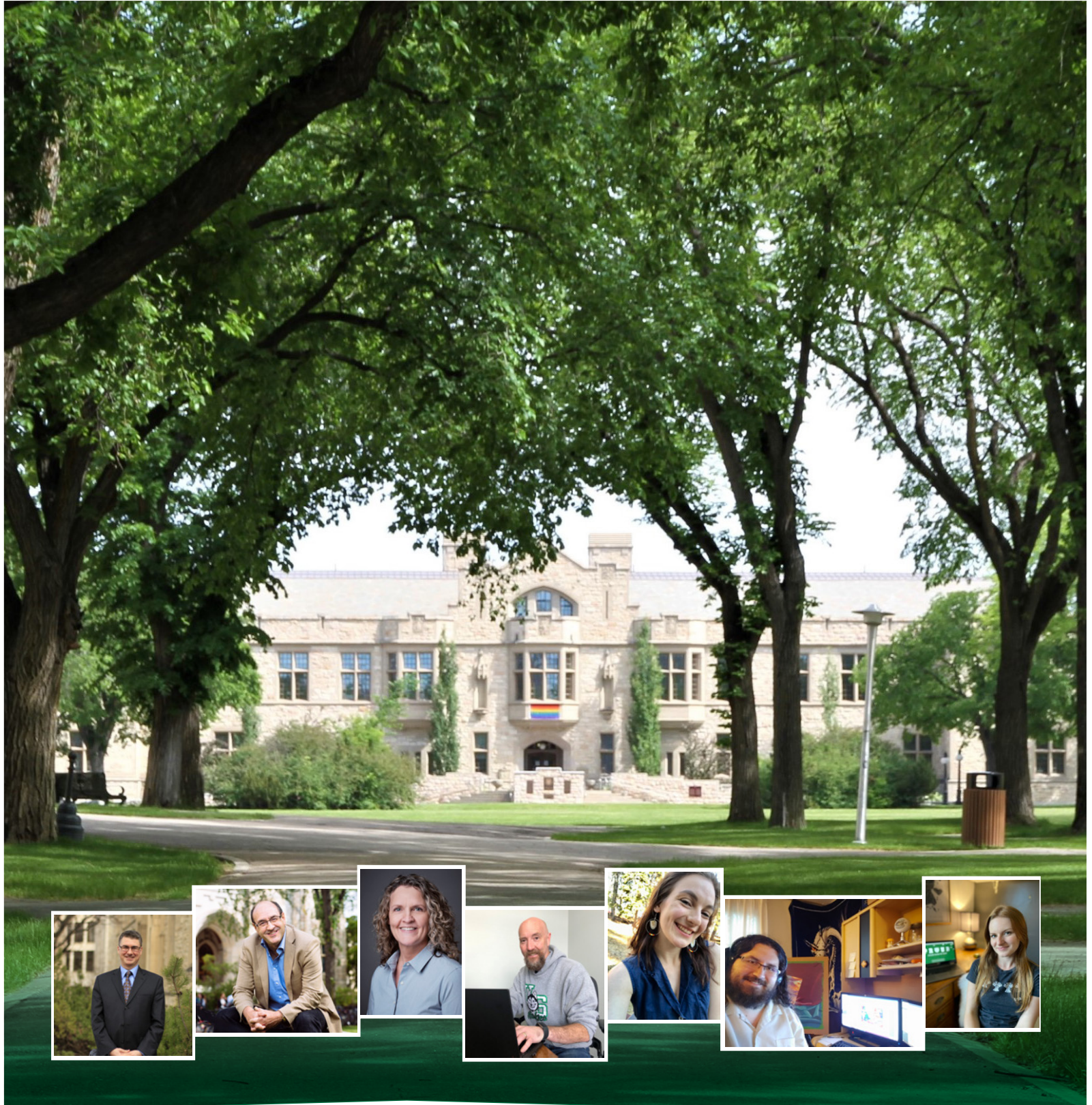




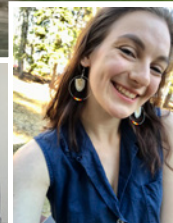
JULY 10, 2020
Volume 27, Issue 11



REMOTE DELIVERY

With summer classes and exams continuing to be offered through remote delivery, the once-bustling picturesque University of Saskatchewan campus is quieter than usual these days. In this edition of *On Campus News*, we take a closer look at how staff across campus successfully worked together in order to quickly transition from in-class to online instruction in mid-March to online final exams in April and May and to virtual convocation celebrations in June. While some courses, labs and research projects are opening up again on campus, the majority of classes are scheduled to continue to be delivered remotely in the fall semester.

SEE PAGE 8-9



– 3 –
HERE TO HELP

– 7 –
SUPERB SCHOLARS

– 10, 11, 12, 15 –
LOOKING NORTH

On Campus News is published 12 times per year by University of Saskatchewan Marketing and Communications. It is distributed to all USask faculty, staff, graduate students and members of governing bodies, as well as to others in the university community, related organizations, some Saskatchewan government officials and news media. Subscriptions are available for \$24 per year. Story and photo ideas are welcome. Advertising rates are available online or on request.

On Campus News aims to provide a forum for the sharing of timely news, information and opinions about events and issues of interest to the USask community.

The views and opinions expressed by writers of letters to the editor and viewpoints do not necessarily reflect those of USask or *On Campus News*.

We acknowledge we are on Treaty 6 Territory and the Homeland of the Métis. We pay our respect to the First Nation and Métis ancestors of this place and reaffirm our relationship with one another.

EDITOR
James Shewaga

WRITERS

Megan Evans, Kim Fontaine, Jenna Fraser, Federica Giannelli, Jackie Martin, Kristen McEwen, Chris Putnam, Erica Schindel, Delaney Schofer, James Shewaga, Carlee Snow, Alyssa Wiebe.

DESIGNERS
Brian Kachur
Pierre Wilkinson

ISSN: 1195-7654

PUBLICATIONS MAIL
AGREEMENT NO. 40065156

Return undeliverable addresses to:

UNIVERSITY OF SASKATCHEWAN
MARKETING AND COMMUNICATIONS
G16 THORVALDSON BUILDING
110 SCIENCE PLACE
SASKATOON, SK S7N 5C9

Email: news@usask.ca

University and city study food reclamation

KRISTEN MCEWEN

What if unwanted food from grocery stores and restaurants could be repurposed to not only save money, but potentially create jobs?

This is one of the potential interventions a University of Saskatchewan (USask)-led research team is studying as part of a food reclamation project, which could save 13,000 tonnes of food and save up to \$138,000 in disposal fees at the City of Saskatoon landfill.

Dr. Rachel Engler-Stringer (PhD), an associate professor in the Department of Community Health and Epidemiology at USask, is co-leading the project with Katie Burns, the community leadership and program development manager at the City of Saskatoon, and the Saskatoon Food Council.

“There are interesting examples in other parts of the world, there have been creation of economic development and social enterprises that have repurposed food,” Engler-Stringer said.

Cities around the world have



Dr. Rachel Engler-Stringer (PhD) of the Department of Community Health and Epidemiology at USask.

created social enterprises and organizations, which hire people to turn unwanted and “ugly” vegetables into food products like soups, jams or jellies that can be sold in grocery stores and delis, Engler-Stringer said.

Donating food to the local food bank or soup kitchen is still good,



Katie Burns is the community leadership and program development manager for the City of Saskatoon.

but it doesn’t address the underlying issue of poverty, she added.

“This is a way to potentially create an opportunity for good jobs in the community,” said Engler-Stringer.

Engler-Stringer’s project was one of five projects that received

funding through the Research Junction Development Grant program, a jointly funded research partnership between the university and the city, which began in September 2019.

The idea for the food reclamation project started in 2016 when Engler-Stringer was working with then Master of Public Health student Sylvana Tu. Now it is part of the training for Master of Sustainable Environmental Management students Freda Atsunyo and Layane Fenandes de Sousa Moura. What began with creating and distributing information pamphlets about the rights and responsibilities of donor businesses in partnership with Population and Public Health in the Saskatchewan Health Authority, has grown into a partnership with the city.

“When the call for Research Junction proposals came out, it seemed like a good opportunity to

SEE REDUCING, PAGE 10



IN CASE YOU MISSED IT

A lot happens at the USask during the weeks when *On Campus News* isn’t published. Here are a few of the top stories from news.usask.ca:

NSERC awards

USask researchers have been awarded \$10.3 million by Canada’s Natural Sciences and Engineering Research Council (NSERC) to support nearly 60 innovative science and engineering projects. USask faculty and students received more than \$9.3 million in Discovery Grants for long-term research, \$600,000 to support early career researchers, \$350,000 to purchase state-of-the-art equipment, and \$75,000 to support research in Canada’s North. The projects range from flood and drought research to synchrotron studies to artificial intelligence in health care.

Pozniak heads CDC

Dr. Curtis Pozniak (PhD) began a five-year term on July 1 as the new director of the Crop Development Centre (CDC) at USask. A faculty member of the College of Agriculture and Bioresources since 2003, Pozniak received his Bachelor of Science in Agriculture in 1999 and PhD in plant genetics and breeding in 2002 from USask. Pozniak is the Ministry of Agriculture Strategic Program Chair in Durum and High-Yield Wheat Breeding and Genetics, as well as a plant geneticist and wheat breeder with the CDC, which has been developing new crops for nearly 50 years at USask.

Sustainability MOU

Saskatoon Public Schools (SPS) and the Sustainability and Education Policy Network (SEPN) at USask have signed a Memorandum of Understanding (MOU) to further sustainability and climate change education initiatives. The agreement supports sustainability and climate change education for SPS administrators and teachers and developing programming to help students gain knowledge and be active in sustainable living, engaged citizenship and well-being. SEPN received a \$2.5-million grant from the Social Sciences and Humanities Research Council in June.

GIFS sets strategy

Increased collaboration with partners to advance sustainable global access to safe and nutritious food is the focus of a new strategy by the Global Institute for Food Security (GIFS) at USask. The new strategy sets the direction for the next phase of operations for GIFS, which was established on campus in 2012. As part of the new strategy, a Grower Advisory Panel will be created to provide expert advice on food producers’ science and technology needs, industry market trends and recommendations on how best to translate science into impactful solutions for producers.

FOR MORE UP-TO-THE-MINUTE NEWS, VISIT: news.usask.ca @usask

Supporting campus community during the pandemic



Terri Peterson is the clinical practice lead and counsellor with the Student Wellness Centre.



Jocelyn Orb is the manager of the Student Wellness Centre at the University of Saskatchewan.

JAMES SHEWAGA

Dealing with the stress and anxiety of living through a global pandemic has not been easy for many members of the University of Saskatchewan's (USask) campus community.

But while campus buildings remain closed, USask wellness support systems remain open for all students, staff and faculty struggling with the new reality of the COVID-19 era. Four months after the move to remote teaching, studying and working off campus, the university's wellness practitioners and programs are providing virtually all support services online, covering everything from counselling and clinics to workshops and webinars.

"There has been a slight increase in the number of clients that I am seeing for the same time period last year, but the big difference is that the things that we're talking about, almost every appointment someone brings up an impact of the pandemic, or of the COVID guidelines, on their life," said Kelly Giesbrecht, a counsellor with the university's Employee Family Assistance Program.

"There is a real fear of COVID that people are reporting for themselves, but also for people in their lives that are vulnerable. So, a lot of people are reaching out and I am getting a lot of feedback of that validation and normalization of their concerns, and that it just feels good to talk."

In addition to anxiety over

contracting coronavirus and prevention practices, Giesbrecht said common issues include the extremes of feeling isolated, or never being alone, as staff adjust to working remotely with children at home. Clients are also struggling with missing family and friends during important life events such as graduation, weddings and birthdays, and missing interaction with co-workers.

On the student side, spring and summer is traditionally a slower time of year for wellness services, and there has not been a spike in students seeking support during the pandemic. However, the clinicians in the Student Wellness Centre are seeing some common themes with their existing clients.

"We know that COVID and social isolation impacts our well-being," said Terri Peterson, clinical practice lead and counsellor with the university's Student Wellness Centre. "We haven't had an increase in students requesting services, but the students who we are already connected with are continuing to reach out at this time, so most of us are busy supporting that work. What I have noticed is students are doing some really good therapy work, so when they have support in times of struggle or crisis, it can be a good time to make changes."

While counselling is always a key component, the Student

Wellness Centre takes a multi-dimensional approach to supporting student health and well-being through promotion, prevention and intervention. Using online video and audio technologies, the centre is providing the full spectrum of support services for students, who can see a doctor, nurse, social worker, psychologist, dietician, peer health mentor or the always-popular therapy dogs.

"We have been able to translate the majority of services online," said Jocelyn Orb, manager of the Student Wellness Centre, which is now opening up some limited in-person services on campus. "We have a lot of health and wellness information on the website, we have been running some groups and workshops online, and are finding new ways to engage students and answer their questions in real time. We are finding that for the vast majority of clients, it has translated well to the virtual environment."

A full range of supports for staff and faculty are also offered online and over the phone, including 24/7 confidential counselling provided through third-party therapists via the EFAP system. USask's Wellness Strategy also includes online COVID-specific toolkits, mental health webinars and workshops, and video series covering every-

“ We need to let students know that we are here and we have space and time for them. We do want to support you in any way possible.

— Terri Peterson

thing from nutrition and fitness, to financial and legal guidance, to work-life solutions and work-from-home supports.

Similar to the student centre, the wellness supports for employees are also designed to provide preventative programming year-round, but are especially important during crisis like the pandemic.

"Anxiety and stress are the top reasons for EFAP usage in the campus community, so it does make sense that we would see an increase during a global health pandemic," said Carine Paley, a wellness team lead at USask. "The EFAP program also provides support in times when someone isn't struggling, to help build coping/resiliency skills. But

especially now when there is a lot of anxiety and stress, it is good to see an increase in numbers because that means people are getting the help they need."

For all wellness staff on campus, eliminating the stigma of seeking support for mental health is a priority, reminding all students, staff and faculty that services are open online and over-the-phone.

"We need to let students know that we are here and we have space and time for them," said Peterson. "We do want to support you in any way possible."

For Giesbrecht, the key message for the campus community is to focus on the present, a one-day-at-a-time approach to limit anxiety over what may, or may not, happen in the future.

"We need to focus on what is happening right now, because everything is changing so quickly," she said. "I guess that would be my advice at any time, but especially now. Be present." ■

HERE TO HELP:

Full faculty and staff supports are available online at:
wellness.usask.ca

Student supports are available online at:
students.usask.ca/health/centres

New research chair to explore ‘unique history’ of the Métis

CHRIS PUTNAM

Dr. Allyson Stevenson (PhD), the holder of the new Gabriel Dumont Research Chair in Métis Studies at the University of Saskatchewan (USask), wants to record the untold story of the Métis in Western Canada.

“It’s a really unique history, a really important history that has yet to be written,” said Stevenson, who began her five-year term as chairholder in the Department of Indigenous Studies on July 1. The Gabriel Dumont Research Chair in Métis Studies is a new position in the USask College of Arts and Science, created in partnership with the Gabriel Dumont Institute of Native Studies and Applied Research (GDI).

Stevenson plans to gather and study oral histories, scrip records, homestead records and government documents to build a detailed history of 20th-century Métis communities in Western Canada.

She said she hopes to connect with communities across Western Canada and combine their local histories into “a larger Métis story about maintaining our culture, revitalizing our culture, and remaining Métis in the present.”

A crucial transformation in Métis society occurred over the last century. Dispersed and devastated Métis communities re-emerged in Western Canada, changing the political, cultural and intellectual landscape of the country.

Stevenson noted that Métis

leaders in Saskatchewan were particularly important to the transformation—something she hopes to understand better through her work in the coming years.

“It appears there is something unique taking place in Saskatchewan that really is fuelling the revitalization of Métis people,” she said.

A Métis scholar with deep family roots in Saskatchewan, Stevenson most recently held the role of Tier II Canada Research Chair in Indigenous Peoples and Global Social Justice at the University of Regina. She earned her Bachelor of Arts, Master of Arts and PhD in history from USask.

During her time as a student in the Department of History, Stevenson said she was fortunate to work with “really exceptional scholars” including Dr. Jim Miller (PhD) and Dr. Valerie Korinek (PhD), who encouraged her to continue in academia.

“Just having that really supportive environment—to be mentored, to be identified as someone with promise—was really transformative for me and just fuelled my desire to continue to pursue history, pursue questions about the past,”

said Stevenson.

Stevenson has published articles on the Sixties Scoop and Indigenous women’s political activism, along with histories of Métis resilience and resistance. Her first book, *Intimate Integration: A History of the Sixties Scoop and the Colonization of Indigenous Kinship*, will be published this summer by University of Toronto Press.

Korinek, who supervised Stevenson’s PhD and is now the College of Arts and Science’s vice-dean of faculty relations, said it was “a privilege” to recruit Stevenson back to USask.

“Watching her take her place on the national and international stage at various conferences over the past few years, it is amazing to see how she has become an emerging leader in her field.”

Stevenson said her approach to the research chair position will be holistic and grounded in her Métis worldview. She plans to collaborate closely with Métis community members, USask researchers and GDI, and hopes to recruit a large cohort of Métis students to contribute to the work.

Stevenson wants to explore ways of sharing her findings beyond traditional academic circles.

“It’s going to be really important to ensure that it’s not just reaching an academic audience, but that it’s reaching a community audience as well,” she said. ■

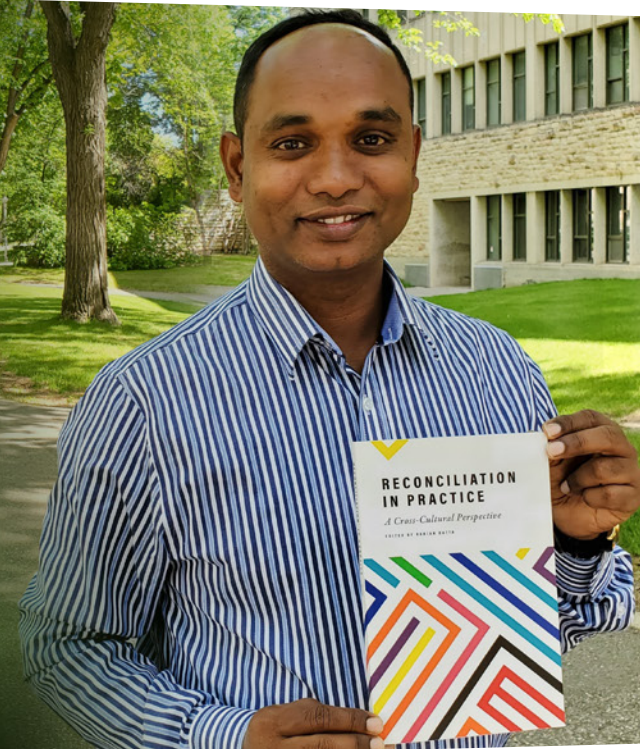


Dr. Allyson Stevenson (PhD) started in the position of Gabriel Dumont Research Chair in Métis Studies on July 1 in the Department of Indigenous Studies at USask.

VICTORIA KERR

ALUMNI SPOTLIGHT

Every month in *On Campus News*, we highlight an exceptional graduate of the University of Saskatchewan in our Alumni Spotlight feature series. In this issue, we profile USask alumnus Dr. Ranjan Datta (PhD'16), a Banting Postdoctoral Fellow who examines reconciliation progress in his new book, *Reconciliation in Practice: A Cross-Cultural Perspective*.



University of Saskatchewan (USask) alumnus Dr. Ranjan Datta (PhD) with his new book, *Reconciliation in Practice: A Cross-Cultural Perspective*.

MEGAN EVANS

Dr. Ranjan Datta: The road to reconciliation

MEGAN EVANS

Dr. Ranjan Datta (PhD) believes everyone has a role to play in contributing to the ongoing reconciliation process in Canada.

The University of Saskatchewan (USask) alumnus was born in Bangladesh and witnessed racism firsthand as his family suffered persecution because of their Indigenous and minority identity. Being on the receiving end of racism in his home country, he decided to emigrate to Canada where Indigenous mentorship has helped him and his family enjoy a healthy and vibrant life.

Datta, a graduate of USask's School of Environment and Sustainability (SENS), was interested in ways he could engage as a scholar with the recommendations from the Truth and Reconciliation Commission's 94 calls to action, which were released in 2015.

"It was only at the University of Saskatchewan that I had an opportunity to learn about Indigenous colonial history and Indigenous

contributions. As an immigrant, I benefit from the colonial systems set up by Canadian settlers, even if I am a person of colour. I need to take responsibility to change these systems through my anti-racist and decolonial education and practice," he said.

His book, *Reconciliation in Practice: A Cross-Cultural Perspective*, is a compilation of essays, personal reflection and poetry written by immigrants, refugees and others. This compilation explores themes like building respectful relationships with Indigenous Peoples, respecting Indigenous treaties, learning the roles of colonized education processes, and creating intercultural spaces for social interactions.

His book also suggests that both Indigenous and non-Indigenous people need to do more than just talk about reconciliation: Each individual must learn how to take responsibility for reconciliation in everyday life—within ourselves and our families, in our communities, in

our education, and our workplaces.

"I wanted to create this book as a compilation of different experiences, because no one person has the answers we need to move forward and everyone must contribute to reconciliation in their own way. Reconciliation is about meaningful collaboration, not a final destination. And it is something of practice or an on-going process," Datta explained. "Being anti-racist is something I commit to everyday. Ending racism is not about ending discrimination against any one group—it is about ending race-based discrimination

for every person. Justice for Indigenous people means justice for me. Everyone must participate if we are to succeed in eliminating racism."

"As a researcher, I must take care to ensure that I do not perpetuate colonial or racist approaches to problem solving, by dictating what someone else needs to do based on my own experience and assumptions."

When Datta approaches a research problem, he tries to understand it holistically. For instance, when looking at an issue of land-water management, Datta looks not

only at the effects of pollution on the natural environment, but also the spiritual, mental, and physical health implications for community members.

"When I am doing research on an environmental issue within a community, I put that community at the centre. Their experience with the problem, their knowledge of the subject, and their needs in the solution cannot be left out or the solution will not be ultimately sustainable," he said. "I have found that the community leaders are always willing to share what they know, and that they also want to learn from me. The combination of their historical and traditional knowledge and my expertise generates more comprehensive answers to any question we tackle together. The community shapes me as a researcher." ■

Megan Evans is a communications specialist in the School of Environment and Sustainability at USask.

Dr. Datta's book, *Reconciliation in Practice: A Cross-Cultural Perspective*, is now available. Datta is a Banting Postdoctoral Fellow in the Johnson Shoyama Graduate School of Public Policy at the University of Regina. He completed his PhD from the School of Environment and Sustainability at the University of Saskatchewan in 2016.



“ I want to be able to break down the barriers of access for justice so that it is available for everyone.

— Barbara Baker

Donor support helps law student connect with the community

 CARLEE SNOW

Inspired by the lawyers who volunteered at the same non-profits as she did during her undergraduate English degree at the University of Calgary, Barbara Baker is now at the University of Saskatchewan (USask) pursuing her dream of practicing law to make a difference in the community.

“I want to be able to break down the barriers of access for justice so that it is available for everyone,” explained Baker.

“I have volunteered with the Pro Bono Students Canada program as well as CLASSIC, the Community Legal Assistance Services for Saskatoon Inner City Inc., and each of these committees has a lawyer that oversees everything. This is a position that I would be really interested in pursuing in the future. I believe it will be our duty as lawyers to help everyone in the best way and truly make a change.”

Baker was the recipient of the Morris and Jacqui Shumiatcher Scholarship in Law, which is awarded to one student entering the College of Law each year, based on academic achievement.

“The College of Law places a large emphasis on volunteering, and thanks to the support of donors I

was able to really immerse myself in that,” she said. “I was able to volunteer to present legal information to survivors of sexual assault at the YWCA, which is something I don’t think I would have been able to do if I was stressed about finances.”

Baker found that it is quite the transition from having a steady income working in Calgary to being a student again. She noted that without the financial and emotional support from donors it would have been a much larger hurdle for Baker to overcome.

“I think being able to focus on volunteer opportunities and developing connections with community members will assist me in the future, instead of focusing on how I am going to make money and pay for expenses now,” she said. “The experiences I am gaining through volunteering will be really positive in the long run.”

Baker also noted how this support has had a positive impact on her mental health throughout the school year.

“This scholarship has helped me be less anxious and more focused when it matters,” she said. “I feel more confident in my abilities because I know there are people that really care about my well-being and

the work I’m doing.”

As a scholarship recipient, Baker said she now has more time to participate and give back to the community, something she is very passionate about and a motivating factor for her to pursue a career in law.

“I have the time to help the community and give back in a meaningful way that I would not have been able to do if I had to be working,” she said. “It is because of donors that I am able help the community and I can only hope it will make a mark on someone else’s life.”

Baker offered her most sincere thanks to the donors who contributed to her scholarship. She sees the importance of their support and explained how they inspire her to also give back in the future.

“All students want is to better themselves, but they often face a lot of barriers getting in the way of them doing that,” she said. “I think that donors who break down those barriers and make university accessible to people who may not have the finances normally to be able to do that, is really amazing. I cannot thank them enough.”

Carlee Snow is a development communications co-ordinator in University Relations.

USask’s Barbara Baker was the recipient of the Morris and Jacqui Shumiatcher Scholarship in Law.

 SUBMITTED

USask's new Banting, Vanier researchers



Bhawra



Skierszkan



Zoroufchi Benis

 FEDERICA GIANNELLI

Three exceptional young University of Saskatchewan (USask) researchers have been awarded national Banting and Vanier Canada awards to advance research focused on climate change and water security.

USask health policy researcher Jasmin Bhawra and geological sciences researcher Dr. Elliott Skierszkan (PhD) have been awarded highly competitive Banting Postdoctoral Fellowships totaling \$280,000 for climate change-related research. Chemical engineering PhD student Khaled Zoroufchi Benis will receive \$150,000 over three years through a Vanier Canada Graduate Scholarship to advance water research.

“These talented scholars will become research leaders of tomorrow and contribute through the impact of their discoveries to Canada’s economic and social growth,” said USask Vice-President Research Dr. Karen Chad (PhD).

INVESTIGATING CLIMATE CHANGE

Working with northern Indigenous communities, Bhawra will investigate the impact of climate change on mental health and food security using a new mobile phone SMART platform to gather population health data.

“Climate change and natural disasters such as floods and droughts contribute to anxiety and depression, and these issues are exacerbated among those who struggle with food insecurity,” she said. “We will look at how climate change affects the food system, and

strategies Indigenous Peoples are using to cope with these changes and develop community-driven adaptation policies.”

While shorter winters may mean longer growing seasons, it is less viable for many northern communities to acquire food in traditional fishing and hunting grounds due to changes in wildlife and the environment.

“The Indigenous communities will take center stage,” said Bhawra. “Using our smartphone-based platform, they will provide direct feedback on their mental health and food access issues and engage in real time with researchers and other

community members.”

The plan is to share the results with the communities months before publication, so the communities can make timely decisions based on this knowledge.

“Our research will provide policy makers with the information they need for ongoing monitoring and program planning to improve food access for these communities and elsewhere in Canada,” said USask public policy professor Dr. Ken Coates (PhD), Bhawra’s supervisor at USask’s Johnson Shoyama Graduate School of Public Policy where the smartphone platform was developed through the school’s

Digital Epidemiology and Population Health Laboratory.

IMPROVING WATER SECURITY

Using the Canadian Light Source synchrotron, Skierszkan will study how warming temperatures in Northern Canada influence natural uranium release from rocks and sediments into water sources.

High uranium concentrations in northern water sources occur frequently. Excessive exposure is known to be harmful to fish and human kidneys.

“Our research draws attention to the need to monitor water quality even in areas with no direct impact from industrial activities, and will also help identify areas of concern for groundwater management,” said Skierszkan, who was attracted to USask by the excellence of the university’s water research.

Climate change and thawing permafrost are causing shifts in groundwater chemistry and flow, but it is unclear how these changes will affect the release of uranium from rocks and sediments.

“Understanding how these changes happen will enable us to better predict future impacts on water security in northern regions,” said USask geological sciences professor Dr. Matt Lindsay (PhD).

DEVELOPING SAFER DRINKING WATER

Zoroufchi Benis is developing a “green” bio-filter to remove arsenic from water and help make drinking water safer.

One-third of Canadians rely on groundwater as a source for drinking water. While arsenic is naturally present in water at various concen-

trations, these natural levels are not always safe. Exposure to arsenic may cause health problems such as cancer, diabetes and heart disease.

“Our filter, made from biochar (activated carbon from agricultural waste) and highly arsenic-resistant microalgae, aims to remove the arsenic from water by combining these two natural materials that have separately shown promise for capturing this metal,” said Zoroufchi Benis.

Using the Canadian Light Source, he will study the properties of these materials and create a more efficient bio-filter that would be cheaper and safer compared to the current processes that rely on chemicals.

“Our bio-compatible filter may have an impact around the world in countries such as India and Bangladesh where arsenic contamination is a big issue,” said USask chemical engineering professor Dr. Jafar Soltan (PhD), Zoroufchi Benis’ co-supervisor.

Arsenic contamination in water is an historic and ongoing Canadian and worldwide human health issue, said engineering associate professor Dr. Kerry McPhedran (PhD), Zoroufchi Benis’ co-supervisor.

“Our team is confident this research will result in an effective bio-filter technology,” McPhedran said.

Zoroufchi Benis, who came to USask from Iran, said, “Being a Vanier recipient will help me reach my dream of doing something for saving the environment.”

Federica Giannelli is a PhD candidate and graduate student intern with USask [Research Profile and Impact](#).



Russell Isinger is the university registrar in Teaching, Learning and Student Experience.



Dr. Gordon DesBrisay (PhD) is vice-dean academic in the College of Arts and Science.



Dr. Nancy Turner (PhD) is the director of Teaching and Learning Enhancement.

Going remote:

How USask rallied together in the face of the pandemic

 KIM FONTAINE

In March 2020, COVID-19 hit and the University of Saskatchewan (USask) took immediate action in making critical decisions that would have a lasting impact on teaching and learning.

In the days leading up to the March decision to quickly transition to remote teaching, the university's crisis management team worked closely with health officials and people from across campus to inform the decisions made by the President's Executive Committee.

On March 13, USask announced that classes would move to remote delivery. How classes and final exams would continue, with only three weeks left in the term, had to be figured out fast.

"We had to quickly determine

how to best support faculty as they navigated this significant task, especially those who were new to teaching online," said Director of Teaching and Learning Enhancement Dr. Nancy Turner (PhD). "Of central importance was thinking about our students and what challenges they would be facing. Our biggest concern was the diversity of student needs and internet access, especially for those who would be returning to remote communities and reserves."

Sydney Kuppenbender, a student in the College of Agriculture and Bioresources, said those concerns were very real, especially for Indigenous students like herself.

"Northern communities are extremely vulnerable to many

things and COVID is no exception," said Kuppenbender, who is working toward her Bachelor of Science in renewable resource management. "I was worried about my fellow Indigenous students. I felt that even if I could thrive in this new mode of learning, not all could. Whether they were returning to their communities and having to deal with unreliable internet, or their house was full of people, making it difficult to concentrate, or if they couldn't go home and were stuck in isolation."

Over the course of the next three days, Turner said faculty executed a Herculean task of bringing more than 3,000 classes online, while teaching and learning support units and Information and Communications Technology (ICT)

staff provided support and help addressing issues when they arose.

"The ingenuity of our faculty and instructors, who so quickly pulled together to implement major change in a time of need, was remarkable," recalled Turner. "Unprecedented doesn't seem a strong enough descriptor. It shone a light on what we're capable of when we need to mobilize."

On Thursday, March 19, when classes resumed in this new virtual world, faculty and staff had to quickly figure out how to best address the various challenges students were facing. Faculty and colleges played an important role in keeping students informed and addressed concerns. Student wellness supports quickly came online to provide counselling and medical care.

Crisis financial aid was made readily available for hundreds of students who needed to purchase equipment and address other imminent expenses. As of June 22, more than \$1.2 million had been distributed to more than 500 recipients.

"When the campus closed, I felt relieved, honestly," said Haydn Harach, a third-year computer science student in the College of

Arts and Science. "Both because I was concerned about COVID, but also because I felt that studying from home might be better in some ways. In the beginning, things felt a little hit-and-miss, but the college did a really good job of keeping me informed. I knew the university was doing its very best to provide whatever support I needed."

As the winter term was drawing to a close, faculty had to next figure out what to do about final exams. University Council passed a motion that provided flexibility in faculty's course syllabi (a binding contract between faculty and students) allowing faculty to offer alternatives to their final exams, including open-book exams, final projects, redistribution of grades for past work, pass/fail grades, etc.

According to Dr. Chris Todd (PhD), head of the Department of Biology, the goal was to figure out how to best maintain academic integrity while limiting the number of online exams—again addressing challenges with connectivity and accessibility that would leave some students disadvantaged.

"There was a lot of anxiety around this," said Todd.

CONTINUES ON PAGE 9



Dr. Christopher Todd (PhD) is the head of the Department of Biology in the College of Arts and Science.



Sydney Kuppenbender is a student in the College of Agriculture and Bioresources.



Haydn Harach is a third-year computer science student in the College of Arts and Science.



Kaitlyn Dilsner graduated with great distinction from Edwards School of Business in June.

FROM PAGE 8

“A lot of our students are aiming for professional colleges, so it was crucial that final grades to be used in their applications were as valid as possible. Our most impending concern was the nature and size of some classes, like Biology 120, with over 700 students. What would happen if everyone logged on at the same time, then got kicked off and lost their exam? The local system’s robustness had never been tested for this.”

Todd reached out to ICT and the Distance Education Unit (DEU), and they started to probe the system through a series of small quizzes, where students logged on together to test how well it would function. Todd said this instilled confidence from both sides (students and faculty) in doing a final exam remotely. Staggering exam start times for groups of 150-200 helped minimize strain on the system, while staff stood by in real time to address any technical issues.

“It worked out phenomenally well in that the vast majority of students completed the exam without any issues,” said Todd. “The thing that strikes me the most is how everyone had the students’

best interests at heart. We wanted to maintain that academic rigour for finals, but it wasn’t for our sake—it was for theirs.”

By all accounts, the winter 2020 term was brought to a credible resolution. Was it perfect? How could it have been? So many mitigating factors came in to play, decisions had to be made swiftly and some of those decisions wouldn’t have been ideal for everyone. But the consensus is that without remote teaching and learning, students would have never made it to the finish line.

“We’ve learned a lot,” said Dr. Gordon DesBrisay (PhD), a vice-dean in the College of Arts and Science. “We’ve learned our technical systems are more robust than some of us feared and we’re introducing new programs like Canvas to help relieve that load to provide better access and tools that will significantly improve teaching and learning.”

For Turner, having to go remote has exposed people to different kinds of teaching and learning practices that they might not have otherwise encountered.

“I think there’s now a different view of online teaching, which could have only come about with the experience in using it,” she said. “It feels

as though a whole new world of possibilities has just opened.”

For all the heroic efforts of faculty and staff, DesBrisay insists that the real heroes in all of this are the students.

“They hung in there,” he said. “It’s one thing for us to pivot. We know our stuff. We’re in the driver’s seat. But for passengers who don’t know what’s going on, it must have been terrifying, concerning, anxiety-making. Yet they rose to the occasion.”

Close to 22,000 students were enrolled in the winter 2020 term and of those, more than 3,500 were finishing their degrees. That last day of in-person classes would be the last time these graduating students would see all of their professors and classmates. To top off the disappointment was the postponement of the Graduation Powwow and Spring Convocation.

On the day that would have been the Graduation Powwow, graduating Indian Teacher Education Program (ITEP) student Rollin Baldhead and his group—the Walking Buffalo Singers—recorded an honour song in the Gordon Oakes Red Bear Student Centre. Saskatchewan Urban Native Teacher Education Program (SUNTEP) student Tawnie

Kotyk sang the *Year of the Métis Tribute* in The Bowl. Their songs were shared far and wide as part of the #USaskClassof2020 celebration.

The #USaskClassof2020 webpage could never replace the powwow or convocation ceremonies, according to University Registrar Russell Isinger, who oversaw the team tasked with finding ways to celebrate the graduates. But on the day that convocation would have started at Merlis Belsher Place, the celebration website was populated with congratulatory messages and videos, student stories and a list of graduating students. Celebratory GIFs and other graphics were also available to be shared on social media.

Isinger said students received celebratory posters, USask photo props and congratulatory letters with their parchments by mail. USask spring graduates continue to share pictures on social media of themselves and their parchments.

“This was uncharted territory for us,” said Isinger. “Our goal was not to replace convocation, but to celebrate the accomplishments of our graduates and show them how proud we are of them. We look forward to inviting our graduates to cross the stage at a future ceremony when it’s safe to do so.”

Kaitlyn Dilsner, a marketing student in USask’s Edwards School of Business, said that had it not been for all the hard work of her professors, she wouldn’t have been able to graduate. At the end of March, she was also hit with a family tragedy that forced her to put her education on hold for weeks and she missed all of her scheduled final exams.

“I’m so thankful my exams were remote,” she said, “and that my professors had more room to accommodate my situation without deferring my finals.”

Dilsner successfully completed her program and graduated with great distinction.

“As with every graduate this year, I’m disappointed that we had to postpone our ceremony, but I’m thankful that the college worked so hard to ensure that I would be able to graduate and the university did its very best to make us all feel honoured,” she said. “I’ve had four wonderful years on campus and look forward to the day we can all come back together and have a real goodbye.”

Kim Fontaine is a marketing co-ordinator with Teaching, Learning and Student Experience at USask.

Providing rural, remote dental care

JENNA FRASER

It's common to hear about people being afraid to go to the dentist. But for many individuals living in rural and remote Saskatchewan, a fear of the dentist is the least of their worries.

For these individuals, visiting a dentist is harder than most could ever imagine, due mainly to the fact that the closest dentist is—at minimum—a seven-hour drive away, and in some cases, individuals need to plan an overnight trip just to receive oral health care. This is something the College of Dentistry at the University of Saskatchewan (USask) is trying to change.

A part of the college's strategic plan is to become a leader in inclusive community care.

"Inclusivity to us means delivering holistic and culturally appropriate dental care to a wide variety of groups—Indigenous Canadians, Elders, children, the LGBTQ community—and to redress oral health inequities among the most marginalized and vulnerable in society," said Dr. Amrinderbir Singh (DMD), assistant professor of Dental Public Health, and director of Inclusive Community Care.

A key component to being



Dr. Amrinderbir Singh (DMD)

a leader in inclusive community care is increasing access to dental services. Individuals in remote and rural communities in Saskatchewan—often Indigenous populations—don't visit the dentist because there isn't one in their community, and it's too difficult to travel to see one.

Working to address this gap, the College of Dentistry is establishing a network of clinics that

serve priority populations through developing innovative inter-sectoral solutions. To date, the college has launched five dental clinics in defined priority communities: Cumberland House First Nation, Yellow Quill First Nation, Kinistin First Nation, La Loche, and the Saskatoon core neighbourhood.

The college works with community partners to determine the schedules for the clinics that run all year long. The schedule is based on what the need is in each community, how often the dentist is available to visit, and housing arrangements for the dental team.

Due to COVID-19, there has been some disruption in the delivery of dental care. However, the operation of most of these clinics is continuing with new infection prevention and control protocols in place, following the guidelines set out by the College of Dental Surgeons of Saskatchewan.

For Singh, an important consideration is providing rural and remote clinical care in a culturally appropriate manner, and gives the dental teams local and regional orientation, background and training.

"We are exploring the Indigenous ways of knowing, constantly engaging the communities to understand their needs of care and to deliver effective and appropriate care," he said.

Singh said the college has future plans to expand this network of clinics.

"Community readiness is important, and then there is broader intersectoral collaboration that is required to put the vision into action," he said. "These clinics are

only possible through collaboration."

The college wants to ensure that when it opens a new clinic, it is sustainable and able to provide care long-term.

"The sustainability and the consistency of the services we provide is one thing I'm proud of," Singh said. "We are taking care to where it historically hasn't been." ■

Jenna Fraser is the communications officer in the College of Dentistry and the School of Public Health.

USask researchers to develop new saliva-based COVID-19 test

University of Saskatchewan (USask) researchers are part of two projects awarded federal funding from The Canadian Institutes of Health Research (CIHR) COVID-19 Rapid Response Program.

Researchers in the USask College of Dentistry and the USask Vaccine and Infectious Disease Organization-International Vaccine Centre (VIDO-InterVac) will develop a unique saliva-based

test for COVID-19 detection. Dr. Walter Siqueira (DDM) of the USask College of Dentistry will lead development of the new diagnostic test, as part of a broader University of Regina-led project. In a second project, Dr. Siqueira will work with McGill University researchers to collect saliva samples from dentists across the country to determine the incidence rate of COVID-19 as they return to work. ■

Reducing landfill food waste in Saskatoon

FROM PAGE 2

work with the City of Saskatoon's Sustainability Division as it works on an Industrial, Commercial, and Institutional (ICI) waste diversion strategy," Engler-Stringer said.

The city's team has a shared interest to create a strategy that will focus on reducing the amount of food that is wasted and goes to the landfill.

"The city has the target to divert 70 per cent of waste from

our landfill," Burns said. "To help achieve this, businesses and organizations that generate food or yard waste as part of their operations will be required to have organics diversion in place by 2023."

"This project will give businesses and organizations an additional option to comply with the new regulation, while at the same time helping to reduce their disposal costs and realizing social

and economic benefits for our community," she added.

The funding for this project was announced in February, a few weeks before COVID-19 arrived in the province. Though the pandemic has disrupted many aspects of life, USask is able to move forward with aspects of the food reclamation project.

The project is starting with environmental scans of existing food reclamation strategies in other cities and studying how food-based

businesses in Saskatoon deal with surplus food.

"We're starting to look at other cities and using their programs as examples for common practices that could be used in Saskatoon," Engler-Stringer said.

The next step of the project is implementing strategies in Saskatoon, which may have to wait until work is no longer required to be completed remotely.

Engler-Stringer mentioned

that they will continue to work on the environmental scan, as well as interviewing food business owners and management throughout the summer, until the practical side of the project can move forward.

"We're still continuing, just in a slightly different order than initially planned," she said. ■

Kristen McEwen is a communications co-ordinator in USask's College of Medicine.

Making a difference: JSGS student supports Yukon First Nation initiative to improve education outcomes



JSGS master's student Lauren Wallingham stands on top of Mount Haldane in the Traditional Territory of the First Nation of Na-Cho Nyak Dun in the Yukon.

✍ ERICA SCHINDEL

It is a common belief that providing young people with a good education should give them a better chance at life. This is especially true when trying to build human capacity while narrowing the socio-economic gap between First Nations and non-First Nations peoples in Canada. But what qualifies as good?

“For generations, education was used by Canada to impose its dominance over Indigenous Peoples and provide inadequate educational opportunities. Slowly, the country came to realize that First Nations education, far from being an advantage, was a tool of oppression,” said Dr. Ken Coates (PhD), Canada Research Chair in Regional Innovation and professor in the Johnson Shoyama Graduate School of Public Policy (JSGS) at the University of Saskatchewan (USask).

“Yukon has emerged as an example of the benefits associated with First Nations control of education. The First Nations and the territory have been creative and determined in improving the educational system to better suit Indigenous needs.”

In 2014, the Yukon First Nations released its Action Plan 2014–2024 as a blueprint for strengthening

traditional roots and closing the educational gap within its territory. The report reinforced the idea that, “knowing the traditional cultural way of life through seeing, knowing and doing and sustaining our [Yukon First Nations] identities, beliefs, laws, values, and morals should be the foundation upon which all learning is based.”

It called on its partners and stakeholders—including Yukon First Nations leaders, the Government of Yukon, the Government of Canada, Elders, youth, education directors and staff—to work collectively to empower present and future generations. However, despite Yukon-wide initiatives, First Nations students continued to achieve lower than non-First Nations students. So, individual communities stepped forward.

About 400 kilometres north of the capital of Whitehorse and along the Silver Trail and Stewart River, is the small Village of Mayo. Home to the First Nation of Na-Cho Nyak Dun (FNNND), it represents the most northerly community of the Northern Tutchone language and culture group. Like many northern rural communities, Mayo is struggling to keep students engaged with

their education. In December 2019, FNNND completed a community report on closing the socio-economic gap between First Nations and non-First Nations residents in Mayo.

“Similar to other community-led reports, ours highlighted educational programming as an essential component in meetings our goals,” said Dr. Anne Tayler (PhD), FNNND executive director. “If we want the children to excel in both First Nations and mainstream societies, we need to determine how best to include Traditional Knowledge, cultural practices, histories and language in their education.”

Around the time the report was released, JSGS Master of Governance and Entrepreneurship in Northern and Indigenous Areas student and FNNND citizen Lauren Wallingham was looking for an opportunity to build capacity in her community through her applied research project. In January 2020, she worked with FNNND to develop a research proposal focused on implementing the community report recommendations. Her proposal was approved by Chief and Council in February.

“There are many challenging priorities within our community in 2020, and COVID-19 brought additional requirements and strains on our capacity. We have to maintain the health and well-being of citizens, and we need to pursue opportunities to strengthen programming and outcomes,” said Tayler. “Lauren’s applied research project provides an opportunity for us to build capacity and develop pragmatic solutions to meet the needs of FNNND children.”

A recipient of USask’s Indigenous Graduate Student Scholarship and a mother of two young children, Wallingham grew up with a deep appreciation for her Traditional Territory, culture and family.

After researching educational programs in Indigenous communities (Yukon, British Columbia, Alaska and Norway) experiencing similar challenges, Wallingham will provide examples of best practices to a community working group comprised of local Elders, Knowledge Keepers and educators. Under their direction, she will develop the framework for three programs: Early Childhood Education Program, In-School Learning Support Program, and

After-School Program. The research and framework will be shared with the community.

“Using best practices and local knowledge, we will develop a holistic framework that reflects the realities of living in the North and the traditions of the Northern Tutchone,” said Wallingham. “The goal is to re-engage our children with their education.”

The four components that she intends to cover within the framework are culturally focused programming, delivery models, accountability and evaluation, and support networks—community members, Elders, parents, students, First Nation government, and inter-community.

“If these programs are going to be successful, the control needs to come from our Elders, Knowledge Keepers and educators,” said Wallingham. “I’m honoured to be guided by my working group and I hope the final framework will help strengthen our community.”

Erica Schindel is the communications and marketing manager in JSGS at USask.

USask Rec supports northern communities with swimming and water safety courses

ALYSSA WIEBE

Many northern communities in Saskatchewan are surrounded by bodies of water, which leads to a rise in concern over water safety each year.

Since 2016, USask Rec has offered the Indigenous Swimming and Water Safety Program each summer in northern Saskatchewan, in partnership with the Canadian Red Cross. The program began in Alberta in 2013, before branching out to Saskatchewan, Manitoba and Ontario, with plans to move further east this summer.

“This has a tremendous impact on our northern communities as it relates to Truth and Reconciliation,” said USask Rec Aquatics Co-ordinator Kim Jones. “The majority of Indigenous reserves are in, on, or around bodies of water. The more we can do to impart the Prepare! Stay Safe! Survive model, the fewer drownings we will see in our northern communities.”

The Canadian Red Cross employs one full-time staff member to continue the development of the program and ensure its continued success each year. The goals of the program are injury prevention, water safety, and preventing water fatalities, along with other preventable incidents. To accomplish these goals, participants teach swimming lessons, babysitter courses, stay safe, emergency and standard first-aid training, respect education, and assistant lifeguard courses.

The program has employed a total of 25 university students, with 24 attending the University of Saskatchewan (USask), focusing on the delivery of this program. Jones collaborates with the Red Cross to schedule and train all staff members and co-ordinate the logistics from week-to-week. Beginning in June



Kinesiology students Sabrina Lemke (left) and Mason Beaulieu (right) with aquatics co-ordinator Kim Jones.

and running until the end of August, staff members are housed at hotels, cabins, teacherages, or health-care accommodations in the communities. In a few occasions, participants also had the opportunity to participate in cultural camps.

This year, due to the global pandemic, the program will have a different look. Three staff have been retained to help deliver virtual programs, where possible. Although not ideal, it is important to keep the information around swimming and water safety front of mind heading into the summer.

College of Kinesiology student Jaimie Fiddler of Warman has been with the program for the past two years and continues to see the importance of bringing water safety training to northern communities.

“I got involved because it was great opportunity to be a positive role model to young Indigenous children and youth, and I love teaching swimming and working with children,” said Fiddler, a member of the Salt River First Nations Band in

Northwest Territories.

“It is really important to teach children, at a young age, about water safety and learning how to swim, since they have so many lakes and swimming areas with no supervision.”

Fiddler sees herself as a role model because it allows children to see someone of a similar background in a leadership position—such as a swim instructor—and encourage them to become involved in water safety, swimming and learning to take a leadership role in their community.

“Being a role model in a community for younger generations is so important, especially in northern communities, and I am hoping children that interact with the instructors who visit will begin to take on that role for their siblings, friends, and even neighbours,” she said.

Another focus is to provide youth in Indigenous communities the opportunity to become instructors and lifeguards themselves,



College of Kinesiology student Jaimie Fiddler has been with the program for the past two years.

moving away from a dependency-based model to a community-driven self-sustained learning model.

Kinesiology student Sabrina Lemke of Saskatoon has been with the program since 2017.

“The program with the

Canadian Red Cross was an opportunity for me to become more invested in relationship-building with Indigenous communities, join an effort that creates connections and makes a difference, and to use my knowledge from kinesiology, lifeguarding, First Aid, and swimming to deliver programs that help to fill gaps in what is available to each community that brings us in.”

Starting out as an instructor for two years and taking over as the co-ordinator in Saskatchewan, Lemke has seen the impact it has had on the community.

“This program offers courses and opportunities that would otherwise be unavailable to these communities, it encourages knowledge sharing, and it is intended to promote community-sustained programming that supports resiliency and safety.”

Alyssa Wiebe is the communications and alumni relations officer in the College of Kinesiology.

For more information on the Indigenous Swimming and Water Safety Program and partnership, contact kim.jones@usask.ca.

NORTHERN EXPOSURE: The northern communities the program has reached include:

Birch Narrows Dene Nation (Turnor Lake)	Clearwater River Dene Nation and La Loche	Lac La Ronge First Nation
Meadow Lake Tribal Council	Cowessess First Nation	Makwa Sahgaiehan First Nation
Black Lake Denesuline First Nation	Cumberland House Cree Nation	Red Earth Cree Nation
Buffalo River Dene Nation and Dillon	Deschambault Lake	Sandy Bay
Canoe Lake Cree First Nation	Fishing Lake First Nation	Stanley Mission
Clear Lake	Flying Dust First Nation	Stony Rapids
	Grandmother's Bay	Southend
	James Smith Cree Nation	Waterhen Lake First Nation

Record-setting season for Huskies sprinter

JAMES SHEWAGA

Coming off of a record-setting season, Karson Lehner was racing towards a possible spot in the 2020 Summer Olympics, before COVID-19 changed everything.

The 22-year-old Huskie Athletics standout and University of Saskatchewan (USask) computer science student from Prince Albert shattered a 35-year-old record set by former Olympian and USask alumnus Cyprian Enweani, and went on to be named both Canada West conference and U Sports national male track athlete of the year. Lehner's record run in the 300 metres had positioned him as a candidate for the Canadian Olympic team trials in June that were postponed due to the global pandemic.

"I was going to go, before the world changed," he said. "Everyone's goal is to be in the Olympics as a track athlete, and as time went on throughout the season and I was putting up these results, it became more of a possibility. So, it's definitely a little disappointing that everything changed and the Olympics were postponed, but there are plenty of people with more serious things to worry about in the world right now."

Indeed. While his national team hopes were put on hold, Lehner had plenty to celebrate this season, starting with his record-setting run in the Canada West conference championships at the Saskatoon Field House on Feb. 21. Lehner raced across the finish line in 33.07 seconds to break Enweani's former Huskies and Canada West 300m record of 33.50 seconds set in 1985, three years before he represented Canada in the 1988 Summer Olympics in Seoul, South Korea.

"I remember crossing the finish line during that race and seeing the time pop up on the clock and I was so happy, because that was the goal that I was working towards," said Lehner, who also earned a silver medal in the 60m at the championships. "I



was extremely humbled, just to be mentioned in the same sentence as Cyprian. He was such a phenomenal athlete, so it is pretty cool."

Lehner went on to earn three medals at U Sports nationals in Edmonton, placing second in the 300m (33.31 seconds) and third in the 60m, as well as earning a silver medal as part of the Huskies 4x200m relay team, after being named national male track athlete of the year.

"Karson's times, medals, and awards this year are the result of lots of work and as a program we are extremely proud of all that he achieved, because it hasn't been easy for him," said Huskies track and field coach Jason Reindl. "He has had his share of injuries over the years, but with the help of personal coach Todd Johnston, he was able to stay healthy and put together a tremendous season of success where Karson became the first male track and field athlete to win a national athlete of the year award."

"Karson's performances this year have placed him amongst the best in nation and the world and he has a realistic opportunity of representing Canada in future international events, including the Olympic Games."

Lehner wrapped up the 2019/20 academic year the way all USask students did, by writing his final exams online after the university moved to remote delivery of courses in March and final exams in April.

"It was a bit of a change of pace for myself, as I'm sure it was for all of the other students," said Lehner, who started his academic career in engineering before transferring to computer science. "But my professors were really good at getting us everything we needed and communicating the course



Huskie Athletics sprinter Karson Lehner broke a 35-year-old record in the 300 metres this year and was named both the Canada West conference and U Sports national male track athlete of the year.

GETMYPHOTO.CA

content to us and I could do it all in the comfort of my own home, so it wasn't too bad. I spend most of my days behind a laptop anyways, so it wasn't a major change."

What has changed is Lehner's expectations as he prepares for his fourth year of Huskie eligibility, with thoughts of taking a run at a spot on the Canadian team for the next Summer Olympics in Tokyo, now scheduled for 2021—pandemic permitting.

"That is written on my wall as my goal," he said. "I just have to work that much harder next year to make it happen." 🍀

HUSKIE NOTES:

USask men's hockey goalie **Taran Kozun** of Nipawin was one of four finalists for the U Sports Lieutenant Governor Athletic Awards, honouring the nation's top male and female student-athletes. Kozun became the sixth Huskie in school history to be named Canada West male athlete of the year after his record-setting season ... The Canada West conference will make a final decision by July 15 on whether cross-country championships will be held this fall, with football and soccer already cancelled for 2020. A decision on whether hockey, volleyball and basketball can begin in January of 2021 will be made by October 8 ... Huskie wrestlers **Berit Johnson**, **Carson Lee**, **Hunter Lee** and **Logan Sloan** have all been named to Wrestling Canada's NextGen program for 2020/21, a program designed to train future Olympians ... Due to the ongoing pandemic, the Huskie Football Foundation's annual Dogs' Breakfast spring fundraiser has been cancelled until 2021.



Detecting bird flu before it's ready to take off

WCVM adjunct professor Dr. Chelsea Himsworth (DVM) and her research team have developed a genomics technique for detecting avian influenza virus in wetland sediment.

DELANEY SCHOFER



A wetland sediment sample collected for the research study.

DELANEY SCHOFER

Canada is one of only 11 countries worldwide that doesn't have avian influenza virus circulating within its domestic poultry flocks.

Known as "bird flu," avian influenza is transmitted from wild ducks to chickens and other domestic birds. While the virus doesn't cause any symptoms in ducks, it's deadly for domestic birds and can decimate entire flocks.

Canada is committed to maintaining its disease-free status to avoid trade restrictions being placed on the country's poultry products. To do so, Canada must screen for avian influenza in wild birds so that veterinary and public health officials can prevent and control any outbreaks. The current screening method involves testing live and hunted birds, but this method isn't very effective.

"Wild birds that die naturally of other causes are brought in [to the lab for necropsy and avian

influenza testing]," said Dr. Chelsea Himsworth (DVM), a University of Saskatchewan (USask) alumna and diagnostic pathologist and leader for veterinary science at British Columbia's Animal Health Centre, which is a branch of the B.C. Ministry of Agriculture. Himsworth is also regional co-ordinator of the Canadian Wildlife Health Cooperative B.C., and an adjunct professor with the Western College of Veterinary Medicine at USask.

"The current method of passive surveillance is like looking for Ebola in car crash victims—the two are not related," she said. "It's no wonder we don't detect it."

The B.C. Animal Health Centre is located in Abbotsford, part of the province's Fraser Valley. Each year, Himsworth and her colleagues witness the migration of wild birds through the second-densest area of poultry production in Canada.

In 2014-2015, passive screening

failed to detect a highly pathogenic strain of avian influenza that was circulating among wild ducks in B.C. When this strain of avian influenza got into the province's domestic poultry population, 240,000 birds died or had to be culled.

Frustrated by the inadequacy of current avian influenza surveillance methods, Himsworth and her team set out to find another way to detect avian influenza in wild birds before any further outbreaks in poultry occurred.

In 2015, they developed a new genomics technique for detecting avian influenza virus in wetland sediment—a rich source of material because avian influenza virus is shed in bird feces. Each sediment sample contains contributions from multiple individuals and species, making sediment sampling more effective than traditional methods of sampling individual birds.

"Wetlands are Mother Nature's outhouse," said Himsworth. "A little bit of pond scum can give us a lot of information."

However, the scientific process isn't as simple as developing a technique that works, dusting wetland sediment off your hands, and moving on. The next step is to iron out the remaining kinks so sediment surveillance is a neatly packaged product that can be easily completed in a lab. The major challenge is that the B.C. Ministry of Agriculture doesn't have the genomics resources required to do this.

Lacking the resources required to create packaged products isn't an issue that is unique to avian influenza. Other researchers within the province's Ministry of Agriculture and Ministry of Health face similar challenges when trying to apply genomic technologies to their own disease surveillance initiatives.

"There are a lot of pieces on the board," said Himsworth. "We're still talking about all the potential models, including what it might look like to have a health-agriculture partnership to support an applied genomics centre."

Sharing resources and expertise would not only assist provincial ministries in achieving their mandates, but a One Health genomics centre could also be a solution for the larger need to develop genomics capacity and co-ordination. ♥

Delaney Schofer of Calgary is a third-year veterinary student in the Western College of Veterinary Medicine at the University of Saskatchewan.



Children run along the boardwalk in the remote northern community of Kongiganak on Alaska's Yukon Kuskokwim Delta where wind energy combined with a battery storage system provides up to 100 per cent of the community's electric needs.

USask project supports northern energy security

AMANDA BYRD

JACKIE MARTIN

Imagine living in a remote community that is dependent on diesel generators or on an electrical grid that's highly vulnerable to harsh winter storms. Or spending more than half your income to heat your home. That is the reality in more than 250 northern and Indigenous communities in Canada today.

Now imagine if these communities were not only energy sufficient, but able to leverage energy to generate social and economic opportunity. Energy security is more than infrastructure and technology, it is also about communities.

Dr. Greg Poelzer (PhD) of the School of Environment and Sustainability (SENS) and Dr. Bram Noble (PhD) of the Department of Geography and Planning (GEPL) at the University of Saskatchewan (USask) are leading an exciting and ground-breaking initiative to explore how northern communi-

ties can achieve energy independence and benefit economically and socially by developing renewable energy.

"The transition to renewable energy in the North shouldn't be based on outside solutions," said Noble. "Renewable energy must be community appropriate, reflecting northern and Indigenous values and interests for the future of their communities."

The Community Appropriate Sustainable Energy Security (CASES) Partnership, hosted by USask, is jointly led by an international team of researchers from Canada, United States, Sweden, and Norway. It is an \$8.8 million international partnership project supported in part by funding from the Social Sciences and Humanities Research Council of Canada and public and private sector partners.

The partnership engages 15

northern and Indigenous communities, each at different stages of renewables deployment. It facilitates the sharing of experience so that not all communities have to go through the same challenges or recreate solutions, thereby accelerating renewable energy innovation.

"Reliable, sustainable, and renewable energy will be key to our economic, social, and cultural well-being," said Deputy Grand Chief Jordan Peterson of the Gwich'in Tribal Council. "We believe the outcomes of this partnership will help us in our goals to preserve our lands, develop reliable energy supplies, and help us to protect our way of life."

Working with northern and Indigenous communities, the partnership is co-developing and applying tools to assess and enhance the social and economic value of renewables; identifying the condi-

tions for successfully developing renewables; facilitating co-learning between sister communities; and creating a northern circumpolar knowledge-sharing platform for energy transition tool-kits, and sharing stories from international experience to facilitate long-term capacity building.

"Working with our partners to co-develop tools for community-appropriate energy planning, and establishing a network of sister communities across the North for knowledge sharing, will facilitate energy transition and local capacity building long beyond the life of this project," said Poelzer.

The project will train the next generation of researchers, policy makers, practitioners and innovators to transform energy systems and reshape energy security in the North. For Rhys McMaster, a current graduate student working

on the project, CASES offers a chance for her to contribute her unique perspective as a First Nations woman from the Siksika Nation in Alberta.

"You can't simply say it's windy, so turbines are the best solution," said McMaster. "Some of the technology requires extensive socio-technical skills in order to develop, operate and maintain renewable energy systems at the community level. Therefore, I'm studying the specific socio-technological baseline capacities of the four Gwich'in communities in the Northwest Territories. What they may require for their respective energy transitions may look different than another community, even if those communities share similar geographical or other traits."

During the first phase of the CASES Partnership project, researchers are working to assess existing community energy systems as a baseline for the project and develop community energy profiles as a planning resource for communities and utilities. Energy profiles will help communities chart their own energy future and inform the sociotechnical design of energy systems that enhance values and reduce vulnerabilities to energy insecurity.

"Peter Ballantyne Cree Nation faces significant energy security challenges that requires transformative research, co-designed with and by Indigenous communities, and training opportunities for the next generation of Indigenous change agents to lead the energy transition in northern communities," said CASES co-investigator and Indigenous business leader Gary Merasty. "We are excited to be full partners in CASES, which is designed to meet this critical and urgent objectives."

To help meet these training objectives, SENS plans to launch a new master's program this fall—offered by distance delivery—with a stream focusing on community energy planning and renewable energy in northern and Indigenous communities. ▀

Jackie Martin is the CASES Project manager in GEPL at USask.



THORVALDSON AIRPLANE ROOM A JOURNEY BACK IN TIME

 CHRIS PUTNAM

When the Department of Chemistry introduces newcomers to the University of Saskatchewan (USask) campus, one room is always part of the tour.

“It’s a window into the past. It’s a classic room that really makes you feel like you’re in a grand institution,” said Dr. David Palmer (PhD), professor of chemistry in the College of Arts and Science.

Since the day it opened in 1924, Thorvaldson Building Room 271—officially the Henry Taube Lecture Theatre, but commonly known as the Airplane Room—has been one of the defining features of the USask campus.

Palmer, a former head of the Department of Chemistry, said he has never been in a room quite like it. The stately auditorium, with its 68-foot domed ceiling and gothic styling, has been used as a set in several movies. One faculty member held his wedding there. Visitors to Saskatoon and returning alumni often make a point to drop in.

“You can tell it’s a special thing to them,” said Palmer.

The lecture hall’s appearance has changed little in the past 96 years. Modern conveniences and electronics are cleverly hidden inside antique furnishings. The slate chalkboard and oak chart frames are original to the building. The original wooden chairs were replaced with replicas in 2014.

As many chatting students have discovered, the Airplane Room has exceptional acoustics.

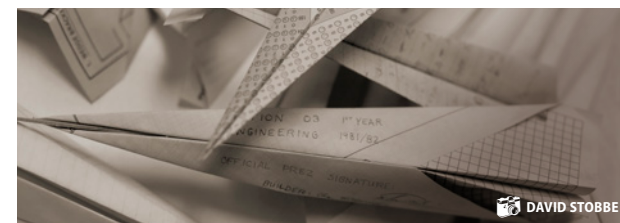
“I think the students don’t realize how easy it is for the person at the front of the room to hear them. You can hear conversations going on in the 25th row in there,” said Palmer.



A look at the original paper airplanes embedded in the ceiling of the Airplane Room (Thorvaldson Room 271), in this archival image by Wayne Eyre in 1994.

The auditorium’s most unique and most famous feature is the assortment of paper airplanes embedded in its ceiling. In a tradition going back at least 60 years, students toss the planes—weighted with pens, pencils and the occasional spoon—hoping to stick them in the soft acoustical material that lines the ceiling.

Legend holds that the practice was started by pilots-in-training during the Second World War, and that a falling airplane was an ill omen for a pilot gone to war. The legend probably isn’t true, but Palmer always enjoys hearing it. It’s



The University Archives and Special Collections holds the original paper airplanes from the ceiling of the Airplane Room, removed during renovations in 1995. The oldest of the planes is dated 1961.



A panoramic look at the seating in the historic Airplane Room (officially the Henry Taube Lecture Theatre) in the Thorvaldson Building, photographed by Wayne Eyre.

one more layer connecting the Airplane Room to the story of Saskatchewan.

“(The room) reminds people of the history of this place—that this university is more than just another school, especially to the province. This is an historical artifact of this province, a monument to all of the people who have taken classes over the years,” Palmer said. ♥

Chris Putnam is a communications officer in the College of Arts and Science.