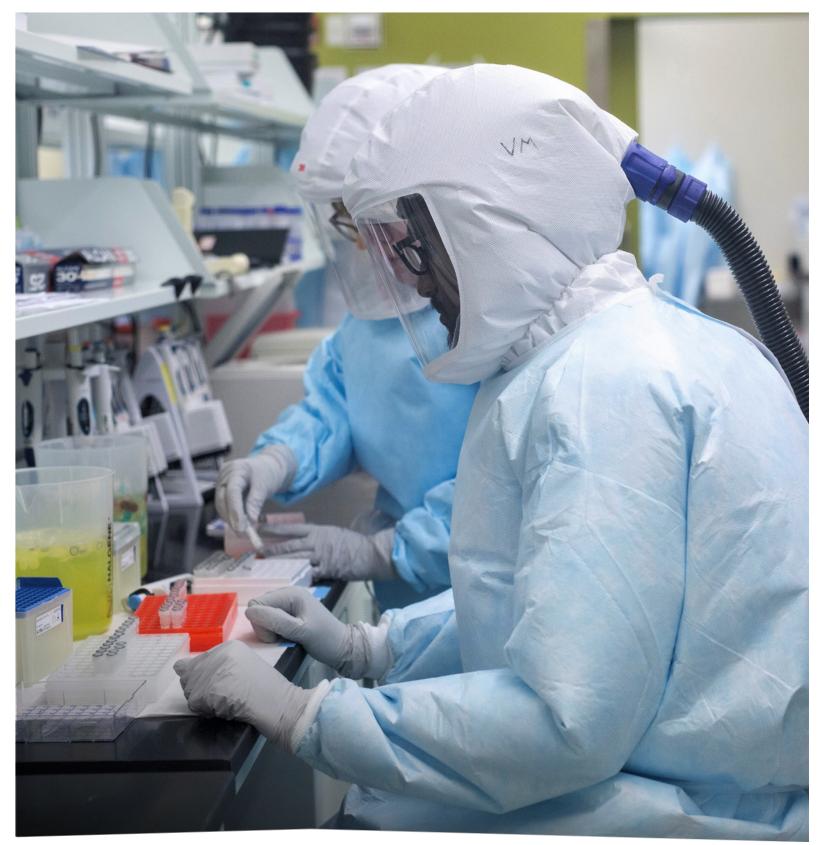


DECEMBER 11, 2020 Volume 28, Issue 4



FOCUS ON THE PANDEMIC

As the global pandemic continues around the world, **University of Saskatchewan** (USask) researchers in colleges, schools and facilities across campus remain firmly focused on seeking solutions and support systems for those in need in our community and our country. In this year-end edition of On Campus News, we take a closer look at ongoing COVID-19 vaccine development in the **Vaccine and Infectious Disease Organization-International** Vaccine Centre at USask. We also feature pandemic research underway in the Western College of Veterinary Medicine, School of Public Health, Johnson Shoyama Graduate School of Public Policy, and the Colleges of Arts and Science, Nursing, and Kinesiology.

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-3-MASTER TEACHER -14-HUSKIE ATHLETICS

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USask introduces new provost and **VP** academic

UNIVERSITY COMMUNICATIONS

Dr. Airini (PhD) is joining the University of Saskatchewan's (USask) leadership team as the next provost and vice-president academic for a five-year term beginning on February 1, 2021.

In this role, Dr. Airini will be the senior academic, planning and budget officer at USask. Working with colleges and schools, Dr. Airini will lead the development of an academic agenda that is connected to the university's financial realities in order to give students an outstanding experience at USask.

"It is a genuine honour to join President Stoicheff's leadership team in this critical role," said Dr.

University of British Columbia, an MBA from Massey University and a Master of Education from the University of Canterbury. "The achievements by USask, one of Canada's top research-intensive universities, are exceptional. At a time when all universities are experiencing the headwinds of change, USask is redefining what it means to be a world-class university; and one that leads with respect. I very much look forward to working with the entire USask community in this vital effort."

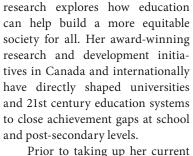
Α highly accomplished education researcher, educator and

Airini, who has a PhD from the

Dr. Airini (PhD) begins her new role at USask on Feb. 1, 2021. administrator, Dr. Airini's current Thompson Rivers University (TRU) in 2014, Dr. Airini held a variety of posts at the University of Auckland's Faculty of Education. At New Zealand's highest ranked research university (ranked in the top one per cent of universities worldwide), her roles included head of the interdisciplinary School of Critical Studies in Education, associate dean of equity

and advisor to governments.

role as dean of the Faculty of Education and Social Work at



SEE DR. AIRINI, PAGE 15



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:

Treaty education

The University of Saskatchewan (USask), through the Office of the Vice-Provost of Indigenous Engagement (OVPIE) and the Office of the Treaty Commissioner (OTC), have signed a Memorandum of Understanding (MOU) to ensure that more Indigenous students graduate, through increased work in Treaty education implementation and reconciliation at the university. The MOU is designed to measure progress, to work together to increase accessibility for Indigenous people to post-secondary education, increase post-secondary participation in decision-making circles, and increase student success and completion rates.

Genome discovery

In a landmark discovery for global wheat production, a USask-led international team has sequenced the genomes for 15 wheat varieties representing breeding programs around the world, enabling scientists and breeders to more quickly identify influential genes for improved yield, pest resistance and other important crop traits. The research published in the journal Nature was led by Curtis Pozniak, wheat breeder and director of the USask Crop Development Centre, and involved more than 95 scientists from universities and institutes in Canada, Switzerland, Germany, Japan, the U.K., Saudi Arabia, Mexico, Israel, Australia, and the U.S.

Pediatric support

A new program in USask's College of Medicine is helping physicians and nurse practitioners better support pediatric mental health needs in the province. Called CanREACH-SK, it delivers the Patient-Centered Mental Health in Pediatric Primary Care Mini-Fellowship developed by the REACH (REsource for Advancing Children's Health) Institute in New York. This Continuing Medical Education program provides up-todate, evidence-based training for care providers assessing, diagnosing and treating pediatric mental health conditions. The college is the first Canadian medical school to offer this program.

Ventilator success

One hundred made-in-Saskatchewan ventilators will soon be available to support the province's residents, thanks to an innovative collaboration with USask, the Saskatchewan Health Authority, and RMD Engineering Inc. The organizations, supported by colleges and units across campus, worked together to provide expertise, research and entrepreneurship and pave the way for Saskatchewan's return to medical device manufacturing. RMD Engineering Inc. is a Saskatoon-based company whose subsidiary, One Health Medical Technologies, has received COVID-19 Medical Device Authorization from Health Canada.

FOR MORE UP-TO-THE-MINUTE NEWS, VISIT:

news.usask.ca





A JAMES SHEWAGA

It should come as no surprise that Dr. Loleen Berdahl (PhD) was ahead of the curve when the global pandemic struck.

After all, for more than a decade at the University of Saskatchewan (USask), Berdahl has been leading by example, emphasizing innovation and inspiration to support students.

"Being dedicated to taking risks in the classroom is so important," said Berdahl, who joined a select list of prestigious professors when she was named USask's newest Master Teacher Award recipient during virtual fall convocation celebrations. "Having students get their hands dirty with ideas and issues, get into the weeds a bit, is so rewarding. What is interesting about teaching is that when you do those things, they don't always work, so there is risk. But when they do work, it feels incredible."

A year ago, Berdahl embraced remote teaching and learning, to help students earn a bachelor's degree in political studies completely online. While she didn't have a pandemic premonition, her preparation proved perfect timing when the university closed on-campus classes due to COVID-19 health and safety precautions and moved to remote learning to complete the 2020 winter term and start the 2020/21 academic year.

"In the last academic year, I did all my teaching online, so now I look back and I think I was very lucky," said Berdahl, the former head of the Department of Political Studies, who took over as executive director of the Johnson Shoyama Graduate School of Public Policy at USask on Oct. 1. "When I started as department head in political studies, I really wanted us to expand

Berdahl passionate about teaching and reaching students

Dr. Loleen Berdahl (PhD) is now executive director of USask's Johnson Shoyama Graduate School of Public Policy.

our online offerings so that our full three-year BA, as well as two of our certificates, could be fully available online. As a leader, I felt I couldn't ask everyone else to teach online if I wasn't doing the same."

It's that leadership, willingness to adapt, and inspiration to be innovative, that has earned Berdahl awards and accolades on campus and across the country. She received the 2012 Provost's Award for Outstanding New Teacher at USask, the 2014 Provost's Award for Outstanding Teaching in the College of Arts and Science, and the 2015 College of Arts and Science Teaching Excellence Award.

In 2019, she earned the Canadian Political Science Association's Teaching Excellence Award, her discipline's most prestigious national teaching honour. Now, Berdahl joins some of her favourite colleagues as winner of the Master Teacher Award, from Professor Vince Bruni-Bossio, Dr. Chelsea Willness (PhD) and Dr. Keith Willoughby (PhD), to the late Dr. Joe Garcea (PhD), a revered political studies professor who tragically passed away in November.

"When I look at the list of who has won the Master Teacher

Award, I have so much respect for those incredible individuals," said Berdahl, who grew up in Saskatoon and earned her bachelor's degree at USask before moving to Calgary for her PhD. "What's amazing when I look at the winners list is that they are all people who are very dedicated to students and dedicated to taking risks in teaching. So this is just such a great career honour."

So what makes a great teacher? For Berdahl, the answer is clear.

"I think caring about students and having an appreciation of how one's discipline matters to society and how it matters to students and what they are going to do with their life, is so important," said Berdahl, who began her career working for the non-profit Canada West Foundation for 10 years before joining USask in 2008. "I find the responsibility of training the next generation very motivating. And the fact that we have the types of students that we do is what inspires me."

As she shifts from the virtual classroom to the boardroom, taking on the senior leadership role with JSGS, Berdahl has some advice for both students and young faculty members. For Berdahl, the importance of work-life balance has been

critical to her success, both professionally and personally.

"One of the things that we can do as teachers and as instructors and as faculty is to be role models for our students and for our junior colleagues," said Berdahl, whose interests include reading, running, and cycling with her twin daughters and her husband.

"I always like to say to my students, the best learning comes when you are rested and well-fed and exercising. I often think my best ideas come when I am running or cycling and it just floats to my mind and seems so obvious, and if I were staring at my computer, it never would have come. So, I am a big proponent of work-life balance."

While her next five years will primarily focus on senior leadership responsibilities with JSGS, Berdahl does hope to find ways to continue to contribute in the classroom.

"I will try to look at ways where I can, not necessarily be the instructor of record, but where I can still be involved in courses," said Berdahl, who has co-written four books and conducted an extensive research program. "I don't think it's possible to keep me out of the classroom for very long." ■

USask researcher focuses work on land-based healing

ℳ SHANNON BOKLASCHUK

The commitment to Indigenization and decolonization demonstrated at the University of Saskatchewan (USask) is important to Dr. Michelle Aihina Inkinsh Holhpokunna Johnson-Jennings (PhD).

In fact, it's one of the things that helped bring the respected scholar to her current faculty position in USask's College of Arts and Science in January 2018.

"What really drew me to the University of Saskatchewan was the ability to focus on my Indigenous research, while working with a great group of Indigenous students and colleagues focused on Indigenous research as well," said Johnson-Jennings.

"I sing the university's praises to almost everyone I speak to, especially when I travel to the U.S. While the university says that we are focused on Indigenizing and decolonizing, I can really see change occurring across administration, faculty, students and staff. Of course, it's not perfect; we're engaging in the process. But, at the same time, it's really the most energy and focus that I have seen at any other university across North America, in particular, and I'd say, even with my limited experiences, across the globe."

Johnson-Jennings, an associate professor in the Department of Indigenous Studies, was recruited from the University of Minnesota, where she served as the founder and director of the Research for Indigenous Community Health (RICH) Center. She came to USask after completing a U.S. Fulbright Scholar award that enabled her to

Along with her husband Dr. Derek Jennings (PhD), a faculty member in the Department of Community USask's College of Medicine, she scholars and artists from New Zealand who visited Saskatchewan in August 2018.

A member of the Choctaw Nation, Johnson-Jennings is a licence-eligible clinical health psychologist who earned a master's degree at Harvard University and a PhD from the University of Wisconsin-Madison. In 2019, she was named a Canada Research Chair in Indigenous Community-Engaged Research and is recognized as one of the few Indigenous psychologists focused on healing interventions on the land.

Johnson-Jennings witnessed firsthand how connecting with the outdoors can reduce addiction and obesity rates and improve overall health and wellbeing. She's seen some communities experience "remarkable changes" as a result, such as implementing healthy eating practices and promoting gardening and hiking. In this vein, she is currently working on a project funded by the Canada Foundation for Innovation that involves developing a Canadian digital repository for Indigenous knowledge around food, known as the Food the Original Obesity Deterrent (FOOD) project.

As a psychologist, Johnson-Jennings employs a narrative reactive



therapy framework in her work. This involves re-examining trauma by focusing on the strength the person had to help carry them through the difficult time.

"The work I do focuses more on addressing historical trauma while partnering with Indigenous communities," Johnson-Jennings explained. "It's been really driven by them; it's not necessarily something I set out to do. But Indigenous communities have said, time and time again, that they want to address historical trauma because they believe it affects their health and well-being today."

Since coming to USask, Johnson-Jennings has had numerous opportunities to explore her interests in Indigenous health and land-based healing. In 2019, a \$3.5-million grant from the Canadian Institutes of Health Research (CIHR) was awarded to USask researchers to establish an Indigenous-led centre to address the increase in HIV, Hepatitis C and other sexually transmitted infections among Indigenous people in Saskatchewan and Manitoba. Johnson-Jennings

has taken on a lead role with the new centre, known as Wuniska, which is under development.

"This is really exciting, because in all of our projects we do have a land-based healing component," she

Johnson-Jennings is also a co-lead investigator with another USask research team that was awarded \$1.2 million from CIHR in 2019. The researchers will examine the benefits of keeping babies born in withdrawal from opioids with their mothers in a supportive care home environment such as Sanctum 1.5—Canada's first HIV and high-risk pre-and postnatal care home for women living with HIV or at risk of transmission of HIV.

"I'm so excited about that project because it's really about determining the benefits of women keeping their babies with them, creating strong bonds and nourishing that, while simultaneously reducing other health risks for both mom and baby," said Johnson-Jennings, a proud mother of four children.

In addition, in collaboration

with the University of Waikato, Johnson-Jennings is part of the Working to End Racial Oppression (WERO) project that recently received funding of \$10 million NZD. Johnson-Jennings is addressing the issue of systemic racism in health, in partnership with Maori psychologists and Dr. Jeffrey Asloos (PhD) from the University of Toronto.

When engaging with Indigenous communities, Johnson-Jennings sees her role as a facilitator rather than as an expert. She promotes what she calls "health leaders," a concept that encourages community members to reflect on the strength and wisdom of their ancestors and develop a sense of responsibility for the well-being of future generations.

"We go on this journey together and it's just been phenomenal," she said. "Each time I take one of these journeys with our communities, I grow personally. I grow especially in my depth of knowledge in Indigenous sciences and wisdom." ■

Shannon Boklaschuk is a communications officer in USask's College of Arts and Science.



Dr. Michelle Aihina Inkinsh Holhpokunna Johnson-Jennings (PhD) is an associate professor in the Department of Indigenous Studies.

ALUMNI **SPOTLIGHT**

Every month in On Campus News, we highlight an exceptional graduate of the University of Saskatchewan (USask) in our Alumni Spotlight series. In this issue, we profile Chief Darcy Bear (BUSADM'09, DDL'14). The longserving chief of the Whitecap Dakota First Nation has led his community to a journey of sustained economic growth.

USask alumnus Chief Darcy Bear is being appointed to the Order of Canada for outstanding achievement, dedication to the community, and service to Canada.

GORD WALDNER

Chief Darcy Bear: Planting seeds for the future

ℳJOHN GRAINGER

Chief Darcy Bear's (BUSADM'09, DDL'14) grandparents tended their large vegetable garden every summer on the Whitecap Dakota First Nation.

They tilled the soil, planted the seeds, kept a close eye for unwanted weeds and made sure it was watered sufficiently. This was part of his community's way of life.

That hard work helped to sustain his family through each winter until spring when they would go through those gardening processes once again.

"Seeing all those sacrifices and hard work really resonated with me. But we grew up happy," said Bear.

It also helped Bear and others of his generation witness how hard his grandparents and that older generation worked. Watching them gardening, raising cattle and working with horses, he was able to develop and appreciate a strong work ethic. It also taught Bear and others in his community about living a sustainable life and using what the land provided to create healthy foods, like those tasty carrots.

"There were many delicious pots of soup that came from that work," Bear recalled. "We had large

gardens with lots of work to do. We had to cut wood to heat our homes and haul water. We were living like pioneers, but only 20 minutes away from a modern city (Saskatoon)."

That dichotomy stuck with Bear. As a youngster, he knew there had to be a better way to live for Whitecap residents.

"What drives me is making those improvements in the quality of life of our people. And sharing our model to other First Nations."

Today, he's working just as diligently as his grandparents did to create opportunities and ensure his people have a better tomorrow.

"When we were growing up, there wasn't anything here. There were just gravel roads, no jobs and no opportunities," said Bear. "A lot of our homes didn't even meet national building code."

He thought, enough was enough; it was time to do something about it. At 23, Bear was elected to band council. Three years later, he was elected chief. In November 2021, Bear will celebrate 30 years of service on council and as chief.

You could say Bear, also chair of the board of the Whitecap Development Corporation, has been tending to his own garden by trying to create a more prosperous tomorrow for his people.

Following the success of the Dakota Dunes golf course in 2004, the casino opened its doors in the fall of 2007, providing Whitecap and partners—Saskatoon Tribal Council and the Saskatchewan Indian Gaming Authority—with more economic growth and opportunities.

All of this was possible with Bear's oversight to enhancing the infrastructure of Whitecap. To date, there has been in excess of \$150 million of capital and economic investment on Whitecap land.

Bear insists his Whitecap ancestors were ahead of their time and notes he embodies their firmly established work habits. He believes it's important to know where he

"I think we all need to do that, understand our history and where we come from. For us, we're Dakota people," he said.

"What does Dakota mean? In our language, Dakota means ally. Our ancestors were always big on alliances, building partnerships.

Just looking at that, that's the way our ancestors operated and we need to build alliances."

Chief Whitecap had good relations with John Lake and the forefathers of Saskatoon. The city recognized him with a statue downtown in 2008. Bear wants to continue the tradition.

"I always see (Chief Whitecap) as a visionary where he picked out the location for our primary market."

Last month, Bear was named to the Order of Canada in recognition of shepherding his community for the last three decades.

"It's humbling, but also recognizes the hard work we are doing in our community."

Whitecap's newest piece of its growing local economy is now in place. A \$38-million hotel and convention centre opened in October 2020, albeit without as much fanfare because of the COVID-19 pandemic. It features 155 rooms, convention space, a fitness centre, pool and a five-star restaurant, and is linked to the casino.

One integral part of his process is making sure the young people of Whitecap receive the education they need to succeed. Having links to post-secondary institutions, like USask, is important he said.

"By sending our people to school, it's an investment," said Bear, who has made it a priority that any Whitecap Dakota student wanting to further their education after Grade 12 will receive post-secondary assistance to ensure they have that opportunity.

Bear's family is setting an example for others to follow. All three of his children have gone on to receive post-secondary educations. His eldest son attended the Saskatchewan Indian Institute of Technologies (SIIT) for business administration. His daughter received an arts degree before going into law and is now articling with Saskatoon firm McKercher LLP. His youngest son is in his third year at USask's Edwards School of Business.

"Our people should be our No. 1 resource and we have to invest in them and make sure there are opportunities for them and a career path."

John Grainger is a communications officer in University Relations.

Hopkins transforming surgical care

KRISTEN MCEWEN

For cancer patients, a quick recovery after surgery is an essential part of their treatment.

Gynecologic oncologist and Division of Oncology professor Dr. Laura Hopkins (MD) of the University of Saskatchewan's (USask) College of Medicine is starting an enhanced recovery after surgery program for patients with gynecological cancers, with help from a \$100,000 Women Leading Philanthropy Grant from the Royal University Hospital (RUH) Foundation.

"Advancing surgical care for women with cancer is one of the first things that will be beneficial for the provincial gynecologic oncology program," Hopkins said.

Originally from Ontario, Hopkins had been working in Ottawa for 17 years before she was recruited in 2019 to lead the province-wide gynecologic oncology program from Saskatoon.

One of the biggest recovery issues patients face after surgery is risk of infection. For cancer patients, an infection can lead to delays in treatment options including chemotherapy and radiation treatments.

"We have to avoid delays in care caused by extended recovery from complications of surgery. Post-operative delays in chemotherapy and radiation are associated with less than optimal cancer outcomes," Hopkins said.

"When we provide care, we need to do as much as we can preventatively, to help assure a normal and healthy recovery from surgery with as few complications as possible," she added.

Hopkins' program will follow guidelines laid out by Enhanced

Recovery After Surgery (ERAS), a global society of health-care professionals that focus on evidence-based methods, research and audit to improve surgical care and recovery. The group released guidelines in 2016 that include 16 elements of care—from pre-operative skin prep to discharge planning—to ensure patients are provided with optimized peri-operative care.

ERAS provides a comprehensive framework to make this possible. Health care teams can enhance surgical recovery outcomes by taking extra steps for care before, during and after surgery.

For example, having the patient start their own skin prep by washing with antibacterial soap can help reduce the chance of infection, Hopkins said. Other perioperative care steps include optimizing antibiotic delivery, keeping the patient warm and screening for and maintaining normal blood sugars in diabetic patients. These steps work together to dramatically reduce the risk of infection.

While some of the elements in the guidelines are already incorporated in current hospital care, the RUH grant will help Hopkins implement all 16 recommended elements. The funding has also allowed for the hiring of a support staff member to help conduct the project and collect surgical-outcomes data for patients.

"I'm really happy to have received the grant," Hopkins said. "I had hoped to implement these recommendations at some point when I arrived (in Saskatchewan), but this brings it right to the front of the line."



Dr. Laura Hopkins (MD) is a gynecologic oncologist and professor in USask's College of Medicine.

The Women Leading Philanthropy Grant supports initiatives and projects led by female physicians, practitioners and researchers at the Royal University Hospital who are leading transformative advancement in health care.

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



As the holiday season approaches, let us take a moment to reflect on 2020, the year the pandemic changed everything. Although we are apart, we remained together to be the university the world needs. I couldn't be prouder of what we have accomplished in the face of this unprecedented challenge, and I thank all of you for your contributions during this very challenging period in our history.

In March, our campus community came together to quickly transition all courses to remote delivery during the pandemic, ensuring the health and safety of our students, staff and faculty, a focus that continues to this day. Extraordinary times call for extraordinary measures, and this remarkable commitment by all members of our campus community has been a tremendous achievement.

Our spring and fall virtual convocation celebrations were a testament to the resilience of the Class

of 2020, a graduating class like no other. That dedication and determination has successfully carried the university through the fall term as we now look ahead to the new year with new hope.

The challenges of 2020 have brought out the best in our campus community, with our researchers on the front lines in the fight against COVID-19. From vaccine development at VIDO-InterVac and therapeutics research in medicine, to volunteer community contributions from students, staff and faculty alike, we have indeed been the university the world needs.

In the critical area of water research, we have continued to build on our reputation as the No.1-ranked university in the country and one of the top 20 in the world. Our researchers are also internationally renowned for contributions to food security, climate change and environmental science. Three of our national research centres – VIDO-

InterVac, the Canadian Light Source, and SuperDARN – were awarded more than \$88.8 million in federal funding in 2020 to secure the future of research at USask, while five faculty members were honoured by the Royal Society of Canada – four of them women.

In the new year, we will welcome new members to our senior leadership team, including Dr. Airini as USask's new provost and vice-president academic, and Dr. Baljit Singh as vice-president of research. I thank in particular my vice-president colleagues Dr. Karen Chad, who has led the university to extraordinary research success during her 12 years in the role, and Dr. Melissa Just who accepted the role of interim provost and vice-president academic during a notably challenging time and has performed superbly in it. We also welcome Dr. Angela Bedard-Haughn (dean of Agriculture and Bioresources), Dr. Debby Burshtyn (dean of Graduate

and Postdoctoral Studies) and Dr.
Loleen Berdahl (executive director of
the Johnson Shoyama Graduate School
of Public Policy). We will miss their
predecessors, Drs. Mary Buhr and Trever
Crowe, and Mr. Doug Moen, each of
whom contributed enormously to their
respective portfolios.

USask now has more than 161,000 alumni world-wide, and we are a proud member of Canada's prestigious U15 group of top research-intensive universities in the country, with student satisfaction on the rise and the university on pace to match or exceed record enrolment levels in 2020/21. The pandemic may have required us to make fundamental changes to how we carry out our mission, but it hasn't changed our focus on creativity and connectivity, collaboration and innovation, and our commitment to Indigenous engagement, reconciliation and decolonization.

While we still face challenges



ahead in 2021, there is hope for recovery now on the horizon. With 2020 coming to a close, let us remember what we have achieved in a year that we will never forget.

Now as we approach the holiday season, I hope you all take the time to rest and reflect and to cherish special moments with family, friends and colleagues, whether in person or in spirit. I wish you all the best in the new year.

mymill

— President Peter Stoicheff



VIDO-InterVac on track to become 'Canada's centre for pandemic research'

⊘ KATHRYN WARDEN

A major takeaway from the COVID-19 pandemic is that emerging diseases require rapid responses and Canada needs to be better prepared to respond to the next one, says University of Saskatchewan research centre leader Dr. Volker Gerdts (DVM).

"Why do we have to wait until disease breaks out and then develop vaccines?" said Gerdts, director and CEO of USask's Vaccine and Infectious Disease Organization-International Vaccine Centre (VIDO-InterVac).

"Why cannot we predict what the next pathogen will look like so when disease breaks out, we have vaccines available? It sounds naïve and really dreaming but that's where the field is going, and VIDO-InterVac will be part of this."

The idea of having adaptable vaccine platform technologies is part of Gerdts' vision for VIDO-InterVac as "Canada's centre for pandemic research." VIDO-InterVac is already a global leader in efforts to combat COVID-19, and the first in Canada to isolate the virus, develop an animal model, and get a vaccine into animal testing.

The team's promising vaccine candidate has completed extensive toxicology testing in animal models. Once Health Canada gives approval, a Phase 1 clinical trial with about 100 volunteers (age groups of 18-54 years, 55-65, 70-and-older) is expected to begin in Halifax at the Canadian Centre for Vaccinology by late December. The Phase 2 trial, involving hundreds of volunteers, will start in Halifax and may move to other sites. Phase 3, with tens of thousands of volunteers, will likely start in the fall of 2021.

We need to be able to start work on vaccines and treatments on the day after a new disease breaks out.

- Dr. Volker Gerdts (DVM)



Dr. Andrea Kroeker (PhD) is one of the research technicians working on VIDO-InterVac's COVID-19 vaccine development.

M DAVID STOBBE

"Once regulatory approvals are obtained, we expect to have a vaccine ready to use by late 2021, or early 2022," said Gerdts. "We said we'd be in clinical trials within 10 months, and we are where we said we'd be."

With other new vaccines already further along in testing, why does the world need another vaccine against COVID-19?

Gerdts urges people to take the new vaccines as they become available. But he notes that not a lot is known yet about how long immunity will last with new vaccines which involve a new technology, and there could be issues around storage, cost and accessibility. Using the same technology used in pertussis, diptheria, and hepatitis vaccines, VIDO-InterVac is working on a proven technology with an excellent safety profile that is cost effective and easy to manufacture.

"To have sustainable long-term access, I think it's important for Canada to continue on with its own vaccines," he said. "This COVID-19 is not going to go away."

To be nimble and quick in vaccine development, three key things are needed—in-house access to high-containment laboratory space, vaccine manufacturing capability, and a wide range of



Dr. Volker Gerdts (DVM) is director of USask's Vaccine and Infectious Disease Organization-International Vaccine Centre.

readily accessible animal models for pre-clinical testing of vaccines and therapeutics, he said.

"If this integrated, threepronged approach to vaccine development had been in place here at the start of this pandemic, we'd be at least six months further ahead with our vaccine and in clinical trials by now," said Gerdts.

To help prepare Canada for combatting new emerging infectious diseases, VIDO-InterVac has embarked on a campaign to raise \$60 million to expand and upgrade its facilities. Preliminary discussions with federal and provincial officials, as well as private donors, have been met with favourable interest. A submission to Ottawa for the next federal budget will be made soon.

VIDO-InterVac is building a manufacturing facility capable of producing up to 40 million vaccine doses per year of various animal and human vaccines, as well as test anti-virals and other treatments. Construction will be completed in a year, and once certified to GMP (Good Manufacturing Practice)

standards, the project is expected to be producing vaccines in 2022.

To work with human and animal pathogens risk groups, VIDO-InterVac needs to upgrade key areas of its Containment Level 3 (CL3) facility to the highest containment level (CL4). The CL4 space would only be about 15 per cent of the centre's total space, but would double Canada's capacity for dealing with Level 4 pathogens such as Ebola, complementing the only other CL4 lab which is at the National Microbiology Laboratory in Winnipeg.

The third crucial need is to expand VIDO-InterVac's pre-clinical testing capacity with a new facility that would provide ready access to a wide range of animals, from bats to alpacas.

"With the global shortage of animals for research and all that's involved to procure them, it can take four or five months before we can start research. We need to be able to start work on vaccines and treatments on the day after a new disease breaks out," Gerdts stressed.

VIDO-InterVac has more than \$13 million in contracts with more than 70 companies working on therapeutics, novel antivirals and vaccines, and is booking into next spring. The new vaccine development group will make it easier for industry to commercialize their discoveries.

"We hope to have funding for a fully integrated facility by next summer and to double our scientific staff over the next few years," said Gerdts. ■

> Kathryn Warden is the director of Research, Profile and Impact at USask.



USask team developing COVID-19 wildlife test

⊘ KATIE BRICKMAN-YOUNG

As the world continues to search for answers to COVID-19, University of Saskatchewan (USask) researchers are focused on tracking the virus in wildlife.

"It is very likely that SARS-CoV-2 originated in a wild animal, and there's a possibility the virus may jump back from people into wild animals, become stronger and change itself for reintroduction into humans," said Dr. Vikram Misra (PhD), a veterinary microbiologist and professor in the Western College of Veterinary Medicine (WCVM) at USask.

Misra is leading a multidisciplinary team of researchers to develop a universal test that will help scientists monitor many wildlife species for exposure to the novel coronavirus that causes COVID-19. In August, the team was among several USask research groups to receive grant funding through the Natural Sciences and Engineering Research Council of Canada (NSERC).

Serological blood tests to detect antibodies in humans are rapidly being developed and used to detect the proportion and spread of the virus in previously exposed individuals. However, such a test that can simultaneously detect COVID-19 exposure in a wide variety of animal species doesn't exist yet.

The team is working on creating a test that would detect antibodies against the virus in wildlife blood or tissue samples. Scientists would then use a test for surveillance of wild and domestic species across Canada.

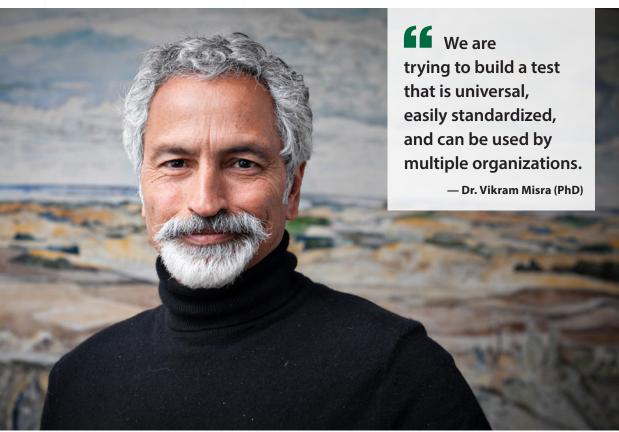
"Our goal with this project is to develop a single test that can be used for all species. We also want to have this test be relatively simple and standardized for typical diagnostic laboratories," explained Misra. "We are trying to build a test that is universal, easily standardized, and can be used by multiple organizations."

Misra's laboratory at the WCVM has had luck in the past with developing a test that showed exposure to the herpes-virus and to other coronaviruses in bats. This COVID-19 project brings investigators together who have routinely worked with a wide range of wild and domestic animals.

Besides Misra, the team includes two of his colleagues—Drs. Darryl Falzarano (PhD) and Emily Jenkins (DVM) of the WCVM's Department of Veterinary Microbiology-along with biologist Dr. Christy Morrissey (PhD) of the USask College of Arts and Science.

"When this all started, several of us who work with wildlife got a bit concerned with what we know about these types of coronaviruses and that it likely came from a wildlife reservoir," said Misra. "So, we came together to try and find a solution from our experience."

The USask researchers are working with Environment and Climate Change Canada, the Canadian Wildlife Health Coop-



Dr. Vikram Misra (PhD) is a veterinary microbiologist and professor in the Western College of Veterinary Medicine (WCVM) at USask.

M CHRISTINA WEESE

erative, Harvard University and USask's Vaccine and Infectious Disease Organization-International Vaccine Centre (VIDO-InterVac).

"Once we get the test developed, we will hand it off to whoever is interested in setting it up in terms of active surveillance," said Misra.

The race to find answers to the global pandemic has brought together multiple groups to collaborate on solutions, something Misra relates to the One Health approach to solving complex health problems—one of the university's signature research areas.

"This is a perfect example of a One Health problem. One Health is the health of the environment and the health of everybody in it, human or animal," he said. "This is a complex problem. You can't solve it without different people. At the centre of One Health is the collaboration between different disciplines to solve complex problems and looking at the inner-related environment."

Through its COVID rapid-response funding program, NSERC awarded Misra's group and each of the three other USask teams nearly \$50,000 for one year. The research projects address pandemic-related research and technical challenges, working with industry, public sector and not-for-profit partners.

"COVID-19 has had more of an impact on the world than just about anything that came before it," said Misra. "Our goal is to either get rid of it or deal with it, and try to prevent similar things from happening in the future."

> Katie Brickman-Young is a communications officer in the **Western College of Veterinary** Medicine at USask.



Research has shown that pet-assisted interventions offer great mechanisms for healing and helping people.

- Meghan Flath





USask Department of Psychology PhD candidate Meghan Flath with her pets Hilo (left) and Kona (right).

SUBMITTED

Animal-assisted socialization for older adults

USask researcher exploring new program to support Canada's aging population

As a child, Meghan Flath grew up with pets, experiencing first-hand the mental health benefits that connection brings. Now she wants to show how it can improve the lives of lonely older adults as the country's aging population continues to grow.

"Many older adults who are still living at home feel lonely or socially isolated, especially during this time, obviously," said Flath, a PhD student who has earned a Bachelor of Science in Physiology and Pharmacology and a Bachelor of Arts (Honours) in psychology at the University of Saskatchewan (USask).

"Whether we are facing a pandemic or not, this population does tend to lose a lot of the connections in their lives. Whether it be the death of a spouse, or losing friends, they might not be able to get out as much as before, so feeling lonely is a

common concern. And that is where at-home delivery of animal-assisted socialization can help."

Flath's project is funded by a Canada Graduate Scholarship Doctoral Award from the Social Sciences and Humanities Research Council, and is supervised by USask psychology professor Dr. Megan O'Connell (PhD), a national leader in research to support older adults.

A comprehensive 2017 research report projected that the number of Canadian seniors (aged 65 and over) is expected to double to 25 per cent of the population in the next 20 years, creating new challenges and increased demands on an already overburdened health-care system. Flath is one of a number of young researchers in O'Connell's lab working on innovative new programs to support the needs of this growing segment of the popu-

lation. For Flath, her research is also deeply personal.

"I have always been incredibly close with my grandparents and I have seen first-hand how the transition into that later-in-life aging process brings about many unique challenges," she said. "So getting to be in Dr. O'Connell's lab was really rewarding for me because I have the chance to see all the different ways that she is trying to help with this transition and improve the quality of life for this growing part of the population."

Building on the success of previous popular pet-assisted therapy programs, Flath's project is designed to bring the benefits right to the door of often-isolated older adults, with in-home visits from animals and their handlers.

"Many older adults can't get to community centres, and many of

them are introverted, so sometimes large group programs are intimidating for them," said Flath. "In stakeholder meetings with older adults and caregivers, many have expressed that they would enjoy having access to pets, but that having the animal visit them in their own home would provide them with socialization in a way that would better suit their needs. So for me, knowing how animals have always been an important part of my life, this approach to at-home delivery of animal-assisted socialization seemed perfect."

While the ongoing global pandemic has delayed community visits in this research project, Flath is currently focusing on analyzing data on the association between pet ownership and social isolation and loneliness, documented in the long-term Canadian Longitudinal

Study on Aging, the country's most comprehensive ongoing study of the health and well-being of Canada's aging population.

Once safe to do so, Flath will put her research to the test by bringing animal-assisted socialization directly to older adults in the community.

"I am in the preliminary stages of my research, but once the pandemic is over, we will move into going into individuals' homes to develop the program and showcase the benefits of at-home delivery of animal-assisted socialization," said Flath. "Research has shown that pet-assisted interventions offer great mechanisms for healing and helping people and we want to show just how well this kind of program can improve quality of life for this growing segment of our population."



The role of public health in the global pandemic



Dr. Alexander Crizzle (PhD)

Dr. Khrisha Alphonsus (PhD)

Dr. Philip Griebel (PhD)

⊘ JENNA FRASER

The ongoing COVID-19 pandemic has impacted society on a global level and has started a conversation about the importance of public health and public health programming.

Public health, at its core, is about the prevention of disease and limiting the impact of disease once it has occurred. Public health is of critical importance now more than ever as the world continues to try to slow the spread of COVID-19.

"With respect to the pandemic, examples of public health measures are tracking the spread of disease, developing models predicting the number of cases, developing and testing novel vaccines, COVID-19 screening and testing, public health messaging, public health prevention guidelines, contact tracing, and setting guidelines for schools, work and other social activities," said Dr. Alexander Crizzle (PhD), associate professor in the School

of Public Health at the University of Saskatchewan (USask). "Public health is the most vital intervention in reducing the number of cases, but also to lessen the burden on the health care system."

Public health is a broad term that encompasses many different disciplines and areas of study, including epidemiology, biostatistics, vaccinology and immunology, program planning and evaluation, policy and health care management, all areas of expertise in the School of Public Health.

The conversation around COVID-19 has recently shifted as the idea of an effective vaccine becomes more of a reality. However, public health professionals caution that the introduction of a vaccine doesn't mean we can forget about other important public health measures. These measures, such as wearing a mask, physical distancing and practicing good hand hygiene, will remain critical to preventing the spread of COVID-19.

"A person trained in public health and with a background in vaccinology will immediately understand that this is only one part of the bigger picture of COVID-19 control. A vaccine that prevents clinical disease may be great, but control of disease provides no insight into whether the vaccine can prevent viral transmission," said Dr. Philip Griebel (PhD), professor in the School of Public Health. "COVID-19 has provided an excellent example of an infection that can be transmitted by apparently healthy individuals, and vaccines will be more effective in controlling both disease and viral transmission if they are combined with public health practices that limit transmission."

While the COVID-19 pandemic continues to affect the global community, public health professionals have started to look towards the future, and how society can be better prepare for future pandemics, based on what we have learned from this coronavirus and health care responses around the world.

"Since the COVID-19 pandemic started, many people are aware that there needs to be better preparation should another global pandemic take place, and this is where the Master of Public Health programs are very important, such as the one that is offered by the School of Public Health at USask," said Dr. Khrisha Alphonsus (PhD), an assistant professor in the school. "Public health professionals are key players since they are involved in various institutions and levels of government and provide the best recommendations to the public to control and prevent the spread of diseases."

For some, being prepared for

future pandemics and dealing with chronic illnesses needs to come with a shift in perspective. This will require a change from focusing on treating a disease when it arises, to a discussion about how to prevent disease in the first place.

"At times, society relies too much on the provision of health care, rather than preventing disease from happening in the first place. This is not limited to pandemics and COVID-19, it is true for many chronic diseases seen in the world such as cancer, diabetes, and cardiovascular disease, to name a few," said Crizzle. "This pandemic has reminded us how powerful public health is in dealing with large scale and global issues." ■

> Jenna Fraser is the communications officer in **USask's College of Dentistry and** School of Public Health.



USask nursing meets the challenge of the pandemic

KYLIE KELSO

"Be kind, be calm, and be safe." During this challenging time in history, the mantra of noted Canadian physician Dr. Bonnie Henry (MD) brings comfort to College of Nursing interim dean Cindy Peternelj-Taylor.

As she looks back on her nursing career spanning more than three decades at the University of Saskatchewan (USask), Peternelj-Taylor cannot remember a time when nursing faced so much uncertainty.

"Amongst all the uncertainty that the global pandemic has created, one thing we know for sure is that nursing is a dynamic profession, always changing to meet the needs of individual clients, their families, and their communities, both locally and globally," said Peternelj-Taylor. "If there is a group of people who can push through uncertainty, adapt well to change, and think on their feet, it is nurses."

Change is constant in nursing, including the transition from hospital-based training programs, through diploma prepared programs, to the requirement of baccalaureate education. Increasingly, nurses are engaging in graduate education, including doctoral education, in order to assume advanced practice roles. And in 2020, the International Year of the Nurse and the Midwife, no longer were nurses simply portrayed as "Angles of Mercy", as the public reimagined nurses as superheroes working on the front line of the COVID-19 pandemic.

Probably the most significant change Peternelj-Taylor has witnessed during her time in nursing is the career path graduates follow. Traditionally, nurses worked in institutions, such as hospitals and long-term care homes and although

many still follow this important and essential path, the role of the nurse has significantly evolved, as have the environments in which they practice. Many nurses work in areas not typically portrayed on the evening news during times like this global pandemic.

Nursing education encourages students to think about the challenges they see today and apply their learning to create a better tomorrow. Although working on the front-lines of a pandemic may feel overwhelming and lead some nurses to question their career choices, Peternelj-Taylor reminds alumni and current students that nurses have shaped the health of the world, long before COVID-19, and they will be there long after the pandemic is a memory. At the same time, she doesn't want to minimize the realities of the pandemic and its individual and collective impact on the people of Saskatchewan, including the College of Nursing.

Not only has the nursing profession changed over the years, so too has nursing education. Since Peternelj-Taylor began her career at USask, the College of Nursing has gone from admitting 80 students to 345 students per year now, making nursing the largest non-departmentalized college on campus.

"Our college has continued to develop and advance, and to expand to meet the growing need for nurses in the growing field of health care in this province and this country," said Peternelj-Taylor.

The challenges posed by the declaration of the pandemic on March 11, 2020, forced the college to adapt and evolve. What was once learned in a classroom and through clinical practice environments, had

If there is a group of people who can push through uncertainty, adapt well to change, and think on their feet, it is nurses. — Cindy Peternelj-Taylor Professor Cindy Peternelj-Taylor is the interim dean in USask's College of Nursing.

to be completely reimagined. Fortunately for the College of Nursing, online program delivery and the use of clinical simulation is not new. For over a decade, the college has been delivering programming online in both undergraduate and graduate programs and thanks to IT support, the college has continued to expand its online presence.

Over the past nine months, the College of Nursing has been working to move the delivery of all theory classes from in-person to remote delivery and to restructure in-person labs. The most significant challenge for the college has been the management of student clinical experiences.

"It has been particularly challenging to plan for these placements during these unprecedented times, especially when one considers the majority of nursing clinical placements take place in hospitals, long-term care facilities, and schools - settings that are under tight restrictions during COVID-19," said Peternelj-Taylor.

The interim dean is proud of the way faculty and staff have pulled together to ensure nursing students remain on track as they move through their programs of study. Instructors have transitioned established clinical placements into innovative clinical experiences, such as the creation of the Negative COVID Callback Centre in Saskatoon, where fourth-year nursing students communicate negative COVID test results in a timely manner, thereby providing meaningful support to the community during the pandemic.

COVID-19 has certainly changed nursing forever. But even with all the new challenges and risks it has posed for front-line health-care workers, in particular nurses, Peternelj-Taylor is confident the world will get through it.

"Nurses are resilient, creative thinkers, dedicated to interprofessional collaboration," she said. "The profession will make the most of these extraordinary times and emerge stronger than ever before."

> Kylie Kelso is the communications officer in the College of Nursing at USask.



The impact of COVID-19 on post-secondary education

EMILIE NEUDORF

The global pandemic demanded a quick response from the Canadian education system.

Many are watching how this response will impact high schools and post-secondary institutions as they adapt to remote delivery. Among those watching is Dr. Ken Coates (PhD), Canada Research Chair of Regional Innovation at the University of Saskatchewan (USask) and professor in the Johnson Shoyama Graduate School of Public Policy (JSGS), USask campus.

Coates has done extensive research and writing on Indigenous affairs, resource development, post-secondary education, and innovation in rural Canada. He continues to study how students, graduates, faculty, and surrounding communities are affected by the response to COVID-19.

The pandemic has dramatically challenged post-secondary institutions and related economies, but it has also provided a unique opportunity to learn more about these I think we need to recognize that these kids had the worst Grade 12 experiences, I think, in recent Canadian history.

— Dr. Ken Coates (PhD)

systems and start on the path to improve them.

"I think the pandemic has really challenged us to take a very, very different approach," Coates said. "And I think we have to figure out how to look at our own evidence, figure out what's actually going on, and adjust accordingly. There will be some good lessons in all of this. We will learn how to do certain things differently."

Before the switch to remote delivery, drop-out rates in Canadian post-secondary institutions were already concerning at a global level. Some Canadian institutions have released their drop-out numbers after the extended withdrawal dates this fall and were pleased to announce that drop-out rates did not rise as much as anticipated. Coates is eagerly awaiting more concrete information in December and January when the first term has concluded.

Coates describes how difficult completing courses online can be. The disconnection from campus activities and student resources would be challenging enough, but many students live in less-than-ideal conditions involving crowded households with poor internet connection. This can make it difficult to succeed. Students who are academically strong and/or highly motivated are less affected, but those who are

going into their first or second year of post-secondary education may be struggling to adapt, through no particular fault of their own, save for not being well-prepared for the unexpected challenge of full online learning.

Those entering university for the first time are also not set up for success.

"I think we need to recognize that these kids had the worst Grade 12 experiences, I think, in recent Canadian history," said Coates.

He said that this contributes to the possibility of the creation of a "COVID-19 Generation," in which students who were in Grade 11, Grade 12, and enrolled at university at the start of the pandemic are experiencing vastly different educational experiences and a difficult transition to the workforce.

With all of this uncertainty, Coates urges post-secondary institutions to study the data related to student engagement and faculty experience that is readily available. Canvas, the learning management system currently used by USask and JSGS for online course delivery, collects data about how students engage with course material.

"We should be collecting that information ... and talking about it in some very systematic ways," he said.

In addition, institutions should be listening to their faculty, and make efforts to support faculty in their abrupt transition to online teaching. But the impact of remote learning goes far beyond the institutions themselves. As a consequence of remote learning, many students did not relocate to the campus.

Many small businesses are realizing the large number of customers that post-secondary education institutions and the tourism industry had brought into their communities. Coates is concerned about how small businesses will continue to suffer as a result.

"And I think it's one of those things, where if nothing else, this whole experience gives us reason to look around and look again at where universities affect our communities in positive and constructive ways," said Coates.

On the other side of the coin, Coates observes that "there's a small number of places that are doing way better because they're attracting a lot of people who have left the city ... It's always good to see the resilience of rural Canada."

Emilie Neudorf is a communications and marketing assistant in JSGS at USask.





New kinesiology research: Masking up for physical fitness

ALYSSA WIEBE

A new study by researchers in the College of Kinesiology has determined that exercise performance and blood and muscle oxygen levels for healthy individuals are not affected by wearing a face mask during workouts.

Keely Shaw is a first-year kinesiology PhD student at

the University of Saskatchewan (USask) and a high-performance athlete who was involved in the study. From lacing up her skates on the ice, to competing in the Para-cycling World Championships, Shaw has had to perform under the most strenuous circumstances, which made her the perfect

> fit to participate as an athlete

and researcher in the study.

"I think it can be really beneficial for a researcher to take part in their own studies. It's always good to have a better idea of what you are putting your participants through," said Shaw. "By being a participant, it allows me to appreciate some of the grey area instead of focusing on only the black and white that is quantitative research outcomes."

Some athletes have raised concerns about the comfort and ability to breathe while masked up, but the research has shown it has no detrimental effect on performance. Shaw agreed that the mask is a new piece of equipment that is a little discomforting, but she did not find it hard to breathe in while exer-

"Having the mask cup my mouth on every inhale definitely was not comfortable, but that being said, I've done a few bike rides outside with a mask and it seems to be less of a discomfort every time," she said. "I think it's just something a person has to get used to."

During the study, published Nov. 3 in the International Journal of Environmental Research and Public Health, seven male and seven female tested two different types of masks. The first was a disposable blue surgical mask and the second

a three-layer cotton mask that is currently recommended by Dr. Theresa Tam (MD), Canada's Chief Public Health Officer.

"I found the three-layer to be a bit more difficult to breathe in, I think just because it was thicker and warmer," said Shaw, who took part in the study led by co-author Dr. Phil Chilibeck (PhD) along with Dr. Gordon Zello (PhD) of the College of Pharmacy and Nutrition, Dr. Scotty Butcher (PhD) from the School of Rehabilitation Science, and kinesiology alumnus John Ko.

Shaw performed bike tests that started out low impact while progressing steadily to high impact. She described it as "climbing a hill that got steeper every two minutes." The formal test was 12 minutes long, plus an extra five minutes for a warm-up, all while donning a mask.

Some athletes have concerns that wearing a mask would affect their performance and while Shaw agrees there are some concerns, she doesn't think it would take long to understand the benefits of using a mask while training.

"If you've never exercised in a mask, I think it would be hard to perform at first. If you use it in training though, I don't think it would impact your performance all that much," she said. "It might even improve your performance as it teaches you to breathe through your nose more instead of your mouth."

As the global pandemic wears on, sport and recreation offerings are being questioned as many believe it is harder to limit the spread of COVID-19 during these activities. In order to keep these opportunities available in Saskatchewan, mask use was made mandatory while entering and exiting facilities, and most recently during exercise and compe-

"I believe masks should be mandatory in all areas of sport and recreation," said Shaw. "We need our fitness facilities and sporting programs to stay open to help maintain our physical and mental health, especially as we enter the winter months. If this is a small action that we can do to keep them open, it would be foolish not to."

Like many athletes, Shaw misses racing her bike, socializing with her teammates, and traveling the world. Her goal from 2020 remains the same heading into 2021 - competing in the 2021 Paralympics in Tokyo next August.

"Having it delayed for a year was disappointing, but it had to be done," said Shaw. "I am just continuing to work hard to prepare and hoping for the best in 2021." ■

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

USask College of Kinesiology PhD student Keely Shaw trains with a mask in preparation for the Paralympic Games.



Huskie Athletics supporting development of female coaches

⊘ **JAMES SHEWAGA**

The numbers tell the story: In Canadian university sports, only 17 per cent of head coaches and 24 per cent of assistants are female.

For Huskie Athletics, Mavis Dzaka, Emily Humbert and Taylor Follensbee are part of a new generation of coaches trying to help change that. The three former University of Saskatchewan (USask) student-athletes and current assistant coaches were selected to take part in new development programs sponsored by either U Sports or the Coaching Association of Canada, designed to increase the number of female coaches in elite levels of sport across

"I think it is really important to show that the coaching world is occupied by both males and females and that we all can be leaders," said Dzaka, an assistant coach with the Huskie track and field team who was chosen to be a mentee in the first Black Female Coach Mentorship Program. "The important thing is to not just sit on the sidelines, but to get involved and know that you can succeed and be a role model for female athletes, and particularly for athletes of colour. I am really excited about it and I am looking forward to continue developing as a coach."

Born in Ghana and raised in

Saskatoon, Dzaka competed for the Huskies from 1999-2003 and began coaching with the Saskatoon Track and Field Club while she was still in university earning a commerce degree. She went on to coach in the Western Canada Summer Games and the Canada Summer Games and guide Huskie athletes in the Canada West conference championships and U Sports nationals. She also earned her national coaching certification in 2020.

Dzaka, who works for a local law firm full-time while coaching part-time, credits Huskies track and field coach Jason Reindl with encouraging her to pursue the mentorship program.

"Mavis is an amazing coach," said Reindl. "Her dedication and commitment to our Huskie program is nothing short of exceptional and I am continually thankful for her coaching contributions to our student-athletes. Her selection into the inaugural Black Female Coach Mentorship Program is a testament to her desire to improve and grow as a leader. Our entire program is very proud of her continued efforts to be the best coach she can be and leader in our community."

Meanwhile, Humbert is an assistant coach with the Huskie women's volleyball team and was selected by the Coaching Association of Canada for the University Female Coach Mentorship Program.

"I am really excited and honoured," said Humbert, who was born in Saskatoon and played five seasons with the Huskies from 2012-2017 while completing kinesiology and education degrees in USask's combined bachelor's program. "The quality of coaches who have been part of this program, including at the University of Saskatchewan and at the national level, there are lots of strong women who are pursuing their own coaching journeys, which is inspiring. I really look forward to all of the different opportunities that being a part of this program can provide."

Humbert, who teaches high school full-time and coaches parttime, was encouraged by Huskie women's volleyball coach Mark Dodds to apply.

"Emily is a huge part of our coaching staff and being an alumni, she is committed to the program and definitely passionate about Huskie volleyball," said Dodds. "She has the leadership skills to be a coach and her communication and her compassion for these student-athletes are key qualities that make her a very important part of our staff. And this coaching mentorship program is just an awesome opportunity to help Emily develop and get her coaching levels and go through the process of becoming a high-performance coach."

Humbert points to Huskie women's basketball and national team coach Lisa Thomaidis as the consummate role model for female coaches and notes the role that male coaches like Dodds also play.

"Absolutely. Talk about a strong female role model who employs strong females on her coaching staff. Lisa is phenomenal," said Humbert. "And Mark has always made it a priority to have strong females on his coaching staff and I think that is a priority across the board in Huskie Athletics."

Meanwhile, Follensbee recently ioined Huskies wrestling as an assistant coach for Daniel Olver's staff after competing for four years and winning gold at the conference championships in 2018. Originally from Moose Jaw, Follensbee was selected as one of the first participants in the U Sports Female Apprenticeship Coach Program.

"I think it opens the doors for a lot more females to get into coaching," said Follensbee, who has a psychology degree and works at a youth centre and the YMCA while coaching part-time with the Huskies. "Daniel is a great coach and we have been discussing the impact of having female coaches. There are 18 of us in this apprenticeship program and I think I am the only wrestling coach. Having female coaches in all sports, especially at high levels, I think is really important, and especially in wrestling where there are so few. So it's a great program to be a part of."

Olver said it is extremely important to support young coaches like Follensbee.

"Taylor has been showing excellent leadership with the team and peer coaches," he said. "She is really figuring out the other aspects of coaching besides the technical, such as coaching the athletes







through situations of mental and emotional distress, or finding new ways to challenge them. It has been great to see her explore this new role. Her coaching won't end with the apprenticeship program. She is a strong leader and will be successful in any coaching opportunity."

END OF AN ERA:

USask Huskies head coach Dave Adolph, the winningest coach in Canadian university hockey history with 488 career regular-season victories, announced his retirement Dec. 7, 2020 after 28 seasons. He was a four-time Canada West coach



of the year and U Sports coach of the year in 2017. ■

Donors inspire aspiring business and law leader

∅ INALIE PORTADES

Through hard work and support from her donor-funded scholarship, Jina Bae is on track to pursuing her childhood dream.

"It has always been my dream to become the CEO of my own company one day," Bae said. "I want to see more women, people of colour, and visible minorities in leadership roles."

Bae's ambitions drew her to study in the Edwards School of Business at the University of Saskatchewan (USask). While specializing in operations management, she is also on the path to obtaining a law degree through the College of Law's Combined Bachelor of Commerce/Juris Doctor program.

"To become a great leader, I need to understand people, policies, trends and industries; I believe pursuing higher education is allowing me to get closer to that goal," she said. "USask is also close to my heart as my oldest sister graduated from the College of Nursing."

Bae was accepted into the combined degree program and began her new academic journey in the fall. Diligent in her studies, she said she couldn't have excelled as a student without the support of her scholarship.

Thanks to the campus community-alumni, friends, staff and faculty-who donated to the

Campaign for Students that funded her scholarship, Bae is able to devote time to participate in extracurricular activities, which is helping her gain additional skillsets for her future career.

Bae has taken on many leadership roles in various organizations, such as the president of AIESEC in Saskatoon, vice-president of the Pre-Law Student Society, marketing director for the World Mining Competition, and now photographer for Young Women in Business. She volunteered at the University of Saskatchewan Students' Union Women's Centre and Food Centre, and sang with USask's Greystone Singers in her first year of university.

To further her potential as a future CEO, Bae is enrolled in Certification in Common Law in French at the University of Ottawa, and is a part of the Corporate Law Club at USask. She is also busy advancing her photography skills and kickstarting an online business venture in her spare time.

"Receiving a scholarship has allowed me to become a well-rounded



First-year law student Jina Bae is one of the many student award recipients of the Campaign for Students, USask's largest yearly scholarship and bursary fundraising campaign.

student," she said. "It is because of donors that I'm able to contribute my time to make a difference in the community and my future—I thank them for their support."

The Campaign for Students raises money to help students with scholarships and bursaries. It also provides additional financial assistance for distance learning tools, and medical and mental health support. Last year, \$1.17 million was raised through the campaign to ease financial concerns of students while working toward their degrees.

"In a time where classes are mainly online, it's crucial for students to have access to resources such as a reliable internet connection. If a student couldn't log-in to a learning platform, they wouldn't be able to finish their courses, forcing them to drop out or delay their studies," Bae said.

Donor support proves to help students like Bae pursue their dreams and serves as an inspiration for their future.

"When someone else supports your education and interests, you feel motivated and inspired," she said.

Bae said she hopes to give back in the future so others can receive the same help she has received.

"I hope to show the same generosity that others have done for me."

> **Inalie Portades is a** development communications co-ordinator at USask.

CALL FOR NOMINATIONS

FOR HONORARY DEGREES

The honorary degrees committee of the University of Saskatchewan Senate is asking members of the university community and alumni to consider nominating honorary degree recipients for convocation ceremonies in 2021 and beyond.

An honorary degree is the highest honour the university can bestow. Acceptance of an honorary degree by a candidate brings honour to both the recipient and the University.

Nominees should be distinguished persons who have made an eminent contribution to scholarship, education, the arts or public service, in Canada or internationally. For more information please visit our website at: usask.ca/secretariat

Please send your nominations to hd.nominations@usask.ca.



Dr. Airini brings wealth of experience

FROM PAGE 2

A Fulbright Scholar in 2014 at Howard University in Washington, D.C., Dr. Airini examined how education policy can change results for under-served students in higher education

At TRU, a specialist in virtual learning and internationally recognized for environmental sustainability, Dr. Airini has led pan-university initiatives delivering on the Truth and Reconciliation Commission's Calls to Action.

"USask is proud to have Dr. Airini join our senior leadership team," said Peter Stoicheff, USask

president and vice-chancellor and chair of the search committee. "She is passionate about post-secondary education, and I look forward to her exceptional academic and administrative records helping move USask forward on its commitment to be the university the world needs." ■



NAPOLEON'S BUST OF HANNIBAL A USASK TREASURE

CHRIS PUTNAM

During his rule as Emperor of the French, Napoleon Bonaparte spent long days and nights working in his study at the Château de Saint-Cloud near Paris. On the mantlepiece above his favourite chair sat a bronze bust of one of his idols, the Carthaginian general Hannibal.

A bust of Hannibal in the collection of the Museum of Antiquities at the University of Saskatchewan (USask) is the very same sculpture, believes Dr. Tracene Harvey (PhD).

"It's not every day you have such a strong connection to Napoleon here in Saskatchewan," said Harvey, director of the museum in the College of Arts and Science.

The bust was priceless even before its link to Napoleon was found. The Museum of Antiquities' former curator, Catherine Gunderson, discovered in the late 1980s that it came from the studio of François Girardon—a sculptor for King Louis XIV of France who played a major role in the decoration of the Palace of Versailles.

The bust was created either by Girardon himself or by his student Sébastien Slodtz, said Harvey.

Gunderson's research also led her to suspect the bust was once owned by Napoleon. In 2014, Harvey asked Helanna Gessner, a student assistant at the Museum of Antiquities, to investigate further. That summer, Gessner found a description of the emperor's bust of Hannibal in the memoirs of Napoleon's private secretary.

"I immediately rushed to tell Tracene and everyone else in the office, 'Look, we found it!' I was pretty ecstatic," said Gessner, who now works at the Diefenbaker Canada Centre.

Only one other bust matching the description is known to

exist, and its whereabouts during Napoleon's time are accounted for. That makes the Museum of Antiquities' bust "a very strong candidate for Napoleon's," said Harvey.

There are still questions about how the bust made it from France to USask.

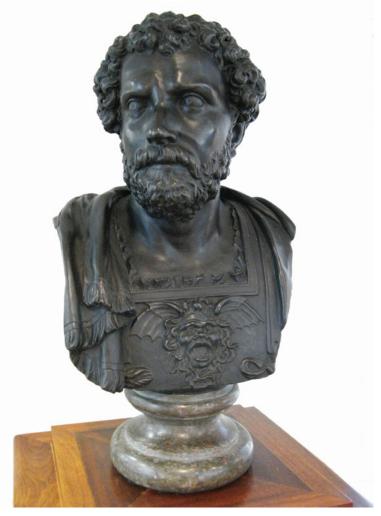
"We're still trying to find the exact path that it took to get here. Parts of that journey we may never know," Harvey said.

After Napoleon's fall from power, the bust may have come into the possession of the Louvre Museum in Paris. It later travelled to New York, where a collector purchased it at an auction in 1939 for just \$69. Judge John C. Currelly acquired it and donated it to USask's Museum of Antiquities in 1988.

Other mysteries remain. The memoirs that describe the bust also mention a sculpture of Hannibal's Roman adversary, Scipio Africanus, which sat next to it on Napoleon's mantlepiece. The second bust has been lost to history.

"Wouldn't that be a treat to find that Scipio bust someday?" said Harvey.

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



Staff at USask's Museum of Antiquities believe the bronze bust of Hannibal in their collection once belonged to Emperor Napoleon Bonaparte.

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