

GREEN & WHITE



The melding of minds:
collaboration is key to USask
alumni's success.

Raise a glass to collaboration.

Maker's Malt takes CDC Bow and steeps, germinates and dries it into malt

9 Mile Legacy Brewery takes that malt and creates the Bow Tripel beer

CDC Bow Barley was developed at USask's Crop Development Centre.

Read more about this on page 16.



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We acknowledge that the University of Saskatchewan is located on Treaty 6 Territory and the Homeland of the Métis. We pay our respect to the First Nations and Métis ancestors of this place and reaffirm our relationship with one another.

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“Boundless collaboration means many things, but to our alumni, students and faculty it means reaching for the unknown and working together to explore new opportunities.”



This past fall, as part of our Computer Science 50 year celebration, I was able to sit in on a presentation by esteemed alumni Darwyn Peachey (BSC'78, MSC'83) and Byron Bashforth (BSc'96, MSC'99).

Peachey began his Pixar Animation Studios career in 1988 and has had a remarkable journey ever since—recently as the global technology supervisor for *The Incredibles 2*. Bashforth has also had an illustrious

career, joining Pixar in June 1999 as a render technical director on *Toy Story 2*. Recently, he was the character shading lead for Disney Pixar's Oscar-winning film, *Coco*.

I am the first to admit I am not overly versed in tech culture but these two were simply fascinating despite my lack of animation knowledge.

The two innovators used real examples from real movies to show the importance of their work; how the lighting in a frame of *The Incredibles 2* changed the mood of an entire scene and how challenging it was to make the skeleton characters wear clothes in *Coco*. Some of these details may seem trivial to the untrained eye but they are in fact monumental when piecing the whole story together.

What was so fascinating to me about their presentation was hearing just how many people it took to make these images come to life. Peachey and Bashforth made sure to mention the importance of their teams as part of the larger team that put the whole movie together. To create a full-length animated feature takes hundreds of brains colliding together to come up with the best product.

After the presentation, I made sure to watch these films over again, now with the trained eye of someone who could better appreciate the amount of work each frame takes. When

the end credits rolled, hundreds of names scrolled through my screen, proving that all of these ingenious people had conjured up these creative ideas and collaboratively tackled them, resulting in a brilliant, eye catching and memorable piece of art.

Boundless collaboration has brought many inventions and ideas to fruition, and these movies are just one example of why working collaboratively is so important.

Boundless collaboration means many things, but to our alumni, students and faculty it means reaching for the unknown and working together to explore new opportunities. It's also why it is one of the University of Saskatchewan's three commitments in our 2025 University Plan.

That's what you'll find in this magazine—stories of our USask community working together to be what the world needs.

Whether it's enhancing plant-based proteins, looking for ways to solve the HIV crisis or working together to provide education opportunities to everyone, it's in our nature to work together to get the job done.

On our own we may be small, but collectively we can move mountains.

Leslie-Ann Schlosser
Editor

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“Being collaborative comes naturally to our grads and helps them influence positive change in their lives and the world around them.”



If you are one of our alumni around the world whom I have visited over the past few months, you've heard me say this: universities are needed now more than ever before. That is certainly true for the University of Saskatchewan. As such, we set our direction not on the basis of what we want to be, but on the basis of what the world needs us to be.

I say with confidence that USask is well on its way to being the university the world needs. This is in part because of our remarkable alumni who have forged this path of excellence. Our 155,000 extraordinary alumni worldwide are an influential force for change that help tell the USask story.

Boundless collaboration is one of the three commitments in our 2025 University Plan and the theme of this issue of the *Green & White*. Being collaborative comes naturally to our grads and helps them influence positive change in their lives and the world around them.

The history of collaboration at the University of Saskatchewan is deep and rich—one of my favourite examples being the cobalt 60 project, which we've highlighted on page two of the Remember When feature.

The best part of the story in my eyes is the collaborative nature of the project; the equipment used to create the world's first betatron accelerator for treating cancer was developed around the corner at Acme Machine and Electric Co on Idylwyld Drive. This collaboration resulted in the world's first radioactive cobalt-60 machine and saved the lives of millions of cancer patients.

When we collaborate, we inspire and learn from one another. We are able to share our

thoughts, spark passions, challenge existing opinions and ignite change.

Because of the foundation of collaborative excellence that has been set by our alumni, USask is meeting the greatest challenges the world is facing today in water security, food security, environmental sustainability, political instability, social justice, equity and inclusion, economics and agricultural resources.

As always, there is still work to be done.

As a community, we have a shared responsibility to honour and join in the collaborative journey of reconciliation. Relationships have been fractured; they require repair and healing. Many stories in this issue focus on rebuilding these relationships and on the collaborative efforts it takes to practice reconciliation in all our engagement efforts. It is important that USask is a leader in these conversations and that we continue the collective healing that is part of true reconciliation.

Our students are becoming the leaders of tomorrow—engaged global citizens who will themselves embody the strong traditions we honour in the pages of this issue of *Green & White*.

It is a great privilege to be the president of such a collaborative university—the university the world needs. ■

Peter Stoicheff
President and vice-chancellor
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Fedoruk (left) and Epp. – 1951

UNIVERSITY ARCHIVES SPECIAL COLLECTIONS
HAROLD JOHNS, COLLECTION, MG 372

Revolutionary research; the cobalt 60

PATRICK HAYES (BA'80, MA'89)
UNIVERSITY ARCHIVES AND SPECIAL COLLECTIONS, UNIVERSITY LIBRARY

In Feb. 1952, *Maclean's* magazine published a feature titled: "The atom bomb that saves lives." The subsequent pages tell a story of the remarkable team effort and a medical innovation that would have global benefits.



Sylvia Fedoruk with unit and patient. – ca 1953

UNIVERSITY ARCHIVES SPECIAL COLLECTIONS
HAROLD JOHNS, COLLECTION, MG 372

The cobalt-60 machine is an example of USask's long history of innovation and collaboration.

It built on earlier successes and led to future facilities like the linear accelerator and the Canadian Light Source.

The previous October the world's first cobalt-60 therapy unit opened at the University of Saskatchewan. This "wonder of the atomic age" was the result of collaboration between government, academia and the private sector. Designed by Dr. Harold Johns of the Physics Department and built by John MacKay, owner of Acme Machine and Electric Co., Saskatoon, it would revolutionize cancer treatment, using radioactive cobalt to attack patient tumors. The team also developed the "most reliable and complete set of isodose tables" then available to physicians.

The groundwork on the project had been laid two decades earlier. Professor E.L. Harrington began researching medical use of radiation in the late 1920s, building the first radon plant in Western Canada at the bequest of the Saskatchewan Cancer Commission. As head of the Department of Physics, Harrington was also instrumental in hiring Harold Johns, who at that time "had no prior interests in radiation physics." Johns was, however, "enthusiastic, responsive to new ideas and able to absorb quickly the pertinent details and apply them to experimental investigations."

The 1944 appointment of the research was a joint one, shared by the Physics Department at USask in Saskatoon and the Saskatchewan Cancer Commission in Regina. Shortly after taking the job, Johns and Saskatchewan Cancer Services director Alan Blair visited Premier Tommy Douglas unannounced without an appointment, asking for funds to buy a betatron to support the project. A betatron shields the highly radioactive but stable cobalt 60 in a lead-lined case and was a crucial piece for the revolutionary cancer treatments.

The unscheduled meeting proved to be successful and with the 25-million volt particle accelerator on the way, a special lab was constructed at the back of USask's Physics Building.

The betatron opened up a fresh experimental field in cancer treatment. On Feb. 4, 1950, the *Toronto Star* wrote, "They are doing big things in Saskatoon through the use of the betatron, just one of

Canada's atomic machines that are pointing to new discoveries."

However, there were limitations to the new machine. It was experimental, open to those who had exhausted all alternative treatment. Treatment was limited to surface or near surface tumors. To attack the deep-seated cancers, a new method and machine would be required.

Johns approached the premier again in 1949, seeking funding for a new device. In his words: "we asked for it and we got it." Douglas personally gave the University of Saskatchewan scientists the "green light" to proceed with the development of the "cobalt bomb."

The device contained the highly radioactive but stable cobalt 60 in a lead-lined case. At the time, there was only one source for radioactive cobalt 60 in the world, located at Canada's Chalk River Nuclear Laboratories. The beam line was controlled through an aperture that was opened or closed depending on the dosage needed. Delivered to campus, it was placed in a specially constructed room in the then uncompleted University Hospital.

Once in place, Johns' team of graduate students, including Sylvia Fedoruk, Edward Epp, Douglas Cormack and Lloyd Bates, assisted with the calibration of the machine. Instead of a patient, the researchers used a tank of water to calculate dosages. Once installed and calibrated, the first patient, a 43-year-old mother of four with cervical cancer, was treated in November 1951. She lived another 47 years.

The machine was a major technological development. It was the birth of cobalt therapy for the treatment of cancer and is still a mainstay for cancer treatment in many third-world countries. Saskatoon's cobalt unit treated 6,728 patients until it was replaced in 1972.

The cobalt-60 machine is an example of USask's long history of innovation and collaboration. It built on earlier successes and led to future facilities like the linear accelerator and the Canadian Light Source. ■



Collaborative research is the key to the LFCE

The newest kid on the block for researchers at the University of Saskatchewan is a world-class facility that brings together under one roof all aspects of raising livestock in a sustainable and environmentally responsible manner.

The Livestock and Forage Centre of Excellence (LFCE) is a \$38-million world-class complex of field and science laboratories, operating three distinct research and teaching units. Plant, soil and animal scientists from the College of Agriculture and Bioresources, veterinarians with expertise in infectious diseases as well as in animal behaviour from the Western College of Veterinary Medicine (WCVN), and environmental engineers from the College of Engineering are leading research projects with considerable overlap, breaking down silos to work together.

The mandate of the research centre includes providing livestock producers and consumers with solid, research-based information on emerging issues related to beef cattle health, reproduction, nutrition, genetics and public safety, as well as plant breeding for forage crops, grazing management and the environment.

Funding for the Livestock and Forage Centre of Excellence was provided by USask, the federal and provincial governments, as well as several organizations, corporations and individuals. ■



DAVID STOBBE

College of Law implementing innovative Indigenous initiatives

From graduating the first Indigenous lawyer to be called to the bar in Western Canada, to founding the country's first Native Law Centre, USask's College of Law has long been a leader in supporting Indigenous students.

It's a foundation the college continues to build on with a plethora of new innovative initiatives, including implementing mandatory Indigenous law courses for all first-year students, and founding programs to teach Indigenous law students in Nunavut, as well as from Newfoundland and Labrador.

"The bottom line is this: If you are going to be a lawyer in Canada in the 21st century, whether you are Indigenous or not, you need to have a good understanding of Indigenous issues and perspectives, from Gladue factors analysis to pipeline debates," said College of Law Dean Martin Phillipson (LLM'91).

The new Indigenous law curriculum supports the Truth and Reconciliation Commission of Canada Calls to Action, and received unanimous faculty support.

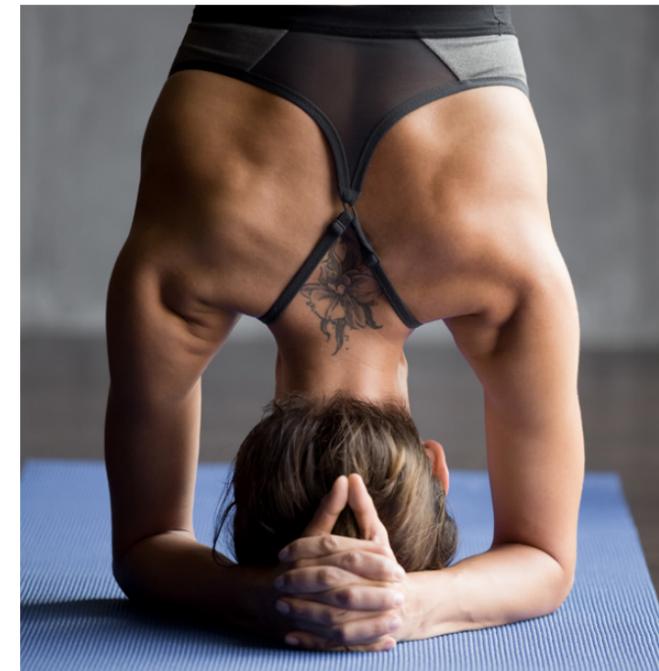
The college is also finalizing a new program for 2019 to enrol two Indigenous students each year from Newfoundland and Labrador, an area of the country without its own law school. ■

A lot goes on between issues of the *Green & White*... stay connected.

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Strike a pose

Yoga continues to be one of the fastest growing health practices in the areas of physical, mental, emotional, social and spiritual well-being in North America.

The question of whether the benefits of a regular yoga practice extend to the prevention of injury is being investigated by Dr. Cathy Arnold (BSPT'84, MSC'96, PhD'08) from the School of Rehabilitation and her research team.

The team has received a College of Medicine Research Award (CoMRAD) grant to evaluate the effect of yoga on fall risk factors. They will also examine whether yoga has the potential to change the ability to successfully control landing and descent using a simulated fall among peri-and post- menopausal women.

"Yoga is an increasingly popular health practice with potential benefits linked to improving balance, muscle strength and quality of life, but there is no evidence that yoga can improve the capacity to reduce the risk of fall-related injury," said Arnold.

Arnold and her team will be collaborating with Ground Yoga in Saskatoon, Sask. to perform a community-based yoga intervention. ■



JULIE SCHAPPERT

Outpouring of support for students in crisis

On March 6, 2019 our community truly came together to show support for students in crisis.

An amazing 640 students, alumni and members of our campus community rallied to support students facing a financial crisis, through donations to the Nasser Family Emergency Student Trust.

And thanks to generous donors Professor Emeritus Dr. Kay and Mrs. Dora Nasser, who matched donations to help even more students, the total raised for students is an incredible \$166,517!

Nasser, who was on campus to help celebrate One Day for Students with a kick-off breakfast for socially conscious students, said it is a very important day for him.

“It’s one of the best things in my life—to be able to see students that are enjoying what they are studying, and at the same time, learning to give value to their community, to themselves and the rest of the world. This is what all our work is all about.” ■

Education announces active learning classroom construction at USask



JOSH SCHAEFER

The College of Education is proud to announce construction of the Grit and Scott McCreath Active Learning Classroom, a progressive project designed to improve teaching and learning for future educators.

The classroom upgrades and addition of new technology are made possible through over \$100,000 being donated by Grit (BEd’91) and Scott (BCOMM’69) McCreath.

“Creating an active learning classroom in the College of Education is so important,” said College of Education Dean Michelle Prytula (BCOMM’92, BEd’95, MEd’04, PhD’08). “Not only will our teacher candidates have the opportunity to learn in this type of environment, but they will also have the opportunity to practice teaching in it as well. We are so grateful to the McCreaths for their support. Grit and Scott are truly difference-makers in so many ways. I am thrilled to be working with and learning from them as we develop this wonderful space.”

“This project is the culmination of a lifetime of connection to the U of S,” said Grit. “Clearly, the U of S is a passion for us and to do this provides us with unbelievable joy.” ■

A lot goes on between issues of the **Green & White**... stay connected.



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EMMA THOMSON

Ramp walking helps diagnose lameness in dogs

Researchers at the Western College of Veterinary Medicine (WCVM) are taking tips from the field of human medicine and rehabilitation to develop a technique to help detect and diagnose injuries in dogs.

Gait analysis, pressure walkways and angled walking are popular techniques used in human medicine. But, while this research has a long history in human diagnostics, it is relatively new in veterinary medicine.

Dr. Romany Pinto (DVM’06), a clinical associate in rehabilitation at the WCVM, hopes similar research in dogs will lead to a non-invasive, quick and easy technique that aids in diagnosing lameness in dogs.

The study is designed to get at the mechanisms underlying gait patterns, specifically focusing on stance time (the amount of time the limb is on the ground as a proportion of stride time), stride length (the length each limb moves in a stride), and limb force of healthy and lame dogs to increase the precision and accuracy of the diagnoses of subtle injuries that can cause dogs to become lame. ■



Rural retention key to new MD student course

College of Medicine students are taking part in a first-of-its-kind provincial program.

USask MD students began placements in the new Saskatchewan Longitudinal Integrated Clerkship (SLIC), recently launched by the College of Medicine. They will spend all 48 weeks of their third-year program in a single location, rather than moving through a series of six-week specialty-based rotations in a variety of urban, rural and remote locations.

What differentiates the SLIC from rotation-based learning is the opportunity for students to be a longer-term member of a health-care team, to follow patients over a continued course of care, and to gain substantial, uninterrupted rural medicine experience.

“It’s an excellent way to learn. These students become immersed in these communities and the relationships they form—with their physician supervisor and other health-care providers, with patients and with the community—are an integral part of the experience and their learning,” SLIC director Dr. Tara Lee (BSc’01, MD’06) said. ■

Dietitian call centre now open

Following a successful pilot project in early 2018, a new dietitian call centre has opened within the College of Pharmacy and Nutrition.

Eat Well Saskatchewan was a pilot project funded through a partnership between Dietitians of Canada and the Government of Canada’s First Nations and Inuit Health Branch (Saskatchewan) last year.

In the new partnership with the College of Pharmacy and Nutrition, the federal government is providing \$210,000 of new funding over three years to continue Eat Well Saskatchewan. The call centre will provide free nutritional information to the public and health-care professionals.

“The college was a natural choice to become the home for the call centre,” said Dr. Carol Henry (PhD), associate dean of nutrition. “It complements the similar services we’re providing to the pharmacy community and provides an environment in which evidence-based nutritional information can be trusted.” ■



TRACI HENDERSON

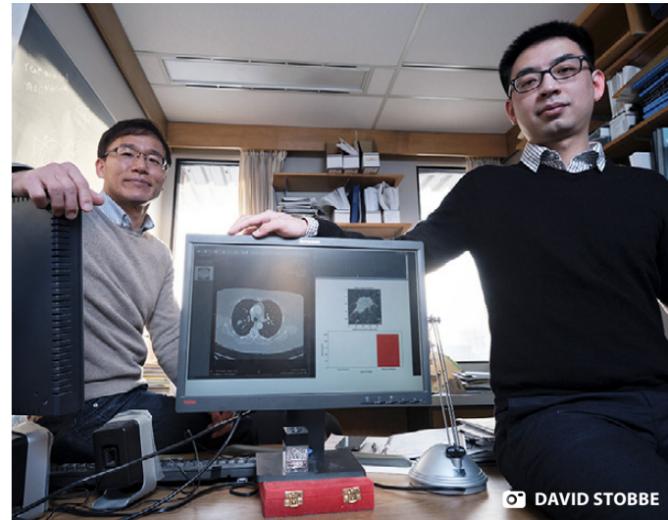
USask launches new master's in field epidemiology

USask is preparing to take bold new steps in the study and control of disease in animal health with a new Master of Science degree program in field epidemiology.

Scheduled to launch at the Western College of Veterinary Medicine (WCV) this fall, the master's program is the first of its kind in Canada, as well as one of only two similar training opportunities around the globe.

"Our program differs from most training programs because it is situated both within a veterinary and academic unit, and is specifically for veterinarians. The focus will be on animal health issues but will not rule out links to human or public health issues," said Dr. Tasha Epp (DVM'00), associate professor in the WCV Department of Large Animal Clinical Sciences.

This hands-on, project-based program is structured to provide students with opportunities to participate in ongoing, real-life animal disease investigations. It will help them best understand the ways in which disease flourishes in an animal setting, how its spread can be carefully managed to prevent further outbreak, and how these skills can position them as future leaders in animal health.



DAVID STOBBE

'Deep learning' software automatically detects diseases

Patients could soon get faster and more accurate diagnoses with new software that can automatically detect signs of diabetes, heart disease and cancer from medical images.

PhD student Yi Wang developed software that can get higher image quality. It improves current computer-aided diagnosis (CADx) technology, which assists doctors to detect diseases from medical imaging scans such as ultrasound, computer tomography (CT) and retinal fundus imaging, which captures photos of the back of the eye.

Wang's software makes diagnosis faster—it takes less than 30 seconds and it is around 10 times faster than current ones.

"Our software is a good tool to complement radiologists' and doctors' expertise, not to substitute it," said Seok-Bum Ko, an electrical and computer science professor and Wang's supervisor. "There is a concern that this type of new 'intelligent' technologies will replace humans, like in science fiction. That is not the case, because we will always need people to make machines work."

Wang and Ko, who have been awarded funding from the federal agency NSERC, are already teaching the software to detect lung and breast cancer from CT and ultrasound images respectively, with very positive results.

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Thomas Lavergne (BE'16), from St. Louis, Sask., didn't have a career in environmental engineering in mind when he was growing up, but things changed shortly after high school.

Lavergne was in Toronto, Ont. when he stumbled upon the Evergreen Brick Works remediation project. The project redeveloped the abandoned Don Valley Brick Works factory site and quarry into a community space, farmer's market and park.

Lavergne was able to visit the site through a self-guided tour and saw the positive changes the remediation project made to the physical landscape. This sparked his interest in environmental engineering and in 2012 he enrolled in the College of Engineering at USask.

After graduating, Lavergne was hired as an associate engineer-in-training at the Saskatchewan Research Council (SRC). Here, he is currently working on Project CLEANS.

"We're responsible for cleaning up 37 abandoned uranium mine and mill sites in northern Saskatchewan. My part of the job is mainly focused on environmental assessment of these sites and the continued environmental monitoring," said Lavergne.

Lavergne's job includes surface and ground water sampling, as well as general site investigation.

He explains the project is very important because these mine and mill sites have public safety concerns, which include mine openings and hazards to the environmental health of the areas. Lavergne and his team are currently working through different stages at each site; some are already in post-remediation monitoring, some in active remediation, while others are still being assessed. They come across unique issues at each one.

"One of the biggest environmental and public safety risks are the unconfined tailings areas at two of the mills. Tailings were the waste product from the mill, which were at the time just dumped freely into low-lying areas. Since closure of the mills, the tailings were free to migrate and spread out in the environment, including into water bodies," said Lavergne.

Along with his work with Project CLEANS, Lavergne is also working on a project he started before he was officially an employee at SRC.

In 2015, between his third and fourth year at USask, Lavergne had the opportunity to be the first summer student in SRC's Aboriginal Mentorship Program. This program exposed

"I do feel very fortunate to be working in a field that I'm very interested in and that I had the goal of entering when I first decided to go to USask. I just feel lucky to be doing what I enjoy."

THOMAS LAVERGNE (BE'16)

Lavergne to SRC and helped launch his career.

"When I was a summer student, I was asked to imagine what a Student Environmental Monitoring Program with Project CLEANS would look like. Then when I graduated, all the stars aligned and I was asked to implement the program I designed," said Lavergne.

The program, which happens during the summer, takes three to five participants from northern communities to one of SRC's remediation sites for five days. The participants get to learn from Lavergne and others at SRC as they conduct their regular monitoring program.

"I pair the monitoring component

with a bit of instruction and background information related to environmental science and in particular remediation projects," said Lavergne. "During the program they get to also be exposed to all the other different professions and trades that are present at our sites. So they get exposed to a wide variety of things that are involved in a remediation project of this scale."

Lavergne said the program has been a success since its inception and it plans to go forward into the summer of 2019.

"Every year we learn a little bit and figure out how to make the program better. The reception from the participants and the

communities that they come from has been really good," said Lavergne. "And usually one or two participants each year really express an interest in pursuing environmental sciences further, which is very gratifying."

As for Lavergne, his goals for the future are to obtain his professional engineering designation, which he is about a year out from getting, and continue to help his team complete Project CLEANS.

"I do feel very fortunate to be working in a field that I'm very interested in and that I had the goal of entering when I first decided to go to USask. I just feel lucky to be doing what I enjoy," said Lavergne. ■



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BRINGING EDUCATION HOME

Chief Evan Taypotat (BEd'05) did not become a leader on his home reserve of Kahkewistahaw First Nation by chance.

 CHELSEA LASKOWSKI



The seed was sown decades ago within his family unit, which included extended family, and was nurtured within the schools he attended.

Along the way, he learned how a good education and motivated teachers can build a person up.

That's why he hopes a new partnership with the University of Saskatchewan will produce leaders and teachers in his community.

On July 13, 2018, a memorandum of understanding was signed between the College of Education, the Indian Teacher Education Program (ITEP) and the Kahkewistahaw First Nation, bringing a four-year bachelor of education curriculum to Kahkewistahaw First Nation, located about 150 kilometres east of Regina.

While Taypotat himself received his education degree on the USask campus, this program is unique in that it brings teachers to the reserve and lets students learn without having to leave their home community. This past fall, the program welcomed its first 15 students.

"I think all 15 of the [students] may have families and children, and it's unrealistic to think that [we] can move 15 people to Saskatoon to be in ITEP. So we told them we are going to bring this program to the First Nation," he said.

The idea all started with a conversation Taypotat had with his former ITEP classmate Chris Scribe (BE'd'05, ME'd'12) at a powwow in the summer of 2017.

They tossed the idea around and Taypotat laughed at the concept of bringing home the program he had to move to Saskatoon to study in.

Taypotat recalls what Scribe, a current PhD candidate in educational administration and director of ITEP, said next: "We can do it."

Fast forward to the fall of 2018, when the two received blessing from the dean of education, Michelle Prytula (BCOMM'92, BE'd'95, ME'd'04, PhD'08). They all shook hands at a ceremony marking the beginning of classes for Kahkewistahaw's first on-reserve ITEP students.

Scribe said he presented the opportunity, but gives full credit to Kahkewistahaw for

making it happen. He said the benefits of offering the ITEP program on reserve are huge.

"If you were to look at numbers across Canada for First Nations students entering post-secondary, it's within their first or second year they fail. If we can capture them and eliminate the barriers to them being successful, I mean, wicked, that's awesome. And that's what Kahkewistahaw is doing with their students right now," he said.

While similar programs have been done in communities like Big River First Nation, Onion Lake, Poundmaker and Little Pine before, the Kahkewistahaw program marks the first time ITEP classes have travelled to Treaty 4 territory.

It's a big deal for a community that both Taypotat and Scribe said struggles with the social impacts of residential schools and colonization, in the form of alcoholism, drug use, violence and high incarceration rates.

Drawing from the past

The meaning of the word Kahkewistahaw is "he who flies around."

And fly is what the people of Kahkewistahaw First Nation once did, all over the Prairies: they have long lived near present-day Broadview in eastern Saskatchewan, but hunted buffalo as far west as the Cypress Hills until the 1880s.

After signing treaty, the First Nation's namesake Chief Kā-kīwistāhāw and his people resisted the nearby community's efforts to surrender some of their reserve land.

Over time, the reason for flying from the reserve changed. Children, without their parents, were sent away to residential schools.

Meanwhile, the parents who stayed behind had their movement and actions restricted by Indian agents. The freedom associated with the First Nation's name lessened more and more.

Taypotat himself went to Qu'Appelle Indian Residential School at Lebret. Scribe is from another Treaty 4 First Nation called Carry the Kettle, and has closely studied colonial education.

"If we go back to our original learning lodges, before colonization, before settlers came to this land, we had an education system where our children would be educated by our elders, by our grandmothers and our grandfathers," Scribe said.

"You miss that male presence in your life. So then when you see that male presence that you respect, and that you yearn for, I think you naturally gravitate towards that."

CHIEF EVAN TAYPOTAT (BE'd'05)

It's no surprise then, that those traditional practices being torn away from children led to a troubled relationship with the education system as Western culture knows it today.

When children attending a residential school would briefly see their parents, the Cree word they used to describe it—kiskinwahamctowikamik—translated to "A building you go to learn to cry," Scribe said.

"Instead of that kindness, generosity, beauty, understanding, love—all of that was replaced with physical, sexual, emotional abuse by priests and nuns from the the various churches. A lot of our people are lost."

While Chief Kā-kīwistāhāw made clear during the resistance of 1885 that "my and my young men's fighting days were over," according to Indian agent Allan Macdonald's records, Taypotat said he considers himself a modern warrior.

"Our people were warriors—men and women—were warriors for thousands of years. And somewhere along the way, after residential schools and being in contact with Europeans, we lost that way. So I take pride in being a warrior," Taypotat said.

How to love education again

As a young man, Taypotat went through the Bold Eagle program, which provides military training to Indigenous youth. He later went on to join the military. He was a member of the Canadian Armed Forces for five years, which included a tour of duty in Afghanistan in 2011.

"I had achieved all the goals I wanted to achieve in my military career," he said. "I saw a lot of good leaders, and I saw some poor leaders as well. So the goal was to learn from all of them, good, poor or great."

Raised by a single mother, he credits three educators for guiding him on his current path. These three male teachers showed him the power of a strong male role model.

"You miss that male presence in your life. So then when you see that male presence that you respect, and that you yearn for, I think you naturally gravitate towards that," Taypotat said. "That was my case. I gravitated to the males that I thought understood me, and let me be me, and that let me have fun, and didn't judge me on my skin colour or where I came from."

Those teachers, all non-Indigenous, bridged any racial gaps that could have existed by just "treating me really fairly," Taypotat said.

There were echos of those three teachers, who used to face off against Taypotat and a few of his friends to make floor hockey games more challenging, in Taypotat when he went on to become a teacher himself.

After earning his USask degree, returning home to Kahkewistahaw to teach was always his plan. He was in for a challenge when he walked through the doors of the school.

"They gave me the biggest, baddest class you ever did see, so they told me," he said.

Some of the boys in that Grade 6 class were getting into the gang life and lacked male role models. Taypotat used what he calls "tough love" to change that.

"It took about a month but at the end of it we had about 14 great students that all were there to learn. And some had a few bad days every now and again but we just worked through it together," Taypotat said.

Making school a fun place to come to is a marked departure from First Nations history in education. According to Scribe, the 40-plus years that ITEP has been doing community-based post-secondary is a success story in a system that once had a goal to "kill the Indian in the child" and brought his people to the brink.

This is thanks to collaboration between some of the program's non-Indigenous pioneers, like current on-reserve ITEP instructor Orest Murawsky (BA'71, BE'd'74, ME'd'75), and the Indigenous people he teaches. Murawsky was the director of the ITEP program for more than 40 years, and the one who initiated the ITEP community-based programs.

"We're in a space now, thanks to the efforts of a lot of different people, including Murawsky, where Indigenous people can take those leads now, where that wasn't available to us in the past," Scribe said.

On a January day, Taypotat said he was happy to see Murawsky teaching the Kahkewistahaw students.

When he sees those students, he sees opportunity—opportunity for better wages for those teachers-to-be, and for students on reserve to get passionate teachers who are invested in their futures.

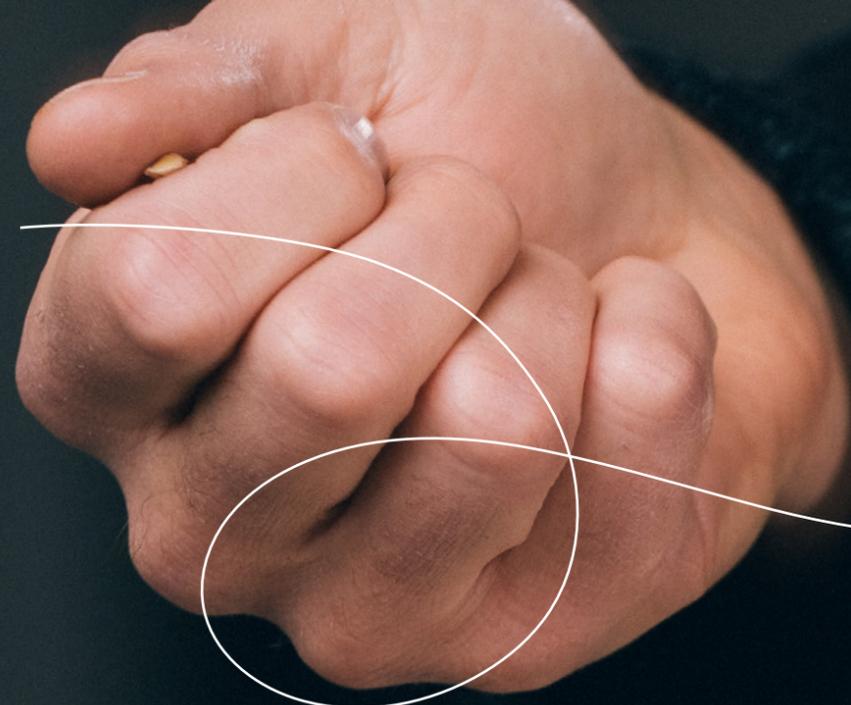
The education programming is not the end of things for Taypotat. As a fairly new chief, he's seeking more opportunities for band membership.

He also envisions looking at what made ITEP so successful for creating Indigenous teachers and expand it into other industries so there are more Indigenous business grads, doctors, dentists and other professionals. ■

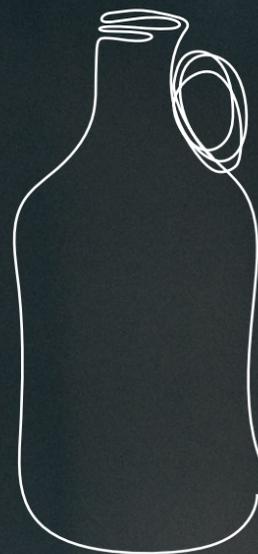
The history of ITEP

ITEP and SUNTEP are USask education programs that include a focus on learning Indigenous histories and cultures. The ITEP program has been offered on campus since 1972 and ITEP has been offering community-based teacher education programs since 1976. ITEP teachers—more than 1,500 graduates from about 60 First Nations in Saskatchewan, Alberta, Manitoba, Northwest Territories, Quebec and Nunavut—ensure the survival of culture as they are academically and culturally educating the youth of communities throughout Canada.

GRAIN



TO



GROWLER



Menus boasting local produce have become the ideal for many restaurants around the world. When you think of a farm-to-table product, a plate full of plant-based proteins, organically grown berries and grain-fed poultry may come to mind.

But what about what's in your glass?

A group of USask alumni are changing the game when it comes to farm-to-table expectations, entering the growing field of craft brewing as an avenue to test out the farm-to-table philosophy and proving that locally grown ingredients can stand the test of time on the Saskatchewan beer scene.

It's Monday afternoon and work has already begun at 9 Mile Legacy microbrewery.

Tucked away on trendy 20th Street in Saskatoon's Riversdale community, the narrow space with modern décor hums like the workings of a seasoned brewery.

In the back, the smell of malt fills the air as team members, led by co-founder and head brewer Garrett Pederson, work between the giant steel fermenters to perfect the perfect pint.

Back outside in the taproom, several taps of beer line the bar, all with a unique flavour and distinct taste. One of them is a new variety to the bunch, a 10.5 per cent Bow Tripel that has a bold taste and appeals to big beer drinkers.

The difference between this Bow Tripel and the Pilsner sitting in your fridge at home? The 9 Mile Legacy concoction boasts ingredients that were researched, developed, grown, processed, malted and perfected all within 60 kms of each other.

The final product that sits in a frosty glass on 20th Street started its life cycle just down the road in a laboratory at the USask Crop Research and Development lab.

Here, researcher Dr. Aaron Beattie (PhD'07) set out to develop a barley that would make everyone involved in the brewing process happy, from the farmers who grow it, the craft brewers who brew it to the drinkers who enjoy the final product.

A history of success

When it comes to brewing better beer, most lager lovers might not think to raise a glass in salute to the University of Saskatchewan.

Then again, for a number of craft brewers across Saskatchewan to industry giants such as Molson and Sapporo, it's no secret that there is some refreshing research being done at the university when it comes to quality ingredients and expertise.

It's a reputation that has certainly been well-earned: USask has been contributing to better brewing for the better part of a century, and it's also one that Beattie, an associate professor in the College of Agriculture and Bioresources, is all too happy to carry on.

"The barley world is quite a tight-knit group. We work quite closely with other barley breeding programs in western Canada. We exchange data, and that happens over the entire course of producing a new variety of barley," said Beattie, who adds that the Crop Development Centre (CDC) works with everyone from farmers to craft brewers to ensure a satisfying final product.



MATT RAMAGE, STUDIO D PHOTOGRAPHY

From left: Enns, Beattie and Moen agree that collaboration is key when developing locally produced craft beer.

While the first barley varieties that came out of USask happened in the early 1920s, the university's worldwide brew revolution didn't land until 1981, when barley breeder Bryan Harvey (BSA'60, MSA'61) and his team released Harrington, a now-famous malting barley variety known for its colour and flavour as well as providing an excellent beer shelf life. Considered one of the greatest sud successes to come out of the university labs, Beattie said that the Harrington variety changed the face of malting and brewing around the world.

"It was a real step forward but it also put the U of S on the map worldwide," said Beattie. "Since then CDC barley breeders, including my predecessor Brian Rossnagel, have continued to put out varieties that have had a large impact in western Canadian crops."

The passion Beattie's put into barley breeding is apparent in both his work at USask and in the bottles of the brewers he's worked with. Barley breeding is challenging, said Beattie, but the end results are almost always rewarding, with an element of fun thrown in as well.

"It's a fun community to be involved with and there's always a lot of excitement around beer—people are passionate about it. And with the semi-recent craft brewing revolution that's been going on in North America in the past 10 years, that's brought a whole new interest in beer especially amongst younger consumers," said Beattie.

While the CDC has released several varieties of barley since Harrington, one of the latest releases to make a splash is a variety called CDC Bow.

The benefits of using CDC Bow barley extends beyond its impressive growth performance and heavy yield capabilities, it's also a chance to

continue to engage with the local craft beer scene and collaborate with everyone involved in the process.

The variety was the star ingredient used in the Bow Project, a recent event that paired the product with craft breweries around Saskatchewan, with each coming up with their own uniquely-flavoured beer from the same ingredient.

"We don't generally get to see the end product or people enjoying it on an intimate level... as a breeder, to see the people enjoying the downstream product of something you've been working on for the past eight years, it's really quite something," said Beattie.

Bringing out the new and interesting

Despite growing up farming with his family outside of Rosthern, Sask., Matt Enns (BSPT'04) initially pursued a career outside of agriculture.

"My dad often said 'You're not a farmer. You don't take the interest a normal farmer would take so you should probably go find something else to do,'" laughed Enns.

When he came to USask, Enns ended up with a degree in physiotherapy alongside being a member of the Huskie men's volleyball team.

He spent 15 years as a physiotherapist, but farming was never far behind as he continued to contribute to his family farm. When a neighbour put land up for sale, it only felt natural for Enns to purchase it and start farming full time.

9 Mile Legacy is built on a sense of community and collaborating—it's not uncommon to find locals from the surrounding businesses sipping on pints while playing cards on a Thursday afternoon, which is why the Bow Project fit perfectly within their brand.

But it didn't take long for Enns to get the itch to extend his work outside just farming once again, which is why he established Maker's Malt in 2017 and became the only craft malting company in Saskatchewan.

Malt is essentially barley that has been steeped, germinated and dried, and it is the final step barley needs to make on its way to becoming beer.

The benefits of producing malt at a smaller level and for local craft brewers appealed to Enns. He was intrigued by the community of craft beer enthusiasts growing in North America and predicted a similar trend wasn't far behind for Saskatchewan, which was just starting to enhance its farm-to-table movement with more robust farmer markets and local restaurants when he started farming full time.

Being able to farm the product that makes its way to a malting stage is a rarity; usually barley farmers need to ship their yields to bigger malting companies where it is combined with other crops to create a consistent product. But Enns had an urge to become more than a commodity producer to bigger grain purchasers.

"I know we're producing the best stuff but it's just going into a big vat with everyone else's stuff and coming out the other end pretty generic. You see that disconnect and think 'how can we capture that?' The craft beer explosion gave us an avenue," said Enns.

As such, Maker's Malt focuses on enhancing barley and malt quality rather than chasing maximum yields.

"Going from grain to growler puts us in the unique position as maltsters to control our entire chain of production," said Enns.

When he heard about the work Beattie was doing at USask through seed partner SeCan, Enns didn't hesitate to get on board with the Bow Project. He supplied malt to 14 breweries throughout Saskatchewan. The brewers were then tasked with taking the variety and creating a wide range of beers. The ultimate goal was to see how the barley would respond in a commercial brewing setting and through different beer styles.

"I love the fact that this barley comes from the U of S," said Enns. "When you look at our typical commodities and where they end up, it's mind-blowing that we can have this high-tech operation that is world class right here in our small setting and take it all the way through full circle."

The final product

A venture like the Bow Project relies on the strengths of small-batch local maltsters and brewers. The ability to produce a variety of diverse beers and explore new ingredients is unique to their small scale when compared to larger corporate breweries, who typically live and die by their tried-and-true brewing ingredients and methods. In short, small craft breweries do not have as much to lose if a batch fails, but the payoff is often worth the risk.

"Beer only has four main ingredients. If you change one of those ingredients you are definitely going to change how your processes work and likely the outcomes," said Enns. "There's so much risk to every part of the equation. You need these small enterprises to start bringing out new and interesting things."

Back at 9 Mile Legacy, Shawn Moen (LLB'05) proudly pours another pint in the taproom.

As a former lawyer, he took a leap of faith from a professional practice into the craft beer game. Like Enns, he doesn't have any regrets about changing professions and is happy to be part of the growing Saskatchewan craft beer scene.

"When I was starting out in law school I was always interested in business and doing alternative things with my degree," he recalled.

9 Mile Legacy was one of the 14 Saskatchewan breweries who were approached to test the bow variety as part of the Bow Project. Moen gives full credit to his co-founder Pederson for constructing the malt-forward recipe that became the Bow Tripel.

"How did it perform in the glass? It was awesome. We had a lot of fun with it," said Moen.

9 Mile Legacy is built on a sense of community and collaborating—it's not uncommon to find locals from the surrounding businesses sipping on pints while playing cards on a Thursday afternoon, which is why the Bow Project fit perfectly within their brand.

"It gives me a lot of pride in what we're doing. To be able to see the pride in people's eyes when they're drinking barley that they grew," said Moen.

"It's two fold—we're adding value to our agricultural product and we're adding value for our communities. By making that beer and telling that story, we're reminding people of what being good neighbours is all about and what working together is all about." ■



THE UNEXPECTED OPPORTUNITY

When Andrew Arruda graduated from the College of Law in 2014, he knew exactly what he wanted to do and where he wanted to go ... until he received that phone call.

 BEVERLY FAST

Andrew Arruda (JD'14) is one of those rare few who seem to move through life with eyes (and mind) wide open. He's made a name for himself as co-founder and CEO of ROSS Intelligence, the world's first artificial intelligent (AI) legal research assistant.

He's also become a sought-after speaker on AI, legal innovation and access to justice. He's a member of the *Forbes* 30 Under 30 class of 2017 and has been quoted in *The New York Times*, *Fortune*, *Inc. Magazine*, *Forbes*, *La Monde*, *TechCrunch*, *The New Scientist*, *The Guardian*, *The Atlantic*, *The Financial Times*, the *BBC*, *CBC*, *CBS* and *CNBC*.

Impressive credentials. During a telephone interview where one of us was enjoying the balmy climate of San Francisco where ROSS Intelligence is now based and the other was in a bunnyhug to ward off minus 35-degree temperatures, it's no surprise that he talks easily about goals and ambitions. But he also talks about his experiences and lessons learned with remarkable mindfulness. It's almost unsettling—Arruda's just turning 30, after all.

It's this mash-up of exuberant entrepreneurialism and laid-back humility, youthful optimism and wise-beyond-his-years insight that have Arruda carving a place for himself as a speaker, collaborator and mentor in the global world of AI.

"The fact that my grandparents moved to Canada late in their lives so that we could have a better education, that's the most entrepreneurial thing I can think of," said Arruda.

Setting sail

A first-generation Canadian, Arruda grew up in Toronto's Little Portugal, a vibrantly diverse community where his parents and grandparents settled after emigrating from Sao Miguel. It's an island in the Portuguese Azores, a stunning archipelago in the middle of the Atlantic Ocean. It's where Arruda traces

his entrepreneurial roots.

"My grandfather was a fisherman who learned early on that he could make a better living by signing on to fishing boats sailing north. He'd be gone for five and six months at a time, while my grandmother stayed home to raise their family. She also ran a small accounting business and had a side business salting and selling fish, which actually turned quite a profit," Arruda said.

Arruda grew up on his grandfather's stories about faraway places, chasing your dreams and doing the things you love.

"When I think of early influences, it's those stories and those lessons that come to mind. My parents and grandparents strongly believed in the importance and value of education—that was why they came to Canada."

Growing up first generation

The Arruda family's hope of a good education for their children came true when Andrew went off to private school in Toronto. He got good grades, played sports and served as co-president of the school's student council in Grades 11 and 12.

"It was such an interesting time of life. I learned about making hard decisions in short timeframes and how to motivate people when things go bad. You learn that people are counting on you. For me, that was always an honour," said Arruda.

Arruda jumped right from high school to the University of Toronto (U of T), where he lived in residence on the downtown campus. It was the first of many moves beyond his familiar Toronto "bubble."

Hitting the high seas (sort of)

With his undergraduate days drawing to a close, Arruda was scoping out his next step—law school. In high school, he'd been impressed by a boutique law firm in Little Portugal.

"I saw their impact on the community and how they represented businesses and people in my neighbourhood, and I wanted to be part of that," said Arruda.

Arruda wanted to attend a law school outside his Toronto comfort zone. "I benefitted

when I moved away from home for university, and I realized that I needed to move even farther away to expand my horizons—a bit like my grandfather."

It was a summer visit to campus that sold Arruda on USask. "I fell in love with the campus, but it was more than that. I felt immediately accepted, like it was an environment where you could explore different ideas. I felt cared for by the professors and the community as a whole," said Arruda.

Glen Luther (LLB'81), his criminal law professor, was a favourite. "I would call him Professor Luther and he'd insist I call him Glen. That's how the college felt, more like a family network than a school."

In Luther's class, Arruda began to realize not everyone had access to legal services, and our society's easy notion of "justice for all" didn't always work.

"We travelled to the penitentiary to work with people who'd been deemed non-criminally responsible, which exposed me to people who were overlooked in the legal system. I thought, that's where I want to make a difference," said Arruda.

While at USask, Arruda started up the college's chapter of Canadian Layers Abroad (now known as Level). After convocation, Arruda returned home and began articling with the neighbourhood law firm he admired. Things were going along swimmingly—until that phone call.

Hello, this is your future calling

On the other end of the phone was Jimoh Ovbiagele, a U of T computer scientist. He and Arruda had met at a party and talked about artificial intelligence and what role it could play in making the law more accessible.

"It wasn't a really long conversation, but the idea just wouldn't go away," Arruda said. "When Jimoh called a few days later to ask me to join him and Pargles Dall'Oglo, another U of T computer scientist, in developing an AI platform to democratize the law, I couldn't say no," said Arruda.

And the rest is history? Arruda laughs softly over the phone.

"Actually, it was more work than I ever



“You see the world through such a diverse lens ... It’s the same with collaboration, the more we collaborate, the more effective we become.”

ANDREW ARRUDA (JD’14)

SUBMITTED

imagined. But then, I can’t say any of us really knew what we were getting into. It was the sheer energy and excitement and belief in what we were building that pushed us forward, and also maybe some naivete about how long and how hard we’d have to work to get it going.”

ROSS is a legal research engine that uses AI to automate legal processes, making them more efficient and less expensive. ROSS can read through a million pages of case law in a second and find relevant information in minutes.

The idea had legs from the get-go. A few months in, the team had garnered investment from Dentons, a global law firm, and Y Combinator, a Silicon Valley-based accelerator.

“About a year in, after we released the first versions, we started hearing from lawyers about how valuable it was, how easy the platform was to use, how much they loved it—that feels so good, you never get tired of hearing it,” said Arruda.

In 2017, the company opened ROSS North, its AI research and development head quarters in Toronto. Toronto’s mayor, John Tory, and U of T president Meric Gertler, were

among the dignitaries on hand to welcome ROSS back to Canada.

The partners have stayed true to their vision of democratizing law.

“Everyone needs a lawyer at some point; the catch-22 is that we can’t all afford the lawyer we need,” Arruda said. “We always knew AI could benefit law firms, but we made a promise from day one to also give our product away for free to deserving organizations—and we’ve done that.”

Mentoring connections

Increasingly, Arruda has found himself in demand as a speaker and mentor. After speaking at a TED Talks event in San Francisco on AI and access to justice, he’s been invited to speak at events in the Czech Republic, Sweden, Norway, Singapore, France, Sweden, Italy, and across Canada and the US. He’s inspired students from USask to Harvard, Duke and Vanderbilt universities.

“I love it,” he said. “You see the world through such a diverse lens, and that makes me a better CEO. It’s the same with collaboration, the more we collaborate, the more effective we become. I see myself acting more and more as a connector—I connected

a company in Singapore to one in Sweden. That’s exciting. Sometimes, it’s even hard for me to believe it’s me doing it.”

In the world of start-ups, collaboration transcends business. A quick check of Arruda’s LinkedIn profile shows he’s currently serving on several international boards and groups. Nor has he forgotten his alma mater. Arruda was named to the College of Law Dean’s Advisory Council in late 2018 and has been a mentor with Co.Labs, a Saskatoon-based tech incubator, since 2017.

That’s the other thing about collaboration; it isn’t just lip service, it demands real time and energy.

“As a Co.Labs mentor, I have formal office hours and set aside a block of time to meet with founders and talk about pressing issues,” Arruda said.

Why make time in an already busy schedule? “I just knew I wanted to be part of it. Saskatchewan was founded by people who had to push through hard times to create something, and that mirrors the entrepreneurial spirit of start-ups.”

Always mindful of life’s journey, he added, “I feel like I was born and raised in Toronto but grew up in Saskatchewan.” ■



Creating a tech culture in Saskatchewan

Jordan Dutchak is slowly changing Saskatchewan’s tech culture at Co.Labs, a non-profit tech incubator dedicated to enhancing the province’s growing tech sector.

LESLIE-ANN SCHLOSSER

LESLIE-ANN SCHLOSSER

When you walk into Co.Labs, you can immediately sense the space is a little different from your traditional cubical-laden office.

A mini Silicon Valley in its own right, Co.Labs is a non-profit, provincially and federally funded tech incubator that provides Saskatchewan startups with the mentorship, space and programming to expand their businesses locally instead of moving to different centres, like San Francisco or Toronto.

Startup technology and Saskatchewan—something that traditionally does not have a strong connection, but a perception that Jordan Dutchak (BCOMM’16), executive director of Co.Labs, and the rest of the Co.Labs team is slowly transforming. Tech culture has shifted on the Prairies in recent years as more young people graduate from courses, like USask’s computer science program, with the knowledge required to transform the industry.

If you are a USask alumni working in tech, at home or abroad, and want to get involved as a Co.Labs mentor you can email hello@co-labs.ca for more information.

Since his days as a USask student, Dutchak saw this trend coming and recognized that there was a community forming around it and there was an opportunity to catalyze in its growth.

Co.Labs has helped over 73 startups generate more than \$5.5 million in revenue, raise \$6 million in investment, and hire 93 employees since its inception in 2017. Dutchak said it’s the collaborative nature of Co.Labs that makes him excited to come to work every day.

“Being able to sit down with these companies and prevent them from making the same mistakes as other startups [can] rapidly increase their speed. When you take the culmination of these conversations and meetings over time, you’re constantly learning and expanding a collective ‘brain trust’ that can scale over time to help new aspiring tech founders,” said Dutchak.

Townfolio is just one example of a Co.Labs success story. Have you ever had questions

about towns or municipalities that Google just can’t answer? That is where Townfolio comes in. The company’s database provides over five million visualized data points on over 38,000 cities and towns.

It is one of the first companies to get their groundings with Co.Labs and has since partnered with 600 government economic developers across North America from small town to big cities who use its data for investment attraction.

Ryley Iverson (BCOMM’13) is the co-founder of Townfolio. He says Co.Labs was able to give him the base for his company and offered the collaboration and support needed to grow. He encourages the next generation to take a leap into tech culture.

“Alumni and students [should] consider that this is a thing here. Our tech scene is amazing. Given the resources put into it, it is very phenomenal where it’s going.” ■

HIGH-TECH HUB: FROM GRASSROOTS TO OLYMPIC ATHLETES—NEW CENTRE WILL GIVE ATHLETES THE EDGE



Ron and Jane Graham toured the newest edition to Merlis Belsher Place in March 2019, saying they were excited about the leading-edge facility.

JESSICA ELFAR

Saskatchewan athletes are getting the leg up on their competitors, thanks to an innovative sport science and health centre that opened in Merlis Belsher Place.

The new Ron and Jane Graham Sport Science and Health Centre is ready to serve athletes from the Huskies and across the province, and will open up services to the greater Saskatoon community in the spring of 2019. The facility will be a hub for researchers, physiotherapists, dieticians, mental health professionals, sport psychologists and trainers to help athletes return to play sooner after injury, engineer new approaches to concussion treatment, and give Huskie student-athletes access to leading sport science technologies.

Ron (BE'62, DCL'13) and Jane (BE'62) Graham, the long-time donors that funded the project with a \$2.068-million gift, toured the space in March just as the final touches were taking place. They said they were excited to see the dream of the new high-tech centre come to fruition, just one year after their donation was announced.

"Seeing the interview areas, the research areas, the physio areas—it's really happening!" said Jane, who emphasized that the centre is not just focused on athletes' physical health; it looks at mental health as well. "It covers the whole person," she said.

Ron said he is pleased to see the progress on the new research and rehab centre because of what it means for athletes in regards to sports injuries, both at the university and around the province.

"On a long-term basis the research will be important to help athletes with prevention—so there won't be as many injuries happening in the first place. That's what's key," said Ron.

The couple said their wish is that student-athletes will now leave the university after graduation healthier than when they arrived. They

were motivated to help when they noticed the increase in athletic injuries at all levels of sport and hearing of the university's desire to increase research into the area.

The Grahams were both Huskie athletes during their time as students, so they understand the nature of sports injuries first-hand. Jane competed on the varsity swim team, and Ron was a basketball player and football quarterback. "Athletic injuries can stay with you a long time—it could be a bad knee or, in my case, it was ankles. I sprained them continually," stated Ron, who said he suffered from his injuries for years after he played.

Preventing and treating injuries will be priorities of the new centre, using highly-specialized equipment. Sean Maw, the Jerry G. Huff Chair in Innovative Teaching in the College of Engineering, helped design one of the most unique features in the new centre—a two-story 'drop-zone'—to study and reduce concussions for athletes in high-impact sports. He said this is not only an exceptional asset for a Canadian sport science centre, but it's world-leading because of the design and the capabilities to look at the impact on the athlete's whole body.

"Not a lot is understood about impact and concussions, so it's an exciting time to be looking at some of these things," Maw noted, adding that it's a misconception that helmets prevent concussions. "Helmets help prevent severe head trauma. But we don't understand concussions well enough to know the criteria of what causes them and what reduces them." He's hoping to change that with the new research capabilities of this centre, which he describes as cutting-edge.

Dr. Joel Lanovaz (BE'90, PGD'92, MSC'97, PhD), associate professor in the College of Kinesiology and biomechanics researcher, said the collaborative nature of the space is what's most appealing.

"It's nice having everyone in one spot—researchers, physiotherapists and athletes—it leads to more collaborations," said Lanovaz. Colleges and programs involved in the project are wide-ranging, including

kinesiology, Huskies, medicine, pharmacy and nutrition, and engineering, among others.

In addition to interdisciplinary academic research, Lanovaz said he's hopeful the space will also lead to breakthroughs for student research.

"I have one master's student, Nicolas Hallgrimson, who is also a gymnast. He's studying how the forces of takeoff during a 'salto'—an aerial summersault—will impact landings. For example, if they are asymmetrical at takeoff, will they be asymmetrical in their landing?" He noted that studies like this could help change how training plans are made for athletes, but the sky is the limit for potential outcomes of the space.

Additionally, Lanovaz noted that Olympic-level athletes will benefit from the performance testing available in the space, citing Keely Shaw (BScKin'16) as a great example.

"She's a world-class Paralympic cyclist, who would typically need to fly to Montreal for some of her athletic testing. Now she can do those tests in this centre," said Lanovaz.

The student-athlete experience is paramount to the Grahams, who said they continue to give back so that USask students enjoy university fully and become better citizens when they graduate. The couple has given more than \$22 million to support USask students, athletes and academics, including \$4 million to open two additional practice courts in Merlis Belsher Place for Huskie basketball teams, ensuring they have ample practice space.

"They are such amazing young people! And we just feel so proud of what they've accomplished, and the experiences they've had. It's keeping us young!" said Jane. ■

The Ron and Jane Graham Sport Science and Health Centre will be a hub for research, rehab, sport physiotherapy, fitness testing and assessment. It's outfitted with top-of-the-line equipment including:



Runway

Embedded with platforms to measure force and power in real-time, this 30 m-long runway allows for high-speed athletic testing and research. It is envisioned for performance testing of Olympic-level athletes and sports teams.

AlterG anti-gravity treadmill

Using 'unweighting' technology, injured athletes will feel like they are floating while they wear a unique bubble attachment that offloads as much of their weight as needed. With real-time gait analysis capabilities and video feedback, the result is reduced wear and tear on the body with precise rehabilitation, allowing for quicker recovery times and enhanced performance.



Lode Corival bike

A fully customizable rehab bike. With a lower step-through and resistance and quicker response times, it helps athletes return to play after injuries.

Veletron bike

Provides science-grade training that mimics road cycling. Researchers and trainers can perform wingate tests and measure anaerobic power and capacity, assessing fitness levels on athletes from all sports.



XSENS motion capture system

With sophisticated sensors that are attached on athletes' bodies, this wearable, wireless technology can be used on and off the field to measure movement and form, enhancing the feedback athletes get from their coaches.

Cosmed metabolic carts

A portable device is strapped to an athlete's chest and connected to a face mask while they exercise. Data is streamed wirelessly to measure oxygen and CO₂ levels, analyzing the athlete's aerobic fitness, metabolic demands and the ratio of carbs, fats and proteins burned. Training and nutrition plans can then be developed with the collaboration of coaches and dieticians.

SEEKING A SOLUTION

More than 2,000 cases of HIV were reported in Saskatchewan between 1985 and 2016, making it the province with the highest rate of HIV in Canada.

USask alumni are determined to beat this statistic.

HENRYTYE GLAZEBROOK

For Saskatoon physician Dr. Kris Stewart (BSP'96, MD'04), there are few things more quietly detrimental to the fight against HIV than the ways in which social stigmatization have cut off access to help.

Despite massive advancements in the medical field around HIV, making it possible for those diagnosed with it to carry out full lives, the virus remains shrouded in negativity. In some cases, this stigma prevents patients from talking publicly about their status—even among their closest friends.

"I've seen circumstances where people who are friends who are both HIV positive—I know that, because they're both my patients—and yet have no idea that each other is positive," Stewart said. "To each of them, it's a secret that they carry alone."

"There could be some support in a friend if either of them just felt comfortable saying something. It's not my place to inform them as they alone own that information. It's devastating."

People leaning on one another to more easily bear a heavy burden is a good way of framing Stewart's career. His work speaks to a direct understanding that it is along the path of collaboration that the greatest strides in finding a solution are made. For Stewart, this includes partnering with the Saskatchewan HIV Collaborative and helping to found projects such as the Saskatchewan HIV/AIDS Research Endeavour (SHARE) and the Saskatchewan Infectious Disease Care Network (SIDCN)—the latter of which he presides over as president.

This emphasis on collaboration and emotional support is most evident in Stewart's work on HIV. Since the virus is found as much within urban city centres like Saskatoon as it is within the scattered communities of northern Saskatchewan, physicians in less populous regions often only have enough capacity to manage day-to-day care.

A gap, then, springs to life wherein outreach programs like SIDCN and SHARE can assist in training, connecting patients to testing and providing research support.

"In Saskatchewan, HIV is spread out over such a vast area and we have a very small population in that space," Stewart said. "It's difficult to encourage people to develop expertise in these small communities given that they're dealing with all the other burdens of primary care—pediatrics, obstetrics, trauma, general medicine and so on. To have people then take on and develop expertise in HIV and Hep C is a lot to ask."

Understanding an illness

The question of how much support is needed is best understood through the sheer number of HIV diagnoses in Saskatchewan, an area where data available from the provincial government has marked the rate of infection at 2.4 times the national average.

"In our province, the numbers really tell the tale," said Stephen Sanche, co-lead of SHARE and clinical associate professor with the University of Saskatchewan College of Medicine. "We've been, unfortunately, the leaders in incidence for many years now."

And these figures are indeed damning to consider when one views them in the context of HIV's effect on the individual. The disease slowly cripples the immune system, thereby decreasing the body's ability to stave off infection and eliminate abnormal cells. Inflammation caused by untreated HIV infection can also stress the heart, kidneys, liver and other vital organs.

If left untreated, these effects of HIV infection can escalate towards death.

Yet Sanche remains hopeful, largely due to modern medicine's ability to tackle these concerns head-on—potentially curbing the threat's growth and reversing its effects on the body.

"We have medications that work extremely well, that are well



“If, in fact, the spirit is wounded or is not well, then the way towards healing is spiritual—it’s doing things like Indigenous ceremony or reconnecting with culture and land that would then help with this kind of healing.”

DR. ALEXANDRA KING, INAUGURAL CAMECO CHAIR
IN INDIGENOUS HEALTH AND WELLNESS

tolerated, and if people take them they become healthier,” he said. “I think just knowing that we have the tools to help people to stay healthy is exciting, but we haven’t yet been able to reach everyone that needs treatment. The disconnect between what could be and what is actually happening in Saskatchewan means we have to work harder and work smarter, work in teams to define and solve this problem.”

What Sanche sees as most integral to the fight against HIV now, though, is a focused effort toward bringing the communities hit hardest by the virus in on the ground floor of assistance programming.

“Now that we’re moving more into rural and remote involvement and exploring the impact on Indigenous communities, the solution needs to involve those communities themselves and their members,” Sanche said. “What I imagine might be the solution might not be what the people want or what the community needs.”

Healing together

As recently as 2011, Big River First Nation was tired of watching members of its community be overtaken by the largely manageable symptoms of HIV.

Located 120 km from the nearest city centre of Prince Albert, Sask., and with a population just shy of 1,600 members strong according to 2016 census data, the area unfortunately fell just out of reach of many medical programs aimed at offering treatment or even simple testing for the virus.

But instead of settling, they set forth with their own plans.

“The concept of what we’re doing is that it is community led and that the approach is tailored to the individual needs and expertise in each community,” said Dr. Stuart Skinner (BSc’98, MD’02), an assistant professor in the USask Department of Medicine who partnered with Big River to help launch Know Your Status.

“Rather than coming with, ‘Here’s what’s going to happen, this is where we’re going to go and this is what we’re doing,’ the change in approach is that we meet with these communities and ask, ‘What do you want to do and how do you want to do it? How do we build this together?’” said Skinner.

Know Your Status began with work centred around anti-stigmatization, aiming to reshape residents’ perspective on HIV and make testing more socially acceptable. Since then, the program has expanded to include treatment, harm reduction, food assistance and mental health counselling—all wrapped in an approach that dovetails western medical practices with Indigenous concepts of healing, community and beyond.

“The needs of people affected by HIV in these First Nations are multifaceted,” Skinner said. “You need collaboration with all aspects of not just health, but cultural pieces, community leaders and government as well to make an impact.”

Big River may have been the spark point for Know Your Status, but six years later the program is planning to expand its reach beyond

and into other Indigenous communities. Backed by a 2017 grant of \$2 million from the Canadian Institutes of Health Research, the hope is that the coming years will see a broadened horizon toward the Indigenous population at large—which most recent provincial data has pegged as making up 79 per cent of Saskatchewan’s HIV diagnoses.

But treatment is just as much about recognizing a problem as it is grasping an understanding of how it came to be in the first place.

“If you were to look at HIV in Saskatchewan and why the rates are so high, you have to go upstream from HIV,” Skinner said. “A lot of HIV or most HIV relates to injection drug use and substance use. Indigenous people are overrepresented, so you have to look at why there’s such high rates of injection drug use amongst this population.”

A history of ignorance

From where Dr. Alexandra King is sitting, HIV in Saskatchewan is a perfect microcosm for understanding how historical mistreatment of First Nations and Métis people in Canada created a ripple effect through to issues ongoing to this very day.

“You have a pattern of settling and colonization that resulted in residential schools, the 60s scoop and now a lot of people in care,” said King, who is herself a member of the Nipissing First Nation. “What you’re seeing, I think, is a number of different causes for disconnection and disruption. This can be within a family, it can also be from a community, and can be from culture and language—and all of these are things that we know are protective factors.”

King, who is the inaugural Cameco Chair in Indigenous Health and Wellness at USask and has spent her career researching HIV and Hepatitis C, champions the blending of Indigenous and western medicine in pursuit of a more holistic approach to wellness.

“In western wellness, you’re often looking at things through the context of mental illness or addictions whereas we’re looking at spiritual or cultural context,” she said. “If, in fact, the spirit is wounded or is not well, then the way towards healing is spiritual—it’s doing things like Indigenous ceremony or reconnecting with culture and land that would then help with this kind of healing.”

King may see the foundations of HIV and other concerns in the Indigenous community as rooted in colonization, but she also sees lessons that can be learned from those early interactions between two very different and mutually respecting peoples.

She thinks back to the days of initial contact between First Nations communities and European settlers. The Indigenous half of the treaty marked the occasion with the crafting of a two-row wampum belt made out of trade beads, an emblem intended to speak to a shared spirit of independence, understanding and collaboration.

“What you had were two rows of purple beads surrounded by three rows of white beads,” King said. “What those two rows of purple beads are supposed to symbolize is a canoe to represent the Indigenous people and a sailboat to represent the Europeans—that these two ships would forever be together going down the river, neither one directing the other’s boat.”

“We are a long way from this in our current relationship. Our individual and collective response to the Truth and Reconciliation Commission’s Calls to Action is a resetting of our relationship that honours self-determination and Indigenous ways of knowing and doing.” ■

USask research fighting HIV

USask virologist and biochemist Dr. Linda Chelico (BSA’99, PhD’05) has been awarded close to \$900,000 by Canadian Institutes of Health Research (CIHR) to develop ways to fortify the body’s natural defences against HIV.

Chelico is leading an international research team working on how to boost the effectiveness of natural enzymes that are able to attack and destroy the HIV virus. The aim is to develop new therapies that will bolster the immune system’s natural weapons against HIV.



THE SCIENCE OF BUSINESS

By fusing together chemistry, biology, medicine, sustainability and business, Dr. Monique Simair is a jack-of-all-trades when it comes to collaborative ways of thinking outside the box.

Simair with a pilot-scale constructed wetland treatment system she designed to assess options for water treatment at Mount Polley Mine in BC.

DAVID STOBBE

ASHLEIGH MATTERN

On Dr. Monique Simair's (BSc'04, PhD'09) first mine visit during a research fellowship in 2009, she was struck by the variety of expertise.

"A mine is like a tiny village of every expert you could possibly imagine," said Simair. "From a plumber to an electrician to a geochemist to a geologist to a physicist. They've got everybody; it's amazing."

She asked questions about everything; acting as a sponge absorbing all the new information.

"It was an infinite amount of stuff I could learn about and find out what people do and what was interesting to them, and so I thought, this is a good fit for me—I can just point at things and ask questions and learn all the time," said Simair.

The experience had a big impact on the trajectory of her career. Simair founded Saskatoon-based Contango Strategies in 2010. The consulting, research and development firm uses groundbreaking genetic testing and microbiology labs to guide strategies for reducing the environmental impacts on water from the mining industry.

Collaboration is at the heart of her work. It

all started with Simair's idea to bring together multiple fields of study.

"The genetic work that we do started out in medicine with the microbiome analysis for human health," Simair said.

"It was no easy feat to translate that technology to environmental work because it's far more complex and challenging than the human body."

The types of laboratories and pilot facilities Contango has are so rare in the industry that they have some of the major consulting firms from around North America contracting them to do work.

Their combination of biology and chemistry expertise is also rare in the water treatment sector.

"If you walk around [Contango], you'll find there is a lot of young faces," Simair said. "It's a very young group largely because what we do here isn't something that gets taught in university.... There's no one type of training that will give you the combinations that we need, so we do a lot of teaching and training internally here with new graduates."

And the industry is taking notice of this approach.

The Contango team's treatment wetland project at the Minto Mine in the Yukon received a Robert Lemke award for excellence in environmental stewardship, outstanding social responsibility and leadership and innovation in the overall process.

A winding path to success

Simair's path to starting Contango was anything but straightforward.

"I had no clue what I was going to do in school," she said.

Before she went to university, she considered going into carpentry but her dad encouraged her to do carpentry for fun and get a university education. (She took him up on that, and a rocking chair she made sits in her office.)

At first, she thought she might go into medicine and took pre-med courses but she saw early on that wasn't the path she wanted to take.

She did her undergraduate studies in medical microbiology and immunology, and did her PhD in applied microbiology in beer spoilage through the Department of Pathology and Laboratory Medicine at USask.

Simair said working on her PhD was one of her first experiences in collaboration. She was an outsider in the department, studying

something that didn't fit the usual mold. She had to explain to them why her work was important but she also needed to understand their viewpoint.

"There were so many interesting things that I was able to learn from all those people in lab medicine and apply over to what I was interested in," she said.

Her PhD supervisor, Dr. Barry Ziola, also had a big impact on her.

"He really focused on teaching the skills and tools his students would need to be successful, not just in this field, but in life. You need to learn how to develop a budget. You need to learn how to write.... You need to learn how to work with other people. You need to learn how to sell because even an academic grant is a sale. You need to be able to explain to people why what you're doing matters," Simair said.

She then did two concurrent postdocs, one in bioprocessing and one in biogeochemistry. That's when she says she fell in love with the mining sector.

After a short stint with a government job, she had the idea that would be the basis of Contango, drawing together her divergent expertise into the emerging field of biogeochemistry.

Dr. Reno Pontarollo (BSc'90, PhD'96, MBA'04), is the president and CEO of Genome Prairie, a non-profit organization that supports stakeholders in capturing and maximizing the benefits of research in genomics and related biosciences. He helped find funding to get the genomics technology off the ground at Contango.

At the time, the tests for environmental testing were pretty basic, Pontarollo said. "No one was using genomic approaches to assess samples."

Pontarollo describes Simair as "a fireball," saying he liked her eagerness, attitude and energy.

In his opinion, collaboration is necessary for success in business and research.

"All of the projects we develop at Genome Prairie are collaborations... I can't think of one standalone project," he said.

"Through collaboration, both partners can access the expertise they need to succeed."

The science of business

Simair said she didn't know anything about business before she began Contango.

"If I had known better, I might have been smart enough to be terrified," she said.

"There were so many interesting things that I was able to learn from all those people in lab medicine and apply over to what I was interested in."

DR. MONIQUE SIMAIR (BSC'04, PHD'09)

“Don’t just expect it to happen. Come prepared. Be humble. Be more interested in them than your own stuff. And don’t go out there expecting everyone will want to collaborate with you; go out there trying to learn about interesting things.”

DR. MONIQUE SIMAIR (BSC’04, PHD’09)

Today, business is her passion, and she’s found many similarities between business and science.

“Both have systems and processes. Both you have to understand what your fundamentals are that you’re working in... Once you learn what your working parameters are, you can work within it,” said Simair.

She describes business as “an ecosystem,” and draws comparisons to testing hypotheses in science, keeping track of the variables and controls so you can measure the outcomes.

“I believe in figuring out what works, not just what is conventional.”

This non-conventional approach to business has served her well. Simair was named one of Canada’s future entrepreneurial leaders by *Profit Magazine* in 2011 and added to its W100 list of Canada’s top female entrepreneurs in 2015.

Success in business isn’t new to the Simair family: Her siblings, Josh, Dan and Chris, started the popular food service app Skip the Dishes about two years after she started Contango. Even their parents have caught the entrepreneurial bug—Rod and Denyse Simair create and sell ceramic art.

The fact that all of the Simairs ended up running successful businesses isn’t something they planned for when they were growing up, she said.

“I don’t know if business per se is something that runs in the family, it’s more that we’re a bunch of geeks that aren’t afraid to really get into an idea and jump into something and give it our all,” she said.

How to collaborate

Simair sold Contango in June 2018 but stayed on for about a year as vice-president of technology and strategic initiatives. She announced her departure from the group in February 2019.

“I’m definitely a little bit terrified about moving on to something else ... but it’s also kind of exciting,” she said.

She’s started the process of building a new

company called Maven Water & Environment.

“We’ll be working on revolutionizing the way water treatment is approached in the mining sector,” she said.

And she’s looking into building some philanthropic water treatment systems in other countries.

Collaboration is always at the heart of what she does.

She describes herself as “massively extroverted—to the point where I’ve had to work hard over the years to learn to listen.” But this extroversion has been a natural support in her networking, which is where she said collaborations often start.

“It’s all about finding people who have different viewpoints and ideas and ways of solving problems,” she said.

Applying collaboration and innovation to your own situation is like “trying to make friends in your 30s,” she said. “How do you meet people?”

“Don’t just expect it to happen. Come prepared. Be humble. Be more interested in them than your own stuff. And don’t go out there expecting everyone will want to collaborate with you; go out there trying to learn about interesting things.”

Whatever you do, don’t force it. She said forced collaborations tend to be short-lived.

“To find a lot of meaningful collaborations, it’s really about learning about others and trying to understand what drives and motivates them because then you can understand how their motivations fit into what you’re doing,” she said.

She notes that people are excited to talk about their work if you give them a chance, especially in academia. And if you see someone at the edges of a conversation or alone in a crowd, invite them in.

“A lot of the time it’s not only that you have to go searching for it, it’s that you’re not seeing that it’s searching for you already.” ■

WATER SECURITY AT USASK

Collaboration needed now more than ever

Global freshwater security is at far greater risk than people realize, says hydrologist Dr. Jay Famiglietti, director of the Global Institute for Water Security at USask.

His article “Emerging Trends in Global Freshwater Availability,” published in *Nature* in May 2018, outlined some disturbing trends about the current state of water in the world.

“Our work with NASA satellites has revealed that the high- and low-latitude regions of the world are getting wetter and that the mid-latitude regions in between are getting dryer,” Famiglietti said.

“We have also identified that over half of the world’s major groundwater aquifers are being rapidly depleted as a result of being overpumped to support irrigated agriculture. This puts food production, as well as water security, at considerable risk.”

At the same time, extreme flooding and drought are becoming more intense. All hope isn’t lost, though. International collaborations may yet save the day. Famiglietti said water plays a unique role in bringing people together.

“Shared water bodies are of mutual interest across political boundaries. Within countries, provinces and states, collaborations between governments, universities, civil society and the private sector will be essential to build cooperative networks and regional resilience.”

CANDICE GRANT



Candice Grant (BA’05, LLB’08) is a Saskatoon lawyer who is committed to giving back to her community.

She is the past chair of the board of trustees for the Saskatoon Public Library and past chair of the board of directors for CHEP Good Food Inc. She also influenced programs such as community gardens and the collective kitchen program in Saskatoon. She has been a big sister with Big Brothers and Big Sisters of Saskatoon, is a former chair of the school community council at Dundonald School and was appointed to the Meewasin Valley appeal board.



USask celebrates the value of volunteering.

Visit alumni.usask.ca/volunteer to check out volunteer opportunities.

G&W: What specifically attracted you to volunteering?

CG: I initially started volunteering shortly after I moved to Saskatoon to start my education with USask as a way to meet new people in the community. As I started getting involved, I was proud to see the difference that I could make with my time and effort. I gained skills and experience that I could put to use in my daily life and my career.

G&W: What keeps you motivated to continue to volunteer?

CG: I’ve been very fortunate to have the time to dedicate to my volunteer efforts and to work at a great law firm that really values and supports volunteers. It motivates me to see and hear about the excellent work that the organizations that I have been fortunate enough to be involved with have done in the community.

G&W: What types of relationships and learning experiences have you taken away from volunteering?

CG: Volunteering has been a great way to make connections with others who share my interests and values, and also to learn from those who have differing perspectives. I am so appreciative of the friendships and professional relationships that I have gained over the course of my volunteer work. I have had a number of incredible learning opportunities during my volunteer work. I can recall, for instance, taking a deep dive into food security issues with CHEP Good Food Inc., and learning about the shifting dynamics of library users with the Saskatoon Public Library. In each of my volunteer positions, I have had the opportunity to learn about topics and to gain knowledge from others that I never would have encountered in my daily life.

G&W: How do you aim to inspire others to get involved?

CG: I believe in leading by example. I hope that others are inspired to find a cause that is meaningful to them and to find a way to contribute. ■



TAKING THE PULSE ON PULSES

USask is part of a collaborative supercluster that will put Canada on the world stage through innovative plant-based protein development.

JENN SHARP

Pulses are all the rage these days and a supercluster team, including USask grads, is going to make sure the recent rapid rise in popularity continues around the world.

Pulses—which are dried seeds from plants in the legume family—are touted for multiple health benefits. A low glycemic index combined with high protein and fibre make lentils, chickpeas, dry peas and dry beans nutritional superstars.

But the health benefits go beyond human nutrition. Growing pulses adds nitrogen to soil and help break disease cycles, which means healthier soil and increased yields to subsequent crops. And these crops grow well on marginalized land.

In addition to being consumed whole, pulses can be ground into flour or separated into protein, fibre and starch. Those co-products can then be developed into a range of products, from protein powders to animal feed.

Canada is a leading producer and exporter of pulses worldwide and 90 per cent of those crops are grown in Saskatchewan. Research efforts at USask's Crop Development Centre (CDC) have gone a long way towards ensuring pulses' long-term sustainability, with new varieties developed to better sustain the short growing season.

With the demand for pulses continuing to grow, a new initiative called the Protein Industries Canada supercluster (PIC) aims to take advantage of the market and make Canada a world leader in the plant-based proteins.

PIC is an innovation hotbed that spans over 1,500 km and includes over 120 organizations based in six epicentres, including USask.

The collaborative efforts at USask will help contribute to PIC's four pillars; create, grow, make and market, while providing meaningful and long-lasting impact at the local level and on a global scale.

Leading Protein Industries Canada into the Future

In 2018, the federal Innovation Superclusters Initiative announced PIC

would be one of five national superclusters to receive funding. The initiative is the first of its kind for Canada and will invest up to \$950 million to support business-led superclusters and accelerate innovation in the country. In November 2018, PIC's \$153-million contribution agreement was signed.

Canadian pulse crops have grown steadily over the last three decades, in keeping with North American consumer trends seeking plant (rather than animal) protein and the international export market. For example, in countries like India, pulses are a traditional staple protein.

Pulses' robust nutrition profile is further amplified when combined with grains on the dinner plate to provide complete protein. They are also used in high-protein feed for meat animals. As the global middle-class population rises, so too does their appetite for meat.

Because of all this, pulses are a \$13-billion market world wide. PIC aims to move Canada to second place in global agricultural exports and fifth in agri-food exports, equivalent to \$30 billion USD in today's distribution of global exports.

PIC's CEO Bill Greuel (BSA'95, MSc'00) will lead the supercluster to develop Canada's plant-based protein potential.

He explained the supercluster will invest in and help develop plant breeding and genomics, primary production, value-added processing, market development and access, and servicing those markets through improved traceability and logistics.

The value chain is one of many emerging challenges Greuel, who was formerly the assistant deputy minister, Regulatory and Innovation at the Saskatchewan Ministry of Agriculture, would like PIC to tackle.

Greuel referenced the current Western Canadian investments into protein fractionation. The process removes pea protein, but results in high starch products and is just one area of many that PIC will focus on.

"We need to find some uses for those (products) because that changes the economics of processing," said Greuel.

Dr. Bob Tyler (BSA'76, PHD'82), agreed.

A professor in the College of Agriculture and Bioresources, Department of Food and

“That’s what it’s all about—building an ecosystem consortium where university researchers and service providers all work together with small and large companies to generate value and employment and ultimately build [research and development] capacity in both the public and private sector.”

DR. BOB TYLER (BSA’76, PHD’82)

Bioproduct Sciences, and PIC’s interim chief technology officer, Tyler said the strength in developing protein ingredients lies in finding uses for the co-products, such as the starch and fibre.

“In pulses, maybe you recover 20 to 30 per cent of the raw material as a protein ingredient... what about all the starch and fibre?” he said.

It’s an issue other companies, like Roquette, the world’s leading pea isolate producer, and James-Cameron-backed Verdient Foods Inc., are tackling and will collaborate on with PIC.

Murad Al-Katib (BCOMM’94) is the president and CEO of AGT Food and Ingredients. The Saskatchewan-based company is one of the largest value-added pulse processors and PIC’s anchor company. Al-Katib is a PIC board director and said one of the supercluster’s goals is finding economically viable uses for the co-products.

“The pulse industries have had a good, solid foundation of innovation and research and commercialization. Now we need to step it up into the value creation,” said Al-Katib.

He attributed much of the pulse industry’s boom to USask researchers such as Dr. Albert Vandenberg (PhD’87) and Dr. Tom Warkentin (PhD’92). Over the last few decades, the CDC has introduced drought and disease-resistant seed varieties. These pulse varieties have helped Saskatchewan become Canada’s leading pulse producer.

“Through breeding and agronomy, we’ve been able to achieve massive growth in yields in these crops—that’s not through genetic modification—that’s through trait, breeding and agronomy programs,” said Al-Katib.

The next step is to create wealth with that knowledge by reacting to consumer trends and growing global populations.

“PIC is about energizing the research sector—with the private sector leading to ensure the commercialization of these projects,” said Al-Katib.

“The concept of crop processing and the

utilization of all the components of the crop is a big part of our future,” explained Al-Katib.

Today, the majority of the Prairies’ pulse crops leave the country, unprocessed or with only initial bagging, cleaning and splitting.

The canola industry was in a similar state 35 years ago. Today, Western Canada has several canola crushing plants, and this is the direction the PIC would like to take as well.

“We are processing almost 50 per cent of our crop, we’re shipping out oil (and) meal—that has direct impact on producers because it changes the economics of production,” said Greuel.

“I think we can imagine a pulse sector that looks like that 10 or 15 years from now.”

Other economic opportunities for PIC lie in Asia’s growing middle class, a demographic whose spending is expected to top \$33 trillion by 2030 and millennial consumer trends are moving away from highly processed foods and more into plant-based proteins like lentils and chickpeas.

“The consumer today is looking for natural, minimally processed foods. That’s the opportunity for PIC to create high protein, high fibre, healthy, nutritious foods and ingredients that are going to be traceable, identity preserved and food safe,” said Al-Katib, adding it must be done in an environmentally sustainable way.

“If we’re going to respond to 10 billion people by 2050, we need protein rich, water-efficient crops that can be produced on relatively marginal lands.”

A collaborative campus effort

“We need to dare to be bold. We need to find those niche opportunities and we need to provide the scale to be able to make a true commercial difference at the farm gate and in the industry,” said Al-Katib.

Boldly going where no one has gone before—it’s a familiar slogan for the university community and an ambitious goal the

campus is more than ready to tackle.

Tyler has been involved in plant protein processing research since the late 70s. He’s the USask liaison in the supercluster program and will serve as the link between researchers and others on campus that want to get involved with PIC.

“That’s what it’s all about—building an ecosystem consortium where university researchers and service providers all work together with small and large companies to generate value and employment and ultimately build [research and development] capacity in both the public and private sector,” said Tyler.

Many disciplines at USask will have an influential stake in the supercluster program.

“It will engage people from all over the campus with levels of funding that we haven’t ever seen before in this kind of work,” said Tyler, adding the potential for training post-doctoral scientists and graduate students, while also providing internships for undergraduates, is unprecedented.

He pointed to the marketing work those in Agriculture Resource Economics and at the Edwards School of Business will contribute. With new protein ingredients comes the question of where and to whom those ingredients will be sold.

More so, the College of Pharmacy and Nutrition will be involved in looking at areas such as amino acid composition and protein digestibility for improved protein ingredients. So too will be the Global Institute for Food Security, which works to deliver sustainable food security to developing countries through agriculture and food production innovations.

Impacting Saskatchewan agriculture

Carl Potts (BSA’99, MSC’02), executive director of Saskatchewan Pulse Growers, said PIC’s four pillars align well with the pulse industry’s current strategies.

The Canadian pulse industry has set a goal

to create demand in new use areas for 25 per cent of domestic production by 2025. That translates into two million additional tonnes of demand for pulses in the next six years.

A lofty goal, but PIC’s incentive to create new ingredients will help the Pulse Growers diversify markets and perhaps become less reliant on traditional commodity markets.

“We’re hopeful with the work of PIC and the funding they have that there may be an opportunity to push the market development goals of the pulse sector and PIC together,” Potts said.

That new demand creation and diversified market is “tremendously important,” and will ensure higher value and more consistent demand for farmers. Markets closer to home also equal a higher value and less reliance on the West Coast export transportation system.

Saskatchewan Pulse Growers works with Pulse Canada on market development. The three- to five-year plan includes significant work with food companies to increase the awareness of pulses and drive more adoption—which is also a component of PIC’s strategy.

“We’re also a significant funder of pulses research,” said Potts of the \$9 to \$12 million they invest annually.

“We’ll look for opportunities to leverage those investment dollars to create bigger opportunities and potentially do more work

with some of the funds that PIC has available.”

Creating a global powerhouse in the plant protein

Potts said the growth in plant-based protein trends will give PIC a competitive edge.

“PIC certainly has the potential—with the funds available and with the idea of creating a global powerhouse in plant protein here on the Prairies—that we can create the infrastructure to help Canada be a centre for plant-based protein,” said Potts.

Greuel acknowledged the federal government for its investment, and recognition that the value-added processing sector has opportunity for growth, calling it an “exciting time for the ag sector.”

Of course, there are challenges PIC must face; the value-added processing sector won’t change overnight.

“We’re taking a long-term view—trying to create the markets and conditions that will bring the capital investment for increased value-added processing here to the Prairies,” said Greuel.

Al-Katib said the market is ready but, “it’s not a slam dunk.

“It’s what do we do with it? That’s the call to action that I’m hopeful the supercluster will have as a message,” said Al-Katib. ■

“We need to dare to be bold. We need to find those niche opportunities and we need to provide the scale to be able to make a true commercial difference at the farm gate and in the industry.”

MURAD AL-KATIB (BCOMM’94)

The role public policy plays

The PIC supercluster is a ground-breaking area for economic development and innovation policy.

Dr. Peter Phillips (BA’80, PhD), distinguished professor at the Johnson-Shoyama Graduate School of Public Policy, and his students, have been exploring aspects of measuring PIC’s economic impact.

Phillips has been involved since PIC’s beginning, helping to conceptualize the organization and design it to extend beyond the conventional, industrial cluster that tends to be located in cities, not regions.

Saskatchewan is already home to an innovative bioscience cluster focused on food and agriculture. In fact, over one-third of Canada’s ag-biotech industry is in Saskatchewan.

Phillips helped PIC’s development team gauge the potential impact of the supercluster’s many components. Now, there are significant policy elements to be addressed. The big questions Phillips asks is, “If you do it, will it matter?”

“Quite often in public space, we spend some money, we say we want to do something, we demonstrate we did it and then we announce we have accomplished the mission—but what was the impact?” said Phillips.

Although it’s still early days for PIC (an official launch is expected spring 2019), Phillips and the management team have been discussing how academics and students might explore some of the project’s policy aspects.

“There are students who are keen on this stuff; they just need an opportunity to get inside and touch something that’s real.”

There will be a number of long-term training and learning opportunities for USask students interested in studying aspects of PIC.

Since superclusters tend to be self-sustaining, there will be a long-term opportunity to see how focused ventures can change outcomes.

“At the end of five years, they should have structured themselves in a way that they don’t need another capital infusion,” said Phillips.



USask alumna Devon Fiddler (BA'11) sets change into motion with SheNative

✍ NAOMI ZUREVINSKI

For Devon Fiddler, social entrepreneur, chief changemaker and founder of SheNative Goods Inc, collaborating with others is an integral part of her company. Through the manufacturing of their genuine leather products, SheNative works to empower Indigenous women and girls, and profile artists and designers in the community.

"I employ 100 per cent Indigenous women in the design and production process," Fiddler said. "We work with different Indigenous artists, designers and photographers, and I always hire Indigenous role models from the community to model for us, whether it's a fashion show or a photoshoot."

A Cree woman from Waterhen Lake First Nation and mom of two, Fiddler wants to change both personal and public opinions of Indigenous women and girls through SheNative.

"Our mission has two main objectives. First, I want to help change the public perceptions surrounding Indigenous women and girls and to invite the community to share in

knowledge and culture. The other goal is to inspire Indigenous women and girls who are going through a tough time, and to show that we can overcome trauma," she said. "A lot of Indigenous women experience intergenerational effects of trauma stemming from residential schools and colonialism."

Fiddler has been recognized for her work and has won numerous awards for leadership and entrepreneurship, including being one of the first two Indigenous businesses to become a SheEO venture in 2016.

Her advice to anyone starting a business?

"Take time to outline your vision and mission so you have a very clear business model. You need to create a business model that is sustainable where you can create change, but also be profitable. It's really about balancing it out, having a clear path and knowing all of the resources that are available to you."

For more information on SheNative, visit shenative.com.

"It's really about balancing it out, having a clear path and knowing all of the resources that are available to you."

DEVON FIDDLER (BA'11)

Fiddler's top five tips for starting a community-minded and collaborative business:

1. Take time to craft your vision and mission

Always go back to why you're doing what you're doing, because this is the main driver and reason for starting a community-minded and collaborative business in the first place. If you have a clear vision and mission, you can always go back to your 'why' as a reference point for major decisions that you will need to make.

2. Be open to opportunities

If you don't stay open minded, an opportunity might slip through your fingers. That being said, also learn when to say no if the opportunity does not fit with your vision and mission.

3. Listen to your clients, customers and beneficiaries

It's important to consider what their needs and wants are. How can you add value and make them happy?

4. Involve others in the start-up process

Get clients, customers and beneficiaries involved and share your story and journey with them. Take them along for the ride! This will enable you to start a following and have customers through your launch.

5. Be creative with funding

Think about new ways of raising capital, like crowdfunding, contribution grants, business competitions, friends, family and fundraising, as alternatives to raising money. You don't always need a business loan in the beginning. You just need to be creative, and find ways to boot strap if you don't have a lot of capital to begin with. ■



Connecting your community to USask

Senate is one of the three main governance bodies at USask and provides an opportunity for you to influence the direction of our university. Help us choose the representatives who will join Senate in 2019.

Voting closes June 14 at 4 pm.

We are holding elections for members-at-large and district representatives.

All alumni are welcome to vote for members-at-large. Only alumni living in a district may vote for their district representative.

For information about the candidates, please visit usask.ca/senate-election or contact us at 306-966-4632 or senate.voting@usask.ca.

To vote online (you will need your USask NSID and password):
usask.ca/senate-election

To vote by paper ballot: please contact us at 306-966-4632 or senate.voting@usask.ca

“This issue is all about collaboration and I can’t think of a better way to describe our unfailing, hardworking alumni family.”

Alumni Association president's message



I believe this collaborative trait is innate in all of our students, it is nurtured once they set foot on our campus and it continues to grow once they walk out our doors into the world as USask alumni.

At the Alumni Association, we are committed to collaborating with you to add value to your life as USask graduates. This includes providing benefits, services, events, and being your continued link back to campus. We are committed to celebrating and encouraging the success of all of you!

We are busy at work enhancing the collaborative ways we engage, support and encourage our alumni. We are excited to welcome convocation back to campus this year and start a new legacy of tradition at Merlis Belsher Place. As always, we will be there to welcome all our new alumni into our family and look forward to connecting with new, old and future alumni during this week-long campus event.

We continue to build on our regional network plan, which will foster a community of alumni champions who want to continue their USask connection beyond their student years.

Alumni Weekend is also a great time to collaborate and return to your roots even if you continue to live in Saskatoon. We are

building on the success of last year, and encouraging alumni to get involved with planning their class reunions during this time as well. Reunions are a great way to connect with your alma mater and fellow alumni, be they lifelong or newly established friendships. I encourage you to look on our updated website, which now has information on where you can begin if you think you would like to plan a reunion.

The Alumni Achievement Awards are also a fabulous time to reconnect with us. Our alumni achievement award winners range from prestigious researchers to distinguished philanthropists. Nominations are currently open for this prestigious recognition of achievement. If you know of someone in your circle who has a USask degree and deserves notable recognition, make sure to nominate them today.

USask alumni are known to be collaborative across all fields of study, life and work. We are strengthened through this collaboration and want to continue building our relationships with you, no matter where you find yourself in the world.

You are a student for only a few short years, but an alumnus forever. ■

Kelly Strueby (BComm'84)
President, Alumni Association

Greetings fellow USask alumni! Two heads are better than one, so the saying goes. This issue of the *Green & White* is all about collaboration and I can't think of a better way to describe our unfailing, hardworking alumni family.

If you think of all the amazing work accomplished throughout history, rarely was it just one person sitting alone with their thoughts. People work better through collaboration, as opposed to working entirely alone, because great things happen when we put our minds together.



The campaign for justice of Chief Poundmaker that has been going on for over a century is about to come to an end.

TARYN RIEMER

Chancellor Emeritus Blaine Favel (BEd '87), former Chief of Poundmaker Cree Nation, has been working with his community of Poundmaker Cree Nation since 1995 to set things straight and clear Chief Poundmaker's name.

“People should be proud of Chief Poundmaker because he was a peace maker,” said Favel.

The history books currently paint Chief Poundmaker as a rebel who was tried and convicted for treason after the battle at Cut Knife Hill.

“I grew up hearing two stories. One story was the Canadian version in the textbooks where Poundmaker was a traitor and a rebel. And the story of my people that we were attacked at dawn by 300 armed soldiers and our grandfathers fought courageously with inferior weapons and they won,” said Favel.

The false narrative of Chief Poundmaker put forth by the government of the time all started when some of the people of Poundmaker Cree Nation and Chief Poundmaker went to Fort Battleford to talk to someone about the rations they were promised but weren't being supplied after Treaty 6 was signed in 1876.

Chief Poundmaker and his people waited for two days for a chance to speak

to someone, but were greeted with silence. This angered Poundmaker's warriors and, despite his efforts to calm them down, they eventually raided the town and then returned home.

They were soon followed by Lieutenant-Colonel William Otter and over 300 Canadian soldiers who were looking for revenge. They attacked at dawn on May 2, 1885. The warriors of Poundmaker fought against the troops until the soldiers retreated. Chief Poundmaker made the decision to not pursue them, calling for peace instead.

To try and keep the peace, Chief Poundmaker turned himself in and was charged with treason. He was in jail for a year before being released due to illness. He died soon after.

Favel started his journey exonerating Chief Poundmaker when he was Chief of Poundmaker Cree Nation in 1995. He made some headway in 2017 during Canada's 150th celebrations.

“The community asked me to take this on again. So we started a social media campaign, we started letter writing, we got into Ottawa with meetings, we got Chief of Poundmaker to a bunch of meetings. So the real intense energy has been in the last two years,” said Favel.

His hard work has since paid off. In January of 2018, the Canadian government said they would agree to exonerate Chief Poundmaker and now they're in the negotiation stage.

“The position of the community, is that we're prepared to accept the exoneration and the apology, but we'd like there to be compensation for approximately 100 horses, weapons and materials used to make food that was expropriated by the government and the hardships our ancestors endured subsequent to the battle because Chief Poundmaker and our community did nothing wrong,” said Favel.

Favel looks forward to negotiations being concluded this year and an apology from the government occurring in the community hopefully soon.

“It's good moment for Canada because they recognize what we now know—that this fellow was a great Canadian. It's a sign of maturity of a country that it can acknowledge a wrong and a harm and make amends in an effort to move forward,” said Favel.

“This is very much a chapter in the national reconciliation that the country is going through, post the Truth and Reconciliation Commission regarding residential schools.” ■



Read it anywhere, on any device or online at usask.ca/greenandwhite

If you no longer wish to receive a printed copy, visit alumni.usask.ca or contact 306-966-5186 or 1-800-699-1907.

Update your contact info at alumni.usask.ca/update to make sure you get monthly e-news, event invitations, college news and more.





THE STORYTELLER

Lieutenant Governor of Ontario Elizabeth Dowdeswell has had a robust career that spans provincially, federally and internationally. She attributes that breadth and success in part to her USask degrees.

LESLIE-ANN SCHLOSSER

Elizabeth Dowdeswell (BSHEC'66, LLD'92) has come a long way since her days as a student living in Saskatchewan Hall.

During a 2018 visit back to the USask campus, the home economics major and Greystone singer alumna fondly looked back at her time as a USask student and recalled the close-knit community, the top-notch faculty, the physical beauty, and connectedness that flourished throughout the Greystone walls.

"One of the wonderful things about coming back and thinking about where you've been is that you realize things you never realized at the time. One of the things that is so amazing about this university begins with the academic excellence," said Dowdeswell.

Dowdeswell credits faculty members, mentors and peers for providing her with an arsenal of skills once she graduated. She also enjoyed working in the Extension Division, an opportunity that enabled her to be on campus year round. Always one to be curious and challenge the status quo, she even took her electives in fine arts and music, going outside the norm of what was traditionally offered to a home economics student. She did so to feed her multiple interests, an approach she would adopt throughout the rest of her life.

"I look back fondly on my time because of the people and because of the skills it taught me in communications, in critical thinking and in seeing beyond disciplines," said Dowdeswell.

A career that has transcended traditional disciplinary lines, Dowdeswell has served on many boards, worked in all levels of government, and has been an advisor to a number of Canadian and international non-profit organizations. Her focus has been vast, ranging from policy-making to environmental sustainability.

Now the province of Ontario's lieutenant governor, Dowdeswell uses the knowledge gained at USask combined with a lifetime of experience to serve her province in her constitutional role. This includes ceremonial and commemorative events to recognize and celebrate the citizens of the province, and it is also an avenue for her to continue the work she is deeply passionate about.

This includes her love of storytelling, something she has stitched into her current role and duties.

"There are stories of amazing individuals from place to place that nobody ever hears and we don't tell them. One day I went off script and said 'I'm going to declare myself the chief storyteller' and people seemed to really like that. I've been doing that ever since," Dowdeswell said with a laugh.

During Canada's 150 anniversary celebrations, Dowdeswell and her team came up with a unique project to share Ontarian stories. The goal was to ask 150 Ontarians what it meant to be an Ontarian in just 150 words. The results ranged from funny quips to poignant stories featuring everyone

from famous members of the provincial community to people she met on the street in Thunder Bay.

A common theme in these stories were the citizen's concerns and aspirations around sustainability. Dowdeswell heard people wanting to connect the dots between economic prosperity, social and cultural cohesion, and environmental stewardship. They wanted to create a better future for themselves and their children. This motivated her to continue to connect and educate her community about sustainability—a passion that started early in her career during her time at Environment Canada and continues to this day.

As she continues her work, she said she is continuously grateful for the opportunities she has been gifted.

"I would say virtually everything I've done has been pure serendipity. It was nothing that I was ever seeking to do. I would never thought of working on climate change issues or work with oil sands or any of those things. I just was so fortunate that it landed on my desk," said Dowdeswell.

Dowdeswell said current USask students and young alumni looking to pursue a career like hers have to keep an open mind when it comes to career developments and life in general.

"If you're curious and want to learn every day, and a bit of a risk taker, then the world is just open to all kinds of things," said Dowdeswell. ■

CONVOCAATION CEREMONIES MOVE TO MERLIS BELSHER PLACE



A look at convocation through the years.

It's a brand-new era for convocation ceremonies at USask

JAMES SHEWAGA

Spring convocation will be held in the new Merlis Belsher Place multisport complex on campus, after 50 years of the university's graduation ceremonies being held in downtown Saskatoon at TCU Place. With last fall's opening of Merlis Belsher Place—a state-of-the-art 120,000-square foot facility featuring two full-sized ice rinks and two basketball courts—the university has moved its annual spring and fall graduation ceremonies back to campus.

"Seeing convocation come back to campus after many decades is very exciting indeed," said USask President Peter Stoicheff. "It conjures images from the past of graduands lining up around the Bowl to enter Convocation Hall, but adds our contemporary reality of many thousands of students graduating across eight ceremonies and the need for a venue that can accommodate these numbers.

"With the return to campus in Merlis Belsher Place we reacquaint families and friends and supporters with the unique beauty of our buildings and grounds, and reconnect graduands and alumni with their colleges and schools for events and celebrations. The new location also gives us the opportunity to

make changes to the convocation ceremonies themselves that all will appreciate."

The first spring convocation ceremonies in the new facility are scheduled for the week of June 3-7, along with the annual Graduation Powwow also slated to be held there for the first time on May 31.

Since spring of 1968, USask convocation ceremonies had been held at TCU Place, a 104,000-square foot, 2,000-seat convention and arts centre in downtown Saskatoon. Merlis Belsher Place provides spectator seating for 2,700 in the main arena with additional capacity for up to a total of 3,700 including floor seating. It also offers plenty of staging area in the attached gymnasium facilities, making it well-suited and well-sized to host convocation, according to University Registrar Russ Isinger (BA'88, MA'97), who helps lead convocation planning.

"It is going to be different because TCU Place is a purpose-designed event centre, whereas Merlis Belsher Place is a multi-purpose facility. But the main advantage is that it has more seating so that graduates can invite more family and friends," said Isinger. "And having the score clock to broadcast live video to the audience during the ceremony

is going to be a nice feature. As well, the attached gymnasium is going to be a great help to us. We always had logistical challenges having the grads line up behind the stage at TCU Place. And now having the gymnasium where we can put all the grads and the gown rental and some of the other services that we offer the students, like flowers and framing, that can all likely be done there."

The move from downtown back to campus does come with some logistical challenges for the organizing committee, but also provides plenty of new benefits for the university, said Isinger.

"There are huge spin-off benefits to having convocation on campus," he said. "The students will be taking their pictures here, attending college or other events, maybe eating on campus at Marquis or Louis' or shopping in the bookstore, or they will be just generally wandering around the campus. And if they are the children or grandchildren of alumni, their families we hope will be revisiting campus, whereas they might not have had the time to do that if they were downtown. So, it's all about getting people back on campus and I think that is the best part of this move." ■

Share your story. Tell us the recent highlights of your career, achievements and personal updates.

Your story will be shared online in class notes and may be published in the next issue or in college publications.

alumni.usask.ca/classnotes

2019 USASK ALUMNI

Achievement Awards

CALL FOR NOMINATIONS!
**INNOVATION, COMMITMENT TO EXCELLENCE,
 COMMUNITY ENGAGEMENT, LEADERSHIP**

Nominate one of our amazing University of Saskatchewan alumni for a 2019 Alumni Achievement Award.

Deadline for nominations is June 18, 2019.
 Visit alumni.usask.ca/achieve for more information.

UNIVERSITY OF SASKATCHEWAN
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USASK ALUMNI weekend

From September 20-21, 2019 USask welcomes all alumni back to campus for Alumni Weekend.

Learn about USask research, breakthroughs and discoveries

Connect with your former classmates and professors

Celebrate our alumni accomplishments and achievements

UNIVERSITY OF SASKATCHEWAN
ALUMNI
 ASSOCIATION

For more information visit alumni.usask.ca

1930s

Dr. Margaret M Brooke, BHS'35, BA'65, PhD'71, of Victoria, BC, has posthumously been added by the City of Saskatoon to the master list of names the city draws from when naming new streets. ▼



1950s

Professor Emeritus Dr. James A Dosman, BA'59, MD'63, MA'69, of Saskatoon, SK, will be inducted into the Canadian Medical Hall of Fame on May 2, 2019.

Dr. Jim E Till, BA'52, MA'54, DSc'08, of Toronto, ON, has been chosen as the inaugural recipient of the Edogawa-Niche Prize. The international award recognizes a physician or scientist based on their contributions to interdisciplinary research leading to health-care solutions in disease prevention, diagnosis or treatment.

Professor Emeritus Dr. Dennis K Gorecki, BSP'69, PhD'73, of Saskatoon, SK, was inducted into the College of Pharmacy and Nutrition Alumni Hall of Fame for 2018.

Sister Teresita R Kambeitz, BA'69, BEd'69, of Saskatoon, SK, received the Justice James D. Higgins Award from the Canadian Catholic School Trustees' Association on June 9, 2018 in recognition of her outstanding contribution, enthusiasm and dedication to Catholic education in Saskatchewan and across Canada.

Mr. Russ R Lemcke, BE'62, of Falmouth, MA, was inducted into the US Curling Hall of Fame October 2018.

Dr. Bruce M McManus, BAPE'67, MD'77, of Delta, BC, was appointed as a Member of the Order of Canada (C.M.)

Mr. Jeff J Mooney, BA'66, of Vancouver, BC, was appointed a Member of the Order of Canada. ▼



1960s

Professor Emeritus Jim L Blackburn, BSP'60, of Saskatoon, SK, was inducted into the College of Pharmacy and Nutrition Alumni Hall of Fame for 2018.

Mr. Rand R Burlingham, BA'64, LLB'68, of Saskatoon, SK, has been honoured with the Queen's Counsel (Q.C.) designation for 2018.

Dr. Bob L Calder, BA'63, MA'65, (PhD) of Saskatoon, SK, received the Prime of Life Achievement Award on October 1, 2018 from the University of Saskatchewan Retirees Association.

Mr. Larry K Evans, BA'69, JD'72, of Port Hawkesbury, NS, has been honoured with the Distinguished Service Award for 2018 by the Nova Scotia Barristers' Society and has retired from his law practice after 45 years at EMM Law Inc. in Port Hawkesbury, Nova Scotia.

Dr. Frank H Farley, BA'60, MA'63, (PhD) of Wyncote, PA, holds the position of L.H. Carnell Professor of Psychological Studies in Education in Temple University in Philadelphia. Dr. Farley has been elected President for The Society for Experimental Psychology and Cognitive Science, a Division of the American Psychological Association (APA). Farley is past President of the APA itself, one of but two living Canadians ever President of this, the world's largest society of psychologists.

Librarian Emeritus Ian C Nelson, BA'63, of Saskatoon, SK, received the Continuing Contribution Award on October 1, 2018 from the University of Saskatchewan Retirees Association.

Dr. Lloyd G Nelson, BA'66, BEd'66, BA'68, (PhD) of Black Diamond, AB, skipped the Alberta mixed curling team to a Gold Medal at the 55+ Canada Games in Saint John, NB in the 65+ division August 20-24, 2018. The Alberta team went undefeated in the round-robin competition and won over BC in the Gold Medal game. Lloyd and his wife, Maxine (nee Lennox), who is also a USask grad live in Black Diamond, AB.

Mr. Vern J Racz, BSA'68, MSc'71, of Saskatoon, SK, received the Prime of Life Achievement Award on October 1, 2018 from the University of Saskatchewan Retiree's Association.

1940s

Dr. Donald E Kramer, BE'48, of Regina, SK, was posthumously awarded the 2018 ABEX Community Leader of the Year award.

Dr. Harry J Moody, BE'48, MSc'50, (PhD) of Bedford, NS, was an accomplished research scientist who was known for his extensive involvement in domestic, international and military communications spacecraft programs. He died peacefully at his home on July 16, 2018.

Mr. Bill D Wilson, BSP'69, of Burlington, ON, was inducted into the College of Pharmacy and Nutrition Alumni Hall of Fame for 2018.

Dr. Robert J Young, BA'63, MA'65, (PhD) of Winnipeg, MB, published his first novel, *Another Spy for Paris* (Signature Editions, 2018).

Mr. Lawrence Zarysky, BE'60, of Wakaw, SK, wrote a book entitled, *TARNOPOL*. It was published by Zulon Press in 2015. The book covers important subjects of current interest including references to the U of O MBA, studies, findings and forward conclusions. He intends to write a second volume. The book is available through Indigo and any Christian bookseller worldwide.

1970s

Mr. Mark J Abley, BA'75, of Point Claire, QC, has had two books published in the past year. *Watch Your Tongue: What Our Everyday Sayings and Idioms Figuratively Mean* appeared from Simon & Schuster in October 2018. A much more personal and heartfelt book, *The Organist: Fugues, Fatherhood, and a Fragile Mind*, was published by University of Regina Press in January 2019.

Dr. Neil B Bishop, BEd'70, BA'71, MA'72, (PhD) of Victoria, BC, participated in the 2016 academic conference "Anne Hébert : le centenaire", and has published his latest scholarly book chapter in *Nathalie Wateyne et al., Le centenaire d'Anne Hébert* [Approches critiques, Montréal, Presses de l'Université de Montréal, 2018]. He authored the chapter "Le catholicisme dans des textes [d'Anne Hébert] peu connus".

Dr. Robert D Brown, BSc'79, (PhD) of Bryan, TX, has been elected University Professor Emeritus by the University of Guelph in June 2018.

Ms. Shelley A Brown, BComm'78, of Saskatoon, SK, has been appointed a Member of the Order of Canada.

Mr. Eric H Cline, BA'76, LLB'79, of Saskatoon, SK, was honoured by the Saskatoon Family YMCA at the 2018 National Philanthropy Day on November 15, 2018.

Dr. John M Conly, MD'78, of Calgary, AB, was appointed as a Member of the Order of Canada (C.M.) on June 29, 2018. John Conly is a pioneer in the areas of antimicrobial resistance and infection prevention and control. A Professor at the University of Calgary, he has served on multiple committees to establish national guidelines that minimize the risk of transmission of hospital-acquired infections. Notably, he was the founder of Ward of the 21st Century, a multidisciplinary initiative focused on healthcare innovations to improve the quality of care in healthcare systems. A dedicated leader and mentor, he is sought internationally for his expert advice and far-reaching influence. ▶

Chief Justice Deborah E Fry, BSN'73, JD'80, of St. John's, NL, was appointed Chief Justice of Newfoundland and Labrador on June 22, 2018.

Mr. Milo J Grimsrud, AGRIC'77, BSA'96, of Langford, BC, completed a Masters in Public Administration at the University of Regina in 2013 and retired from the Saskatchewan Ministry of Agriculture, Policy Branch in June 2017. Grimsrud has moved to Langford, BC and plans to continue to travel the world.

Mr. Randy L Hanson, BE'77, of Saskatoon, SK, has been appointed the president and CEO of International Road Dynamics Inc. effective July 12, 2018.

Dr. Warren N Huber, MD'70, of Humboldt, SK, is the recipient of the 2018 Saskatchewan Family Physician of the Year award from the Saskatchewan College of Family Physicians.

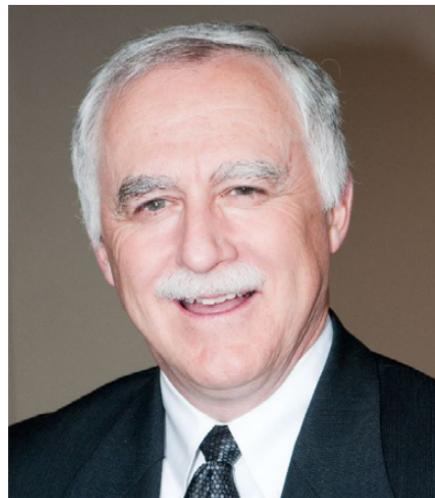
Dr. James R Kirkpatrick, BSc'78, MD'84, of Victoria, BC, has managed the care of adolescents and adults with eating disorders in private practice, community-based eating disorder programs, and hospitals for over 30 years. He is a clinical assistant professor at the University of British Columbia, a member of the Academy for Eating Disorders, and a member of the World Health Organization's Global Clinical Practice Network. His latest book, *Taking a Detailed Eating Disorder History—A Comprehensive Guide for Clinicians*, was published this fall by Routledge. In 2015, he was also awarded a BC Community Achievement Award for his work in eating disorders.

Dr. Lynn L Kirkpatrick, BSP'78, PhD'81, of La Jolla, CA, has been inducted into the College of Pharmacy and Nutrition Alumni Hall of Fame for 2018.

Ms. Gail J Krawetz, BA'77, BEd'77, of Invermay, SK, has published her first book, *Risk & Reward, The Birth & Meteoric Rise of the Saskatchewan Party* in November 2017.

Mr. Ken G Linnen, BE'72, of Regina, SK, was honoured by The Association of Consulting Engineering Companies - Saskatchewan (ACEC-SK) as the 2018 recipient of the prestigious Lieutenant Governor Meritorious Achievement Award at their annual Awards of Distinction on November 20, 2018 in Saskatoon, SK.

Mr. John E McFadyen, BA'74, of Regina, SK, is a recipient of the 2018 Saskatchewan Protective Services medal.



Professor Emerita Rose R Olfert, BA'71, ARTS'72, MSc'76, of Saskatoon, SK, received the Continuing Contribution Award on October 1, 2018 from the University of Saskatchewan Retirees Association.

Mr. Justice Brian J Scherman, BA'72, JD'72, of Saskatoon, SK, has been appointed a Deputy Judge of Supreme Court of the Northwest Territories.

Ms. Sandra A Semchuk, BFA'70, of Vancouver, BC, published a book entitled *The Stories Were Not Told, Canada's First World War Internment Camps*. It will be available in 2019. She is also the recipient of the Governor General's Award in Visual and Media Arts for 2018.

Mr. Gerald G Tegart, BE'73, JD'76, of Regina, SK, was elected vice president of the Law Society of Saskatchewan on December 6, 2018.

Professor Emeritus Dr. Bill A Waiser, MA'76, PhD'83, DLitt'10, of Saskatoon, SK, has been awarded the J. B. Tyrrell Historical Medal by the Royal Society of Canada and the 2018 Governor General's History Award for Popular Media: The Pierre Berton Award. ▼



1980s

Ms. Leslie G Belloc-Pinder, JD'84, BA'87, of Saskatoon, SK, has been honoured with the Queen's Counsel (Q.C.) designation for 2018.

Dr. Doris L Bergen, BA'82, (PhD) of Toronto, ON, was named a fellow of the Royal Society of Canada on September 11, 2018.

Dr. Richard J Bigsby, MD'86, of Saskatoon, SK, was the 2018 recipient of the Department of Surgery Golden Scalpel Award for Pre-clerkship Education from the College of Medicine, University of Saskatchewan. This award is presented annually to faculty member demonstrating the highest level of teaching excellence as acclaimed by the surgical residents.

Mr. Daryl B Bode, BA'85, JD'90, of Yorkton, SK, has been honoured with the Queen's Counsel (Q.C.) designation for 2018.

Ms. Patricia M Chuey, BSNT'89, MSc'94, of Lantzville, BC, has been inducted into the College of Pharmacy and Nutrition Alumni Hall of Fame for 2018.

Mr. Glen W Dowling, LLB'82, of Regina, SK, has been honoured with the Queen's Counsel (Q.C.) designation for 2018.

Ms. Cheryl L Gamble, BA'82, of Moose Jaw, SK, earned a Master's of Public Policy Analysis in 2014 and Master of Public Administration in 2017 through Johnson Shoyama Graduate School of Public Policy, University of Regina. In the spring 2018, she retired after 34 years with the Government of Saskatchewan. She resides in Moose Jaw, SK with her husband, Joe, and three Shih Tzu.

Ms. Aldis A Gislason, BEd'87, of Calgary, AB, received her Bachelor of Education from the University of Saskatchewan in 1987 and taught in Saskatchewan until 1989. Gislason then moved to Alberta and taught there until 1994. She had her one and only child in 1998 and recently moved to Calgary, Alta. Gislason is now a music instructor with a local music store. Over the years she has kept up with her music background by being involved in musical theater, playing piano with a musical trio, and performing both solo and in groups at a variety of venues and events.

Madam Justice Brenda R Hildebrandt, LLB'83, BA'84, of Saskatoon, SK, has been appointed a judge of Her Majesty's Court of Queen's Bench for Saskatchewan.

Madam Justice Elizabeth A Hughes, BA'81, LLB'81, of Calgary, AB, has been appointed a Justice of the Court of Appeal of Alberta.

Mr. Denis P Laclare, BEd'88, has been employed for the past 30 years by a non-profit, and furthered his education with an MA'97 and a PhD'18 in Intercultural Education. Laclare also teaches education and history courses as an adjunct faculty at Fresno Pacific University, Bakersfield, California campus, where he resides.

Dr. Lisa M Lix, BSHec'88, (PhD) of Winnipeg, MB, has been awarded a Tier I Canada Research Chair in Methods for Electronic Health Data Quality. This seven-year chair was announced by the Honourable Kirsty Duncan, Minister of Science and Sport, at the University of Manitoba in 2018. Dr. Lix is a Professor in the Department of Community Health Sciences, Rady Faculty of Health Sciences, at the University of Manitoba.

Mr. Walter J Matkowski, BA'86, LLB'86, of Saskatoon, SK, has been honoured with the Queen's Counsel (Q.C.) designation for 2018.

Ms. Sandra L Maxwell, BA'80, LSc'04, of Saskatoon, SK, is the recipient of the 2018 Lifetime Achievement Award from YWCA Saskatoon.

Mr. Jim M McDonald, BA'85, of Saskatoon, SK, was elected Vice Chair - Workforce Development for the Canadian Urban Transit Association (CUTA) in June 2018. In this role Jim retained his position on CUTA's Board of Directors and became a member of the Executive Committee. CUTA is Canada's voice for public transit and integrated mobility.

Mr. Mike P Morris, LLB'84, of Regina, SK, has been honoured with the Queen's Counsel (Q.C.) designation for 2018.

Mr. Keith K Nutting, BE'87, of Castor Bay, Auckland, has been appointed president of Startec Compression & Process.

Ms. Elizabeth E Philips, BA'85, of Saskatoon, SK, has been named the Saskatoon Public Library's Writer in Residence.

Madam Justice Charlene M Richmond, BA'85, LLB'88, of Regina, SK, has been appointed a judge of Her Majesty's Court of Queen's Bench for Saskatchewan.

Mr. Cameron B Swan, BSA'89, of Regina, SK, has been appointed as the Deputy Minister to the Premier.

Minister Gordon S Wyant, BA'85, LLB'86, of Regina, SK, became the Minister Responsible for SaskBuilds on August 15, 2018.

1990s

Ms. Joni V Avram, LLB'91, of Calgary, AB, was accepted to the Executive Masters of Behavioral Science program at the London School of Economics. Avram will graduate in 2020.

Mr. Brad E Berg, BComm'91, LLB'92, of Toronto, ON, was awarded the Together Towards Zero award (along with his husband Brian Rolles, LLB'91) for longstanding service for the Aids Committee of Toronto (ACT). ▼



Mr. Brad E Berg, BComm'91, LLB'92 and Mr. Brian J Rolles, LLB'91

Professor Emeritus Eli Bornstein, DLET'90, of Corman Park, SK, was appointed as a Member of the Order of Canada (C.M.) on June 29, 2018.

Lieutenant Colonel Colin S Coakwell, BE'98, is a Lieutenant Colonel in the Royal Canadian Air Force, and recently took command of 450 Tactical Helicopter Squadron which operates the CH147F Chinook helicopter in Petawawa, ON. After graduating from electrical engineering in 1998, Coakwell continued with his career as an RCAF pilot. Over his career he

has been posted to 408 Tactical Helicopter Squadron in Edmonton, AB and 403 Helicopter Operational Training Squadron in Gagetown, NB. Coakwell has also completed staff tours at National Defense Headquarters in Ottawa, ON, at the Canadian Forces College in Toronto, ON and at two Canadian Air Division Headquarters in Winnipeg, MB. Throughout his flying career, he has flown the CH146 Griffon helicopter (including a deployment to Bosnia) and the CH147D Chinook helicopter on deployment in Afghanistan.

Ms. Joy N Crawford, BComm'93, of Saskatoon, SK, was re-appointed to the University of Saskatchewan Board of Governors on April 21, 2018. Crawford's second three year term will commence July 1, 2018.

Mr. Sam C Farris, BE'97, MSc'99, of Regina, SK, was appointed president of K+S Potash Canada (KSPC) Inc. on July 1, 2018.

Ms. Sandra L Gordon, BSc'94, MSc'96, of Malmö, SKÅNE, has been named staff scientist at Copenhagen University in the new High Throughput Translational Hematology laboratory. This year for the 2018 Swedish Roller Derby Championships, Gordon was chosen to be the head referee for the gold medal game. This game was live broadcast on Swedish national TV (SVT) and is available for online viewing via SVTPlay.

Mr. Mark E Hillenbrand, BA'97, LLB'97, of Edmonton, AB, has published his first book, *Fields and Fencelines: Stories of life on a Family Farm, a memoir of his childhood on the family farm south of Shellbrook, Saskatchewan*.

Mr. Thomas F Isaac, LLM'93, of Vancouver, BC, has been named on the nation's "Top 25 Most Influential" lawyers by Canadian Lawyer.

Mr. Keith D Kilback, BA'90, JD'94, of Regina, SK, has been honoured with the Queen's Counsel (Q.C.) designation for 2018.

Dr. Colin P Laroque, BSc'93 (PhD), of Saskatoon, SK, is the recipient of the 2018 Geosciences Undergraduate Research Mentor award from the U.S. Council on Undergraduate Research.

Judge Erin M Layton, BA'95, LLB'00, of La Ronge, SK, has been appointed as a judge to the Provincial Court of Saskatchewan is a recipient of the 2018 Premier's Award for Excellence in the Public Service.

Dr. Morris Markentin, MD'96, of Saskatoon, SK, is the recipient of the 2018 CFPC Award of Excellence from the Saskatchewan College of Family Physicians.

Mr. David A McHattie, BA'92, ARTS'92, of Calgary, AB, was elected for a two-year term as chair of the Canadian Manufacturers and Exporters Association, Canada's oldest and one of its most influential business associations, on November 8, 2018. In addition to this position, McHattie was also elected on November 1, 2018 as a vice chair of the Petroleum Services Association of Canada. He resides in Calgary and is employed as vice president Institutional Relations for Tenaris Canada, one of the world's leading steel companies.

Colonel (Retd) Scott A McLeod, MD'93, of Sherwood Park, AB, is the 2018 recipient of The Calvin L. Gutkin Family Medicine Ambassador Award as awarded by the College of Family Physicians of Canada.

Mr. Jason L Mewis, BE'95, of Saskatoon, SK, is the recipient of the 2017/2018 SES Engineer of the Year Award.

Dr. Dwight G Newman, JD'99, of Saskatoon, SK, has been honoured with the Queen's Counsel (Q.C.) designation for 2018.

Ms. Ronalda A Nordal, LLB'98, of Regina, SK, has been honoured with the Queen's Counsel (Q.C.) designation for 2018.

Ms. Melinda Park, BComm'91, of Calgary, AB, was selected as Chair of the Board of Governors at the Southern Alberta Institute of Technology (SAIT) on December 13, 2018. This is a 3 year appointment.

Mr. Greg P Porter, BUSADM'95, of Saskatoon, SK, was honoured by the Saskatoon City Hospital Foundation, along with his spouse, Patty Kirk-Porter, at the 2018 National Philanthropy Day on November 15, 2018.

Mr. Brian J Rolfes, LLB'91, of Toronto, ON, was named #17 on the Financial Times of London OUTstanding LGBTQ Role Models globally in their annual publication in October 2018. Rolfes was also awarded the Board of Directors Leadership Award by the Metropolitan Community Church of Toronto. Finally, Rolfes was given the Together Towards Zero award (along with his husband Brad Berg, BComm'91, LLB'92) for longstanding service for the Aids Committee of Toronto (ACT).

Dr. Carey J Simonson, BE'91, MSc'83, PhD'98, of Corman Park, SK, has been recognized by the Canadian Association for Graduate Studies as one of the top 11 graduate student mentors in Canada for 2018. Simonson is committed to mentoring graduate students to high standards of technical excellence, developing mutual respect in a truly collaborative intellectual partnership, and takes personal investment in the growth of his students. Professor Simonson provides all of us with an example that is inspiring, and which inspires his students to reach for their own highest truth.

Mr. Ian D Sutherland, MBA'97, of Saskatoon, SK, was honoured with the AFP Saskatoon Chapter Honoured Supporter Award at the 2018 National Philanthropy Day on November 15, 2018.

Ms. Janice N Tranberg, BSA'94, MSc'98, of Saskatoon, SK, is the new president and CEO of the National Cattle Feeders' Association (NCFA) and the Alberta Cattle Feeders' Association (ACFA). ▶



Mr. Ben K Voss, BE'99, of Saskatoon, SK, was honoured by STARS air ambulance at the 2018 National Philanthropy Day on November 15, 2018.

Mr. Mark N Zenuk, BSA'90, of South Lake, TX, has been appointed to the board of directors for Bunge Limited effective July 17, 2018.

2000s

Ms. Ivy A Armstrong, BMUSED'08, BE'd'08, BA'09, PDC'10, MEDUC'14, of Saskatoon, SK, was awarded the Canadian Forces Decoration in October 2018 for 12 years of service to the Canadian Armed Forces, where she is a Cadet Instructor Cadre Officer.

Ms. Jennifer L Bain, BComm'00, of Saskatoon, SK, was honoured by READ Saskatoon at the National Philanthropy Day on November 15, 2018.

Mr. Nicholas M Cann, LLB'04, of Regina, SK, has been honoured with the Queen's Counsel (Q.C.) designation for 2018.

Mr. Yang Chen, BSA'07, MBA'12, of Saskatoon, SK, is a 2018 CBC Saskatchewan Future 40 winner.

Mr. Kurt A Dahl, BComm'04, LLB'05, LLM'09, of Saskatoon, SK, was featured in an issue of *Canadian Lawyer* for his contributions to entertainment. ▶

Ms. Patricia L Farnese, LLB'01, of Saskatoon, SK, has been appointed to the Canada Agricultural Review Tribunal.

Dr. Maud Ferrari, PhD'09, of Saskatoon, SK, has been named as a member of the College of New Scholars, Artists and Scientists by the Royal Society of Canada.

Mr. Dale V Gross, BSc'02, MSc'05, of Saskatoon, SK, received the Alexander and Jean Auckland Post-graduate Award in Agriculture.

Mr. Cameron J Kemp, LLB'03, of Medicine Hat, AB, has been elected to the national board of directors for Kin Canada for 2018/2019.

Mr. David J Kolla, BA'05, of Saskatoon, SK, has been honoured by the Canadian Cancer Society for his continued commitment to fundraising at the 2018 National Philanthropy Day on November 15, 2018.

Ms. Haylie A Lashta, BSKI'09, MPT'11, of Saskatoon, SK, was the recipient of the 2018 ABEX Young Entrepreneur of the Year award.

Dr. Sarah M Miller, BSc'09, BA'11, MD'14, of Saskatoon, SK, was the 2018 recipient of the Department of Surgery Bronze Shovel Award from the College of Medicine, University of Saskatchewan. This award is presented annually to the resident with the most outstanding contribution to surgical education.

Ms. Karen E Mosier, BA'00, MSc'04, of Saskatoon, SK, was the recipient of the Canadian Association of Research Administrators 2018 Dan Chase Distinguished Service Award - Priority Initiatives. The award was presented at the CARA national conference in Ottawa in May.

Ms. Ashley M Smith, LLB'07, of Saskatoon, SK, has been chosen as a 2018 Lexpert Rising Star, which honors Canada's leading lawyers under 40. ▶



Professor Emeritus Henry Woolf, LLD'01, of Saskatoon, SK, received the Prime of Life Achievement Award on October 1, 2018 from the University of Saskatchewan Retirees Association.

Ms. Stephanie Yong, BA'01, MBA'10, of Saskatoon, SK, is a 2018 CBC Saskatchewan Future 40 winner. ▶

2010s

Ms. Nathan G Bell, DIPAGB'17, of Drumheller, AB, received the Ron Gallaway Scholarship from the College of Agriculture and Bioresources at the University of Saskatchewan on November 1, 2018.

Ms. Kayla S Brien, BA'12, BA'13, of Saskatoon, SK, is a 2018 CBC Saskatchewan Future 40 winner.

Ms. Sara M Doerksen, BSA'16, of Moose Jaw, SK, received the R. P. Knowles Scholarship from the College of Agriculture and Bioresources at the University of Saskatchewan in fall 2018.

Mr. Gazali Issah, MSc'14, of Saskatoon, SK, received the Agros Class of '43 60th Anniversary Award and the Barbara and Frank Pavelich Post-graduate Scholarship in Soil Science at the fall 2018 convocation.

Mr. Nicholas C Kaminski, BE'13, of Saskatoon, SK, is the recipient of the 2018 Association of Consulting Engineering Companies - Saskatchewan (ACEC-SK) Young Professional Award on November 20, 2018. ▶

Ms. Kaitlyn D Klutz, BSA'16, of Saskatoon, SK, received the R. P. Knowles Scholarship from the College of Agriculture and Bioresources at the University of Saskatchewan in fall 2018.

Mr. Kyle K Montgomery, DIPAGR'18, of Morrin, AB, received the Charles C. Cook Student Leadership Award, the Russell Fisher Scholarship and Walter Scott Scholarship at the fall 2018 convocation.

Mr. Karsten M Nielsen, BSA'15, of Clavet, SK, received the R. P. Knowles Scholarship from the College of Agriculture and Bioresources at the University of Saskatchewan in fall 2018.

Mr. Jesse C Reimer, BSA'17, of Saskatoon, SK, received the S. N. Horner Graduate Scholarship in Agriculture on November 1, 2018.

Ms. Yan Ran Tang, BSA'18, of Saskatoon, SK, received the Andjelic Land Graduate Award in Agricultural Research at the fall 2018 convocation.

Ms. Claire M Thomson, BA'12, MA'15, of Rockglen, SK, has been awarded a 2018 J.H. Stewart Reid Memorial Fellowship by the CAUT. Thomson is currently a PhD candidate in the Department of History at the University of Alberta.



Mr. Matthew C Walliser, BSc'13, BSP'15, of Estevan, SK, is the recipient of the 2018 Preceptor of the Year award from the Saskatchewan College of Pharmacy and Nutrition for his efforts to mentor pharmacy student Alexis Dryden.

Ms. Dakota Wightman, BSA'15, of Saskatoon, SK, received the Alexander Malcom Shaw Memorial Graduate Scholarship at the fall 2018 convocation.

Dr. Jamie L Willems, BSc'13, PhD'17, of Waldheim, SK, received the Molson Canada Postgraduate Achievement Award on November 1, 2018.

Ms. Caroline H Brown, BSA'15, of Calgary, AB, received the R. P. Knowles Scholarship from the College of Agriculture and Bioresources at the University of Saskatchewan in fall 2018.

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1930s

Neild, Florence D (Cheetham), BA'38

1940s

Adams, Robert, BA'46, BEd'49
Arscott, Howard R (Bob), BComm'49
Attfield, William J, BComm'49
Ball, Florence E (Betty) (Bell), BHSc'46
Bing-Wo, Reginald (Reg), BE'43
Boan, John A (Jack), BA'48
Calimente, Donald, BE'48
Campbell, John L, BE'49, BusCer'72
Criswick, Betty J (Iverson), BHSc'49
Culham, Janet R (MacLean), BA'45
Eisenhauer, Hugh R, BA'49, MA'50
Goodman, Margaret K (Ogilvie), BA'45
Hetland, Forrest M, AGRIC'46
Hoffman, Norman M, BE'49
Hosie, Robert T, BA'47
Kramer, Donald E, BE'48
Kutz, Kenneth J, BE'48
Matheson, Jean I, BA'47
McCrimmon, Murray H, AGRIC'49
Orr, Kenneth S (Ken), BA'47
Pearce, Douglas C, BE'47, MSc'48
Pearson, Roderick F (Frank), BE'44
Rudd, Douglas R, BA'48
Rutherford, Elizabeth L (McCusker), BA'48
Sharzer, Sidney, BA'47, MED'49
Skarsgard, Harvey M, BE'49, MSc'50
Steele, Robert C, BEd'49, BA'50
Thomas, Anne D (Brodie), BA'44
Towill, Margaret C (Dix), BHSc'48
Treleaven, Joseph H, BA'48, MED'48
Turner, Edward K (Ted), AGRIC'48, LLD'89
Weiers, Margaret K (Kesslering), BA'49, DLet'10
Williams, Owen D, AGRIC'49

1950s

Baird, Janet M (Derby), BEd'57, BA'65
Balasch, Peter P, BComm'57, BE'60
Bistriz, Victor A, AGRIC'51
Boughton, Glenn R, BSA'54, MSc'56, ADMIN'69
Brown, Douglas T (Doug), BComm'55
Christy, Dorothy R (Peachey), BA'51
Cox, Leonard, MD'58
Dick, Earl L, BComm'51, BA'51, MBA'75
Dorrett, Reginald H (Reg), BA'53
Durie, Robert W, BE'53
Einarson, Donavon C, BSP'57
Eisner, Jacob (Jack), LLB'54
Eley, Donald B, AGRIC'51
Gold, Lorne W, BE'50
Johnson, Donald W, BA'56
Jones, Barclay G, BE'54
Kent, Carmen E, AGRIC'51, BEd'59
King, Gerald C, BA'58, LLB'63
King, Harry J, BE'56, MSc'57
Knowles, Raymond L, AGRIC'52
Lange, Helen (Kozak), BComm'54
Leckie, Garnet B, BA'50, BSP'53
McCormick, Sheila A (Roberts), BEd'59
Michayluk, Julian O, BEd'58, MED'61, BA'68
Mitchinson, Doreen M (Greve), BA'53, MD'58
Moir-Wass, Linda E (Jorstad), BA'59
Moroz, Edward L (Ed), BE'59
Pacholka, John A, BEd'56, BA'65
Palmer, Gordon S (Stewart), BSA'55
Plaxton, Norma A (Nan) (Vicq), BSHEC'57
Rutherford, Marcelin A (MacEachern), BA'53
Schollie, Thomas G (Tom), LLB'55, BA'72, Arts'82
Willey, Erma J (Jean) (McLean), BA'51

1960s

Ball, Howard F, BSA'64, BEd'68
Bell, Gordon R, BE'65
Billett, John M (Morley), BSA'63
Brown, Caroline A, BA'63, BEd'67
Cameron, Erma C, BA'65
Cooke, Gerard (Gerry), BEd'65, BA'66
Dosdall, Francis A (Allan), BSP'67
English, Gordon W, BE'66, DATPRO'69
Foss, Wilfred K, BEd'63, BSc'74
Harbin, Gary D, DVM'69
Hilsen, Brian R, BA'67, CertEduc'68, BEd'69
Hoffert, Allen L, BE'62
Hubick, Walter M, BA'62, CertEduc'65, BEd'68
Hutch, James P (Jim), BE'61
Koleoso, Olajide A, MSc'66, PhD'68
Lamb, Alvin C, BComm'60
Lowe, George T, BEd'64, BA'66
Lozinsky, Joseph, BA'65, BEd'67, PGD'70, MED'75
Morrall, Robin A, MA'64
Nanson, Josephine L (Jo), BA'68, MA'70, PhD'88
Nepip, Wolodymyr, BE'60
Ottenbreit, Frank J, Acc'64
Paterson, William J (Bill), BSP'67
Rich, Alan D, BA'67, Sc'69, MD'71
Rozon, Lawrence E, BComm'60
Rugg, Terrance E, AGRIC'66
Smith, Homer D (Dennis), BSA'68
Smith, Joyce L (Glass), NURS'61
Soveran, Lawrence E (Larry), BA'65
Subchyshyn, Aloysius W, BA'64, BEd'69
Thomas, Robert R (Bob), BComm'62
Tkachuk, Bill, BA'68
Tuplin, Kenneth A, BSA'68
Weisbeck, Joan, BSHEC'69, BEd'75
Willick, Leonard L, BEd'68, BSc'82
Zabolotney, Gladys M, BEd'61, BA'69

The Alumni Association has noted, with sorrow, the passing of the following graduates.

In Memoriam includes those who have passed prior to March 15, 2019. Names are listed by decade of receipt of their first USask degree. Date of death and last-known address can be found online at greenandwhite.usask.ca.

1970s

Avivi, June A, BEd'76
 Carr, Robert S, BEd'77
 Chisholm, Forbes R (Rob), DVM'78
 Coggins, Patrick J (Jack), BA'72, MA'74, BEd'83
 Cowan, Ross L, BComm'74
 Davidson, Mary L (Freethy), BEd'77
 Evanoff, Darcy M, BA'77
 Flanagan, John P, AGRIC'72
 Foster, Wayne L, BSP'70
 Fullerton, Daniel E (Dan), BA'72
 Graham, Robert C, BComm'72, MBA'97
 Greschner, Pauline, BEd'74
 Haberstock, Lorne K, BEd'72
 Hertzog, Harold E, BusCer'71
 Hill-Hampson, Cheryl L (Hill), BEd'79
 Hudek, John Edward, BSA'76
 Langley, George F, BSA'79, BEd'81
 Liddle, Robert S, BComm'78
 Lizaire, Andre L, PUBADM'71
 McDonald, Donald D (Don), BusAdm'76
 Miller, Rosalyn E, BA'79
 Parkes, Cheryl D (Russell), BSN'73
 Pennell, Charlotte I (Domaratzki), BA'70
 Popowich, Barry L, BA'73, Arts'84, MA'88, PhD'92
 Smith-Windsor, William A (Sandy), BAPE'72, BEd'73
 Steen, Graeme E, BMus'73
 Witzel, Heather D, BAPE'73, MSc'73, BEd'74
 Wood, Derek, BEd'75
 Zak, David J, DMD'75

1980s

Brad, Shelley C (Stene), BA'80
 Clarke, William T, BA'84
 Collins, Jean A, BEd'85
 Dickson, Dale J, BComm'85
 Fuller, Cam J, BA'85
 Goodtrack, Kirk D, BA'86
 Gower, Leigh F, Arts'81, LLB'84
 Gray, Kathleen R (Kathy) (Buswell), BA'81, BusAdm'83
 Johnson, Beverly J (Bev) (Ballard), BComm'80
 Kowalenko, Elsie M, BSN'80
 Loi, Teresa W (Wong), BA'80
 Meister, Stephen B (Steve), BSA'81
 Ohene-Manu, Joseph, MSc'80
 Parchoma, Gale A (Muller), BEd'88, BA'93, PhD'07
 Trischuk, Evan P, BE'89, BSc'89

1990s

Burechailo, Allan M, FBM'96, CACP'97
 Cashman, Patrick B, PhD'95
 Damsgaard, Tanya (Howe), BSP'98
 Martin, Margaret K (Peggy) (Wigmore), BA'92, MA'95, PhD'01
 Rabbitskin, Carolyn K (Carolyn), BEd'92
 Wagner, Elisabeth M, Arts'90, MD'94

2000s–2010s

Guilbault, Reta A (Terry), PhD'01
 Ives, Randy C, BusAdm'05
 Kowalchuk, Micah A, BComm'07, JD'13
 Neumann, Walker B, BSc'08
 Plamondon, Kyle D, BA'04, BSP'12
 Hanwell, Alicia D, BA'11, BSc'11
 Poitras, Jonathan M, JD'11

FACULTY AND STAFF

Beck, Scott
 Brown, Marvin
 Coggins, Patrick J (Jack)
 Gray, Gordon R
 Gray, Kathleen R (Kathy) (Buswell)
 Greenough, Paul R
 Guilbault, Reta A (Terry)
 Hanwell, Alicia D
 Hleck, Shirley A (Davidson)
 Lowry, Noel J
 Martin, Margaret K (Peggy) (Wigmore)
 Matthews, Peter C
 McLean, Christine E
 Michayluk, Julian O
 Morrall, Robin A
 Nanson, Josephine L (Jo)
 Nicholls, Arlene M
 Parchoma, Gale A (Muller)
 Parnell, Patricia S (Pat)
 Popowich, Barry L
 Rabbitskin, Carolyn K
 Ripley, Earle A
 Skarsgard, Harvey M



You can inspire the next generation of educators.

Jordanne Estergaard and Christina Luross are passionate about teaching. The two students are in their final year of the early childhood education program in the College of Education, thanks to an estate gift left from a similarly impassioned donor.

The A. Marion Clarke Education Trust re-established the early childhood education undergraduate program at the University of Saskatchewan in 2016. The program provides a deeper understanding of the youngest minds in the education system—pre-kindergarten to Grade 3—at a time when their brains absorb information like a sponge.

Thanks to Marion Clarke's gift, the College of Education can continue to support programming for teacher candidates like Jordanne and Christina, and train teachers with a strong foundation in early childhood principles.

You can make a difference to students like Jordanne and Christina by leaving a gift to the university through your will, like Marion Clarke. For more information, contact:

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“Without Marion Clarke this experience would not have been possible, and with it we have come to recognize the inspiration, passion and motivation within each other towards becoming the best early childhood educators.”

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