

**September 14, 2018** 

Publication Mail Agreement #40065156

Volume 26, Issue 1

**ON CAMPUS NEWS** • news@usask.ca • news.usask.ca



# PICTURE PERFECT

A pair of University of Saskatchewan students capture the moment while taking part in Orientation activities in The Bowl on Sept. 4, the day before classes began for the majority of students to open the 2018/19 academic year. We feature a couple of the university's exceptional new students in this month's edition of On Campus News.

**SEE PAGE 8.** 





On Campus News is published 12 times per year by University of Saskatchewan Marketing and Communications. It is distributed to all U of S faculty, staff, graduate students and members of governing bodies, as well as to others in the university community, related organizations, some Saskatchewan

are welcome. Advertising rates are available online or on request.

On Campus News aims to provide a information and opinions about events and issues of interest to the

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

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

EDITORIAL ADVISORY BOARD Patrick Hayes Fiona Haynes Sandra Ribeiro

PUBLICATIONS MAIL AGREEMENT NO. 40065156

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

## Wheat genome blueprint accelerates innovation

SARATH PERIS

Breakthrough research in creating a comprehensive blueprint of the wheat genome will bring disruptive innovation to wheat breeding, predicts University of Saskatchewan crop scientist Curtis Pozniak, whose team played a key role in the successful international wheat genomics project.

"The wheat blueprint will enable us to decipher the genetic basis of important traits in wheat, such as genes responsible for resistance to fungal diseases and pests. That is the disruptive part. What took years to do before can now be done in a matter of a few weeks," said Pozniak, a wheat breeder at the Crop Development Centre (CDC) in the U of S College of Agriculture and Bioresources.

New knowledge generated by the International Wheat Genome Sequencing Consortium over the past 13 years is expected to have a huge impact on global food security, with the planet's population projected to reach 9.6 billion within three decades. The findings were published recently in the journal Science.

"From a breeding perspective, the blueprint will enable us to develop DNA markers for breeding. These markers will allow us to improve the efficiency of selecting important traits, which will ultimately help produce better wheat varieties over the long term," Pozniak said.

The next step for the U of S team will be to lead the 10+ Wheat Genome Project—a larger-scale international initiative to sequence more than 10 cultivated wheat varieties from the main growing areas across the globe.

"We are very excited about this project. The idea is not use just one genome sequence, but make a comparative analysis of many sequences simultaneously," Pozniak said. "To understand what genes do in wheat plants, you need multiple sequences so you can start comparing to really appreciate all of the differences. You can then associate these differences with important traits we select in breeding programs."

The genome structure mapped out for the Chinese Spring line will

University of Saskatchewan PhD

student Suneru Perera has been

awarded a \$150,000 Research

and Professional Development

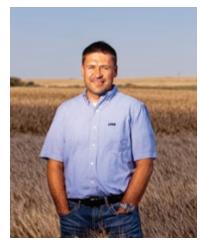
Fellowship from The Foundation

for Food and Agriculture Research

(FFAR). Perera was the only student

in Canada to receive one of the 17

fellowships from the American



**Pozniak** 

serve as a useful reference in developing new wheat varieties that have traits to resist diseases and pests as well as varied growing environments, he said.

Andrew Sharpe, director of genomics and bioinformatics at the U of S Global Institute for Food Security and co-lead with Pozniak on the wheat genomics research, is also excited that the new project will yield a lot of data on genomic variation that will help the agriculture industry respond to environmental changes.

"We're hoping to work out all the different gene variations that could have an impact on traits," Sharpe said. "Basically, we will end up with a catalogue of variation and how it impacts a crop in the field."

He expects this catalogue of genomic information to be available by fall of next year.

"This resource will have immediate application in the wheat breeding program at the CDC, where we will see the impact over the next few years," Sharpe said.

Because the CDC has been involved from the beginning of the wheat genome project, researchers here have the benefit of a two- to three-vear early access to the information, he said.

"You will see that reflected in the new varieties that ultimately come out of the breeding pipeline," Sharpe said.

**SEE RESEARCHERS, PAGE 14** 



### IN CASE YOU MISSED IT

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

#### **NSERC funding set Fellowship award**

Researchers Irena Creed and Tim Kelly at the University of Saskatchewan have been awarded a total of \$1.2 million by the Natural Sciences and Engineering Council of Canada (NSERC) for two research projects. Creed, executive director of the School of Environment and Sustainability, received \$827,000 from NSERC to examine improving environmental prairie landscape. Kelly, associate professor in chemistry, received \$412,500 for developing technology to transform breast cancer screening.

agricultural research organization, to develop processing techniques to expand the uses of canary seed, and help hone his skills as an industry scientist. Perera will receive \$50,000 US annually for three years. FOR MORE UP-TO-THE-MINUTE NEWS, VISIT: news.usask.ca 📑 💆 @usask

### **New institute**

The University of Saskatchewan will soon become the new home of the Institute of Indigenous Peoples' Health (IIPH)—one of 13 institutes of the Canadian Institutes of Health (CIHR)—under Research leadership of the institute's scientific director, Carrie Bourassa. Formerly located at the Health Sciences North Research Institute in Sudbury, Ont., the IIPH will begin operations at the U of S starting Oct. 1. Bourassa is joining the U of S College of Medicine's community health and epidemiology department.

### **Franklin finding**

Synchrotron studies of bones and teeth by University of Saskatchewan and other Canadian researchers has determined that lead poisoning did not play a key role in the deaths of crew members in the ill-fated Franklin Expedition of 1845. The findings were published on Aug. 24 in the journal PLOS ONE. The 11-member research team included the paper's co-author David Cooper and fellow U of S researcher Sanjukta Choudhury, as well as Canadian Light Source scientists Ian Coulthard and Brian Bewer.



Elders and other members of the university community took part in an Indigenous naming ceremony Aug. 29 for the upcoming University Plan. 🛍 CHUCKLA PRODUCTIONS

### **Building** Reconciliation **Internal Forum**

Tuesday, Sept. 18, 8:30am-6pm:

Now in its second year, this event is a response to the Truth and **Reconciliation Commission Calls** to Action and provides another opportunity to constructively and respectfully dialogue and plan for the university environment we aspire to. As part of the day's sessions, participants will attend four 45-minute conversation circles:

**Circle one**—Indigenous student experience

**Circle two**—Ally relationships: Building and sustaining "right

**Circle three**—Indigenous perspectives on research

**Circle four**—Meeting reconciliation through anti-racist, anti-oppression education

# Indigenous initiatives help shape the future of U of S

@ CHRIS MORIN

As an Indigenous student starting college straight out of high school in 1983, Jacqueline Ottmann remembers the University of Saskatchewan as a very different place.

As she recalls, there were few other Indigenous students, faculty and staff. But by the time Ottmann returned for her master's degree in 1999, the U of S already felt more welcoming.

Now, since becoming the campus' first ever vice-provost, Indigenous engagement in 2017, Ottmann has made it her mission to ensure that the university's commitment to Indigenization is a profound and lasting transformation. And while her office is a relatively new one for the U of S, where 3,100 self-declared Indigenous students were enrolled in 2017, Ottmann said that the willingness and support from university leadership, faculty and staff inspires her work.

"I have the privilege of travelling the country and seeing what other universities across Canada are doing, and we are being seen as a national leader when it comes to Indigenization," said Ottmann. "We have one of the highest Indigenous student populations within the U15 and we have a significant population of Indigenous staff and faculty. That's all very exciting, and how we move through these next few years will have a great impact on the future.

"I get excited by the opportunity to not only support the Indigenous community, but also to support the systemic transformational process the university is

undergoing right now."

A significant part of that process will be guided by contributions from Indigenous Elders, Traditional Knowledge Keepers and Language Teachers, who informed the University Plan 2025, and gifted it an Indigenous name during a ceremony on Aug. 29 in advance of the plan's official launch later this fall. Ottmann said what makes the plan unique is that it draws upon Indigenous perspectives to inform the university's overall principles.

"The university plan focuses quite heavily on Indigenization, reconciliation and decolonization as well, and I'm encouraged by the commitment that the U of S has made towards reconciliation," said Ottmann, who adds that a northern strategy is also in the works.

"We are meeting with deans across campus who are looking on developing relationships with First

Nations (and Métis), and we have a number of colleges that are doing so already," said Ottmann, noting that the U of S plans to employ a counsellor dedicated to Indigenous students for culturally appropriate counselling. "It's important to be visible and meet Indigenous people where they are at, whether it is at their First Nation or elsewhere."

Ottmann also points to a number of initiatives taking place this fall at the U of S, including the Building Reconciliation Internal Forum on Sept. 18, and the FSIN Post-Secondary Forum on Sept. 25-26. She hopes that events such as these will help develop relationships with Indigenous leaders and their communities.

While the changes since she first began attending undergrad classes have come slowly, Ottmann acknowledges that there is a sense of urgency for many on campusincluding herself.

"I have a five-year term and within that amount of time I would like to support this process as much as I can. It motivates me to be all in and fully engaged," said Ottmann, who added that a number of initiatives in progress will be rolled out in the coming months and into 2019 to support Indigenization efforts.

"This office, and all the work that needs to be done, has been anticipated for so long. There has been advocacy for this for so long, and when it finally came together there were some very high expectations. But there is so much support from the Indigenous community, which is 'we are here to support you' and that gives me hope and strength. I've been involved in some decision-making circles where it is the first time that an Indigenous person has had an equal voice at those tables." ■



The mountains surrounding Canmore, Alta., are obscured by the smoky haze from the outbreak of western wildfires in British Columbia and Alberta this summer.

# Wildfire season: is this the new normal?

**ℳMARK FERGUSON** 

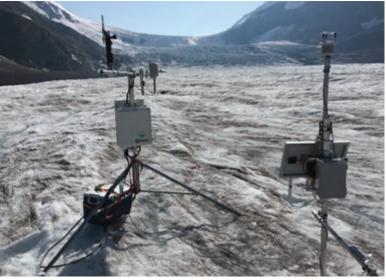
Rapid melt of near-record snowfall in the Rocky Mountains in the spring caused serious flooding in parts of B.C. This summer, the drought and high temperatures have led to a very different situation.

More than 500 wildfires were still burning in B.C. in September, with the Yukon, Alberta, Ontario, Quebec, and parts of the Atlantic provinces all experiencing one of the worst fire seasons in history. Globally, wildfires in the United States, the United Kingdom, Spain, Portugal, Greece, Sweden and Australia are burning at an alarming rate.

According to John Pomeroy, Canada Research Chair in Water Resources and Climate Change and director of the University of Saskatchewan-led Global Water Futures Program (GWF), this is a horrific year for wildfires not only in Canada, but around the world.

"You do not expect extensive wildfire in Swedish mountain tundra or in Welsh mountains, but we see that this year," said Pomeroy. "This is further evidence of remarkably fast changes in climate around the world as a result of new extremes of heat and variable precipitation, due to human-introduced greenhouse gasses."

Pomeroy points to a number of



Ash and soot from the western wildfires is coating the Athabasca Glacier in the Rocky Mountains.

**GREG GALLOWAY** 

factors that have led to these severe fires this year, including an extremely dry and hot summer, and dead forests ravaged by the invasive pine beetle—a creature that continues to thrive in warmer winters, especially in the B.C. interior.

These fires are also sprinkling ash across the Columbia Icefield and glaciers that make up the headwaters of the Saskatchewan, Mackenzie, and Columbia River Basins. This ash will likely speed up the melt due to the increase of solar radiation on

the glacier, whereas clean ice would reflect the sun's rays.

"This is the darkest I've seen the Athabasca Glacier in my life," said Pomeroy, who has been studying hydrology in the Rockies since the early 1980s.

In nearby Canmore, Alta., Robert W. Sandford, a Fellow of the U of S Centre for Hydrology, and EPCOR Chair in Water and Climate Security with the United Nations University, described the situation in a different way.

"The sunrise in Canmore on the morning of Friday, August 17th, 2018, was surprisingly smoky in a way that made it eerily reminiscent of some of the sci-fi doomsday thrillers of the 1980 and 1990s," he said. "We are now seeing the direct climatic connection that climate scientists have been talking about for years, between water and its diametric and symbolic opposite fire. If you don't have the former, then you get the latter. Higher mean annual temperatures, especially in northern Canada, are already resulting in increased wildfire risk."

According to Sandford, a decade ago scientists predicted a whopping 75-120 per cent increase in the amount of area burned each year, and now it is happening.

"We are also seeing once again this year that a slower and wavier jet stream is causing the conditions that exacerbate the wildfire threat to intensify and persist longer in vulnerable places. As a result, fires are already becoming bigger, hotter and faster. Just as scientists predicted, methane releases have accelerated from the thawing permafrost of the Arctic. We now have forest fires that are fueled by the methane they release," said Sandford.

Many researchers involved with

the pan-Canadian GWF program are studying this situation with increased urgency. Addressing risk factors is critical moving forward, according to Pomeroy.

"The risk of fire can be predicted with coupled climate and water models," said Pomeroy. "For instance, the exceptionally low snowpack and dry soil moisture or dry duff layer under the forest canopy that led to the Fort McMurray fire in 2016 was predictable by our models. Once the risk of fire is high it is harder to say exactly where the fire will start because the start is often from a dropped match or a spark from a vehicle or a lightning strike. But it is possible to say where the risk is high.

"Risk can be mitigated by reducing the density of forests where there are communities, mines, roads and infrastructure right next to the forest. We often have very dense, old forest canopies right next to boreal forest and mountain communities and these are very dangerous situations given the recent increases in wildfire in Canada. We also need better prediction of risk of fire so that fire bans and other preparations can be made when risk is high." ■

Mark Ferguson is a communications specialist in the **Global Institute for Water Security.** 

# A lifetime of achievement

## Tse's curiosity powers professor's passion for discovery at the U of S

**A JAMES SHEWAGA** 

He is an internationally renowned researcher with a remarkable resume spanning 38 years, has more than 500 articles published in high-profile scientific journals, and has accumulated an abundance of awards and accolades.

So at the age of 64, what continues to power professor John Tse's passion for discovery?

"It's curiosity," said Tse, a faculty member in the Department of Physics and Engineering Physics at the University of Saskatchewan. "I always think doing research is like solving a puzzle. I want to learn something new every day. My brain is like a sponge: I soak up everything. First thing in the morning, I read science news and I get interested in one subject and I start to study it. And if I am capable, I just start doing it. It's my curiosity and my personality."

The personable professor added to his lengthy list of distinctions earlier this summer when he received the honorary title of distinguished professor at the U of Salong with professor James Hendry in the Department of Geological Sciences—honouring a lifetime of exceptional achievement in research, scholarly or artistic work.

"It definitely is an honour to be awarded the highest award of the university and it is peer recognition that is more important than the title," he said.

Previously, Tse was awarded a Doctor of Science from the university in 2015, earned the Distinguished Researcher Award in 2010, and was inducted as a Fellow of the Royal Society of Canada in 2008 one of the highest honours a scientist can receive in the country-after beginning back-to-back seven-year appointments as a Canada Research



John Tse is an award-winning professor in the Department of Physics and Engineering Physics at the U of S. 🕡 JAMES SHEWAGA

Chair in 2004 to start his 15-year career at the U of S.

Tse came to the university after serving 25 years in Ottawa with the National Research Council (NRC), where he achieved the highest rank

of principal research officer in 2000. Tse first came to the U of S during that time to help establish the new synchrotron in the world-renowned Canadian Light Source research facility.

"I came to this university basically to help build the synchrotron and I was the chair of the oversight committee when the synchrotron was built from 1999 to 2005," said Tse. "The synchrotron has been important all my life.

I started with Dr. Mike Bancroft, who was the first director of the synchrotron here. So, I have been working with the synchrotron for a long time and the synchrotron has been a major tool of my research for

I always think doing research is like solving a puzzle. I want to learn something new every day.

— John Tse

a long time."

Tse's research has helped spark advances in research ranging from energy storage and superconductors, to his team's recent discovery of how the Earth can create water

thousands of kilometres deep inside the planet, from liquid hydrogen reacting with silica under high pressure and high temperature.

"There are different theories of how water got onto Earth, and we

> are contributing to that knowledge. How much water is formed and under what condition and how long ago, that still has to be investigated," said Tse. "So, I have an extremely broad area of research, from chemistry

to geophysics. My major interest right now, working with professor (Yuanming) Pan in the Geological Sciences department, is to understand how magma flows and the chemical reaction of magma with

water and other minerals, in the Earth's mantle. So, I am going into a completely new field of geoscience, with absolutely no background."

That, however, is nothing new for Tse. You see, one of the top researchers in the U of S physics department doesn't actually hold a physics degree.

"All my degrees are in chemistry, so I learned along the way," said Tse, who earned his PhD in chemistry at the University of Western Ontario in 1980 before joining the NRC that year. "I started off as an experimental chemist and circumstances required me to learn physics, so I learned how to do it. And over the years I have refined myself, by learning from some very good colleagues, in particular graduate students and post-docs. I make no bones about it: I learned everything from my post-docs!"

To be sure, students and research collaborators at the U of S, across Canada and around the globe have learned plenty from the popular professor, who regularly gives lectures world-wide, is an adjunct professor at Western and the University of Ottawa and works internationally with institutions in Japan, China and the United States.

While he still relishes conducting research, he also enjoys teaching the next generation of researchers.

"The reason that I joined the university is that I have a passion to teach," said Tse, who was recently appointed a U of S Centennial Enhancement Chair for another five vears. "Even when I was at NRC, I figured I would end up at a university at some date. It just happened earlier than I expected. I always told my wife: If I can sleep in an airport, I can do anything." ■

# Kids at the heart of the matter

## College of Kinesiology researchers address childhood chronic disease

**∅** KRIS FOSTER

Thousands of children in Saskatchewan have Congenital Heart Disease (CHD) but don't have a formal program that helps them live with the chronic condition.

University of Saskatchewan researchers are working to change that by developing the first CHD intervention program in Canada specifically designed for children.

"If an adult has a heart attack, there is a set program, a standard protocol for cardiac rehabilitation," said Corey Tomczak, assistant professor in the College of Kinesiology. "But there is nothing for kids, no protocol, and they will have this heart condition for the rest of their lives."

So four years ago, Tomczak and Marta Erlandson, also an assistant professor in kinesiology, along with colleagues in the College of Medicine and the Department

of Psychology at the University of Regina (U of R), launched a week-long summer camp called Children's Healthy Heart Camp in Saskatchewan (CHAMPS) to help kids with CHD manage day-to-day life with a chronic condition.

With more than 3,200 kids in Saskatchewan living with CHDan abnormality in development or function of the heart that occurs during fetal development or acquired during childhood-there was no shortage of demand for the camp.

"There was a willingness and strong desire from families for this camp," said Tomczak, noting that the camp has grown each year and has a current capacity of 30 participants. "We saw a need for this type of environment in which children can be physically active and can talk about health anxiety and emotions."

Erlandson said so many



**Assistant professor Corey Tomczak.** 

children with CHD just assume they can't be physically active, and that inactivity contributes to increased obesity and increased risk factors beyond CHD, which all contribute to a prolonged strain on the health-care system.



Assistant professor Marta Erlandson at this year's CHAMPS camp.

"We want kids to learn their capacity at the camp," said Erlandson. "A lot of kids come in thinking they can't do any physical activity, and meeting kids who have shared experiences, as well as seeing similar scars from open-heart surgery, helps them know they can participate in physical activity. That also helps with their anxiety."

During the week, kids and their parents take part in different sessions

**SEE SHRF, PAGE 15** 

## **DANCE OR SWIM** WITH US

### U OF S SCHOOL OF DANCE

Ballet, jazz, tap, hip hop, creative/modern, highland, musical theatre and cultural dance. Multi-class and family discounts available.

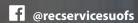
### U OF S AQUATICS &

Learn to swim programs, CPR and First-Aid training and lifeguard and swim instructor programs.

- U of S student dance rates
- Special Needs dance or swim programs available
- Classes for ages four months through adults



Room 222, Physical Activity Complex, 306-966-1001





beactive.usask.ca



From towering tyrannosaurs to tiny trilobites, the country's top paleontologists have dug into hundreds of millions of years of history of life

This fall, University of Saskatchewan researchers will be joined by other prominent paleontologists from across the country when the Department of Geological Studies hosts the prestigious Canadian Paleontology Conference for the first time in 21 years, from Sept. 21-24.

"We are excited that the conference is being held in Saskatoon this year and we look forward to hosting geoscientists from across Canada and around the world and showing them first-hand what Saskatoon and the University of Saskatchewan have to offer," said Samuel Butler, department head of geological studies.

With a robust research staff on campus and some of the richest deposits and fossil finds in the country, conference chair Michael Cuggy said the university and the province are well-positioned to host this annual gathering.

"It's good for the department because it brings a number of researchers and grad students to the province, some for the first time, and it gives them the opportunity to meet with our researchers who work here and learn what we are working on," said Cuggy, a senior lab co-ordinator and sessional lecturer in geological studies. "It also increases the possibility of collaborative work in the future."

The four-day conference will open with a reception in the Geology Building's impressive Museum of Natural Sciences, featuring fossil finds and dinosaur displays of precise replica models of the likes of a Tyrannosaurus rex, a Triceratops and a Mosasaur, which can all be found at dig sites across the province. The conference will also feature a free public lecture on Sept. 22 by Royal Saskatchewan Museum researcher Ryan McKellar entitled, "Cretaceous amber: glimpses of terrestrial ecosystems during the Age of Dinosaurs."

Participants will also travel to Wanuskewin Heritage Park, featuring archaeological dig sites dating back 6,000 years, and will tour the Canadian Light Source facility on campus, featuring the only synchrotron in the country.

"We are going to the CLS to learn about the paleontological applications of using the synchrotron," said Cuggy. "These researchers might know that we have one, but because they don't have a synchrotron at their own universities, they may not be familiar with what you can do with a synchrotron. So, they will be able to learn about how it can be used to help determine things like the colours of dinosaur feathers, and seeing structures that would otherwise be invisible. You can look at details of fossils that you couldn't find any other way."

Cuggy said the province has a long history of attracting paleontologists, who have flocked here for more than a century to find fossils, with the Mosasaur model on display in the Geology Building an exact replica of the 75-million-year-old Cretaceous creature found near the Gardiner Dam at Lake Diefenbaker back in the 1960s.

While Alberta's heller region garners most of the attention as a hub for fossil finds, Cuggy said the Cypress Hills area in southwestern Saskatchewan also has some of the richest deposits in North America.

"Probably the most significant finds in the province are in the Cypress Hills area, with fossil mammals from shortly after the extinction of the dinosaurs," he said. "From about 50 million to 30 million years ago, we have the best collections of fossil mammals in the

country, and they have been studied for well over a hundred years by people from all across the country. So, Saskatchewan is one of the best places in North America to look at early mammal evolution." ■



50th Anniversary Lecture Series 2018-19 **ARCHAEOLOGY AND ANTHROPOLOGY** IN AN ERA OF ENGAGEMENT **AND RECONCILIATION** 

SEPT. 27, 2018, 4:30-6PM, ARTS 102

An Imperative to Cure: Engaging Indigenous "Medicine" Through Collaborative Ethnographic Research with Q'eqchi' Maya Healers in Belize

DR. JAMES B. WALDRAM, PhD Professor, Archaeology and Anthropology

OCT. 18, 2018, 4:30-6PM, ESB 18

Engaging the Past in New Ways: Tales from Filming APTN's TV Series "Wild Archaeology"

DR. RUDY REIMER/YUMKS, PhD Associate Professor, Archaeology and First Nations Studies

and Indigenous Research Institute, Simon Fraser University

OCT. 19, 2018 1:30-3PM, STATION 20 WEST, 1120 - 20TH STREET WEST

Why Archaeology Matters: The "Wild Archaeology Experience"

DR. RUDY REIMER/YUMKS, PhD

NOV. 8, 2018, 4:30-6PM, ARTS 102

Cultural Politics of Energy: Community-Engaged Environmental Anthropology in Canada's Tar Sands

DR. CLINTON WESTMAN, PhD Associate Professor, Archaeology and Anthropology

#### LECTURE 4:

JAN. 10, 2019, 4:30-6PM, ESB 18

Reverse Ethnography: Decolonizing Approaches to Anthropological Research

DR. MARGARET BRUCHAC, PhD University of Pennsylvania

FEB. 7, 2019, 4:30-6PM, ARTS 102

Archaeology as Reconciliation: Community-Based Heritage Projects

DR. TERRY CLARK, PhD Assistant Professor, Archaeology and Anthropology







Joel Pollak is beginning his first year of classes in the College of Engineering.

**SUBMITTED** 

# Schulich scholars set to study at U of S

**A JAMES SHEWAGA** 

For Vaidehee Lanke and Joel Pollak, their summers spent at the University of Saskatchewan were among their most memorable experiences during their high school years.

Being awarded Schulich Leader Scholarships has helped bring them back to campus this fall.

The two first-year U of S students are among 50 from across the country who were selected this year to receive the prestigious Schulich scholarships, awarded annually to graduating high school students enrolling in STEM (Science, Technology, Engineering and Mathematics) programs in university.

Lanke, a graduate of Saskatoon's Aden Bowman Collegiate, has received \$80,000 over four years to study science at the U of S.

"This is something that I am very grateful for," said Lanke, who had an outstanding 97.7 per cent academic average in her final year of high school, earning the Governor

General's Academic Medal, an International Baccalaureate Learner Profile Award and the Grade 12 Proficiency Award for highest average. "A university education is something that I always wanted to pursue, but there is a huge financial cost to it and knowing that financial support is there is something that I am very grateful for. But in addition, Schulich also offers internships and support and guidance and opportunities and that is also something that I am very excited to explore.

"And coming to the U of S equally excites me because their combination of programs really interests me and I really like the interdisciplinary nature of the research programs."

During her time in school, Lanke co-founded Saskatoon's first Speakers Bureau, a youth group supported by Plan International Canada to create gender equality solutions, and was a regular participant in city and provincial science fairs. It was during a science fair that Lanke met professor Troy Harkness in the College of Medicine and was invited to take part in a U of S student research internship in the summer of 2015. Lanke worked with Harkness and his team on a Canadian Cancer Society-funded research project into multiple drug resistance in breast cancer chemotherapy.

"My experience was wonderful and not only did I get hands-on research experience and worked in the lab for two months, but I also was able to see how the scientific process works," said Lanke, who turns 18 this month. "Every week we would analyse our results and then discuss where we are going to go from there. And one of the most insightful parts of this experience was I actually got to see cancer cells growing because I would culture them every week and it was fascinating how fast they would grow.

"What really drew me to his lab is also what intrigues me about science and its power to solve problems. If we ask questions, we can figure out not only the answers, but also have a greater understanding of our world. So, the idea of researching big problems is very intriguing to me."

Like Lanke, Pollak's positive experience on campus in the summer of 2016 proved to be a key factor in choosing to come back to the U of S, where he took part in the SHAD month-long program to sample science, technology, engineering, arts and math learning opportunities at Canadian universities.

"I wanted to come to the U of S because in 2016 I attended SHAD there, so I got to see the campus and I loved the campus and I loved the people I met and I was just really impressed with all the facilities," said Pollak, a 19-year-old graduate of Blyth Academy in Waterloo, Ont.,

who has been awarded \$100,000 over four years to study engineering at the U of S. "I walked away really happy from my experience at SHAD at the U of S. And the Schulich scholarship gave me the chance to go back there, so I'm very grateful."

Pollak said the scholarship will also afford him the opportunity to dabble in courses outside of the College of Engineering curriculum, something he is anxious to take advantage of.

"It gives me the freedom to try courses that I otherwise wouldn't, so I am able to take biology, for example, and explore other areas outside of engineering that interest me," said Pollak, an accomplished student who was also a finalist for the Prime Minister's Youth Council advisory board created by Prime Minister Justin Trudeau in 2016. "So now I am able to take more risks academically, which is one of the great things about the Schulich scholarship." ■

# Schulich recipient relished time on campus

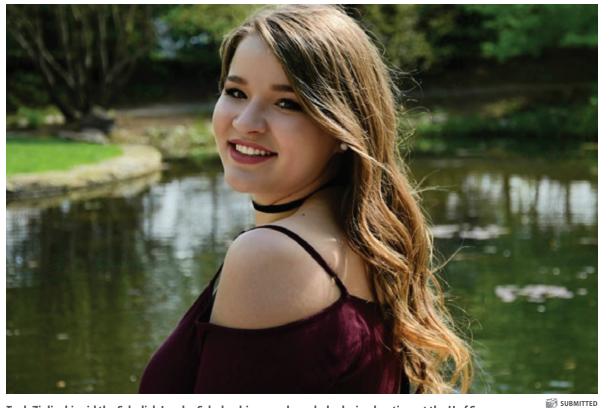
Teah Zielinski didn't know quite what to expect when she first came to campus in 2014.

But with the support of a Schulich Leader Scholarship, Zielinski thrived in her four years at the University of Saskatchewan, capped off by earning a Bachelor of Science in Engineering (Civil) with Distinction at Spring Convocation in June.

"It was great to see all of my hard work pay off, and to have something tangible to represent it was really exciting," said Zielinski, who was awarded an \$80,000 Schulich scholarship in 2014 to study engineering. "I truly enjoyed my four years at the U of S and I am glad that I chose to study there. It's a great university with a beautiful campus. As an engineering student, I spent a lot of time studying there, so having a beautiful campus definitely helped because it made it much more enjoyable to be on campus."

Zielinski was one of 40 high school students from across the country-including fellow U of S student Tushita Patel—who earned a Schulich scholarship in 2014, a prestigious award that covered all of her costs for tuition and books, and also provided a significant boost of confidence as she began post-secondary studies after graduating from Marion Graham Collegiate in Saskatoon.

"It relieved a ton of financial pressure, and receiving the scholarship provided a huge relief," said Zielinski, an accomplished athlete,



Teah Zielinski said the Schulich Leader Scholarship was a huge help during her time at the U of S.

dancer and musician who also won

the Saskatoon Public School Division

Proficiency Award for the highest

academic average in each of her four

years at Marion Graham. "And by

taking off that financial pressure,

it allowed me to fully focus on my

academics, without the distraction of

working outside of school in order to

nitely increased my confidence in

"The scholarship also defi-

support earning my degree.

being a leader in your community is a big part of the scholarship. So, it provided a big boost of confidence for me in terms of my ability to lead."

Zielinski said a big part of her university experience was the camaraderie within engineering, as well as with other Schulich scholars across campus.

"What stood out for me was the Schulich community that we had on campus. There were 10 of us Schulich scholars during my time there and

we went to events together and hung out together outside of school, so that was really great," she said. "We got to meet other Schulich leaders from different campuses, which was really neat and it strengthened our group's bond."

After graduating, the 22-yearold Zielinski wasted no time in putting her degree to use, joining Graham Construction as a project co-ordinator.

"Now that I am working in the

field of engineering, I realize how useful a lot of my classes were," she said. "Especially some of my classes in third and fourth year. We did a lot of design work and design projects which have been very helpful. I am using a lot of what I learnt in those classes now, so I have developed an appreciation for those experiences.

"We also took RCM (Rhetorical Communication) classes which taught me how to make an effective cover letter and resume. These classes strengthened my ability to communicate effectively and that has helped me in the work that I am doing now. I still have a lot to learn now that I am in the work force, but university taught me not only how to learn, but how to work. It gave me a strong work ethic that will continue to benefit me now that I have graduated."

As for potential future Schulich scholars, Zielinski's message is

"The advice I would pass on to high school students coming to the U of S is, if they are interested in the scholarship at all, go for it," she said. "It has been an amazing experience being able to develop this community of leaders on campus and it has also taught me how important it is to be involved in your community. So, put yourself out there and get involved. I can't imagine how my university experience would have gone otherwise, and I am very thankful that I was able to earn the scholarship." ■

my ability to be a leader. I think that USASK ALUMNI Neekena



A closeup look at the research team's new instrument, the Jackfish SEC Spectroelectrochemical Cell.



From left: Tyler Morhart, Jessica Sigrist and Ian Burgess with the Jackfish SEC Spectroelectrochemical Cell.

# Students partner with professor for chemistry startup

**CHRIS PUTNAM** 

A tool developed for specialized research in the College of Arts and Science is being adopted by scientists around the world through a new commercial venture by its inventors in the Department of Chemistry.

In February, professor Ian Burgess and PhD candidates Jessica Sigrist and Tyler Morhart co-founded Jackfish SEC Manufacturing to bring to market a product called a spectroelectrochemical (SEC) cell.

"All that is, in layman's terms, is a piece of elaborate glassware and machined pieces which allow scientists to do experiments that otherwise they wouldn't be able to do," said Burgess.

SEC cells are needed for the research technique known as ATR-SEIRAS, a non-destructive way of studying chemical processes on the surfaces of metals using light. It is a valuable method in the field of electrochemistry, with applications in consumer electronics, next-generation energy solutions, and medical diagnostics.

But until recently, the barrier to entry of using ATR-SEIRAS was daunting. Building a working cell requires such specialized knowledge that no manufacturer of scientific instruments offered an off-the-shelf solution. Researchers such as those in Burgess's group had to construct their own cells based on descriptions in scientific papers—a challenging prospect even for an expert.

"If you were following the literature, you would have to do what we did and spend basically years ironing out all kinds of different bugs and issues ... to finally get to the point that you can have an experiment where you can say, 'We're confident in this. This works," said Morhart.

The University of Saskatchewan team had the advantage of access to the Department of Chemistry's on-site scientific glassblower Rick Elvin and skilled machinists

in the Physics Machine Shop, who worked closely with the researchers as they refined their SEC cell over several years.

With the latest revision of the device, they knew they had something special: a simple and robust cell that worked consistently. But the team didn't seriously consider the commercial possibilities until Burgess had a chance meeting in British Columbia with Jenni Briggs, marketing and applications engineer for American scientific instrument manufacturer PIKE Technologies.

"I told her that we had made a spectroelectrochemical cell that mounts directly to their accessory, and she was super excited," said Burgess.

"I said, 'Maybe you should think about making them," Briggs recalled.

It was the start of a "good synergistic collaboration," said Briggs. "We had the distribution, they had

the know-how, and they had a really nice cell with some really innovative features to it."

Burgess, Morhart and Sigrist decided to take the leap as equal partners in a technology startup, but they needed help.

"We approached this as scientists. We had no idea how to run a business," said Sigrist.

They found a wellspring of advice next door from associate professor Stephen Foley, who recently launched a company to commercialize his research team's gold recycling process.

The university's Innovation Enterprise office offered support, along with the entrepreneurial minds in the Edwards School of Business. Lee Swanson, associate professor of management and marketing, challenged a class of his MBA students to develop potential business plans for Jackfish SEC.

"It was a really good experi-

ence," said Sigrist. "They peppered me with questions, and in the end, they came up with these ideas for different models that we could use to take our business in whatever direction we wanted to take it."

Jackfish SEC is now actively producing SEC cells for PIKE Technologies. The cells are manufactured in small batches on campus through contracts with the Physics Machine Shop and the glassblowing laboratory. The first cells have been sold to researchers in Asia, Europe and the United States, and the product has generated a lot of interest from scientists who want to spend more time doing research and less time tinkering with equipment.

"From a science standpoint, it helps to accelerate their research," said Briggs.

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

# Alumni activities offer something for everyone

**ESLIE-ANN SCHLOSSER** 

From Sept. 20-22, the University of Saskatchewan campus will be abuzz with alumni returning to their roots for Alumni Weekend 2018.

The weekend is a chance for everyone—not only alumni—to come back to campus and experience a packed weekend of activities planned to bring together U of S graduates from around the world.

The challenge will be taking in everything that Alumni Weekend has to offer. Overwhelmed with the abundance of opportunities that await? Not to worry. Here are the top five things you should check out:

Take in the tours: Much has changed at the U of S since the establishment of the Alumni Association over 100 years ago. See what's new and rediscover what remains the same on campus, with tours of the Canadian Light Source, Patterson Garden Arboretum, Merlis Belsher Place and other hidden gems on the most beautiful campus in Canada.

Acknowledge your dynasty: A Golden Grad ceremony on Saturday,



Sept. 22 will celebrate graduates from 1967 and earlier. Alumni celebrating 50 years (or more) since convocation will be presented an honorary certificate to commemorate the milestone.

Cheer on your Huskies: What would a party in Saskatchewan be without a football game? Cheer on your favourite team Friday, Sept. 21, as they take on the University of Regina Rams and kick off the celebration with a pre-party in the Bowl. Festivities begin at 4 pm, with

great food and drinks.

Celebrate vour alumni family: The 40th annual Alumni Achievement Awards on Thursday, Sept. 20 will recognize eight accomplished alumni who have graduated from the U of S and gone on to do amazing things. From legendary athletes to an international research expert, a philanthropic pair of doctors to a provincial court judge, this year's diverse group of Alumni Achievement Award winners embody

what it means to be dedicated and committed to one's profession and community.

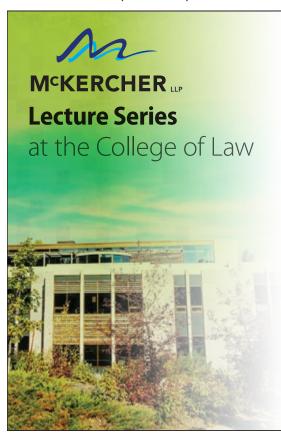
Learn a thing or two: Be prepared to gain a wealth of knowledge from two of the leading researchers on campus. Dr. Ivar Mendez, a clinician/scientist in functional neurosurgery, brain

repair, stem cells and remote presence robotic technology, will deliver his USask Talks presentation on the morning of Saturday, Sept. 22. Jay Famiglietti, director of the U of S Global Institute for Water Security and Canada 150 Research Chair in Hydrology and Remote Sensing, will give his USask Talks lecture that afternoon.

That is just skimming the surface. There are many more things to check out, with the Edwards School of Business also celebrating 100 years with a full schedule, along with the Department of Computer Science hosting a number of events throughout the weekend to celebrate its 50th anniversary. ■

Leslie-Ann Schlosser is editor of the Green and White magazine and communications specialist in Alumni Relations.

For the full schedule of events, visit alumni.usask.ca/alumniweekend.



### **CRONKITE MEMORIAL LECTURE IN PUBLIC LAW**



### DICK POUND, CC, OQ, QC

Senior member of the International Olympic Committee (IOC) Founding chairman of the World Anti Doping Agency (WADA)

**MONDAY, SEPT. 17, 2018** 

7PM, CONVOCATION HALL, PETER MACKINNON BUILDING, U OF S

This event is free, however pre-registration is required at poundlecture.eventbrite.ca

### **UPCOMING LECTURES**

#### September 24

#### **Pipeline and Politics: The Trans Mountain Controversy**

Devon Page (Eco Justice), Dwight Newman (UofS) Moderator: Jason McLean (UofS)

12pm | MLT Aikins Lecture Theatre (Room 150), College of Law, University of Saskatchewan

#### October 3

#### **Heald Lecture in Administrative Law: Developments in Prison Law**

The Honourable Kim Pate, Senator

12pm | MLT Aikins Lecture Theatre (Room 150), College of Law, University of Saskatchewan



UNIVERSITY OF SASKATCHEWAN College of Law LAW USASK CA

# **Religion and Sport: Examining redemption and the Roughriders**

*⊘* JAMES SHEWAGA

It didn't take long for Chris Hrynkow to discover just how passionate people in this province are for their beloved Saskatchewan Roughriders, after he moved here from Winnipeg back in 2011.

"The first weekend that I moved here was Labour Day weekend and I went to church and the priest was talking in his homily about the Roughriders," said Hrynkow, an associate professor of religious studies in St. Thomas More College at the University of Saskatchewan.

"(Former Roughrider) Glen Suitor said it's not just a team, it's not just a game, it's a way of life. And if you didn't know that he was talking about football, you'd think it was a statement about religion."

Hrynkow explores the similarities and connections between sport and religion, the devotion of fans and fanatics, the expression of religious traditions in sport, and even arguments for considering the Roughriders a religion of sorts, in his Religious Studies 229 class: Religion and Sport, one of the unique courses on campus.

"I'll tell you why we teach it: In religious studies we study the world's major religions like Islam, Christianity, Judaism, Buddhism," he said. "But there is also this idea that other things function like religions, like a civil religion, and this is a perfect example.

"The interesting thing is curling is actually the official sport of Saskatchewan. But if that is the official sport, are the Roughriders the unofficial religion of the province?"

From faith and devotion to suffering and redemption, to making the pilgrimage to Regina's Mosaic Stadium from all corners of the province to watch games, Hrynkow



Chris Hrynkow is an associate professor of religious studies in St. Thomas More College at the U of S.

**IMAGE SHEWAGA** 

said there are many parallels between sport and religion, particularly when discussing the dedicated face-painting, jersey-wearing masses who make up "Rider Nation."

"Something that religion and sport scholarship talks about is looking at sporting venues as cathedrals," said Hrynkow, who received the St. Thomas More Teaching Excellence Award for the 2017-18 academic year. "If you came here from another country on a game day and you didn't know where the team was based, you could just follow people from all across the province going down to Regina to watch the game. It's a pilgrimage for

them and it's like a cathedral for the most ardent fans. It's a case of total identity and similar to religious services."

So what powers the passion that makes Rider fans unique? While the CFL club has won two of the last 11 Grey Cups and now out-sells all other teams in the league combined in merchandising, it wasn't always that way. Much like the boomor-bust economic history of the province, the team has also suffered through lean years, winning only one Grey Cup in its first 65 years and missing the playoffs every year from 1977 to 1987.

The rallying cry of "Rider Pride"

was coined during a 1979 fundraising campaign, with province-wide telethons also held in the 1980s and 1990s to keep the team afloat. Hrynkow said it's that passionate community connection that has kept the team alive, with the Roughriders one of the last community-owned professional franchises in North America, operating in the secondsmallest major pro sports market.

"They had to have telethons just to save the team and that is very similar to religious fundraising and the idea that you phone in and testify and give your money," he said. "People who are outsiders, they don't understand why this is

so important. But it's about identity and total commitment and faith in your community and faith in your team. It's about everything you want Saskatchewan to be."

Hrynkow said it is during those tough times, for both the team and the province, that the fans' faith is tested—and later rewarded another parallel between religion and the Riders.

"It's a problematic part of that Christian background in particular, that idea that suffering is worth it because it will pay off in the end," he said. "When it comes to Rider fans, all that suffering in the losing seasons is worth it because of what they stand for. The people don't give up and they have faith that it will eventually pay off. It pushes it to the spiritual and religious end of the spectrum."

And a Rider fan is a fan for life—and beyond, apparently.

"There is a funeral home in Regina, and they have a whole package where you get buried in a Riders jersey with the full Riders treatment," said Hrynkow. "So, for some people, religion and sport serve as a total identity."

Which brings us back to that first church service Hrynkow attended years ago, when the priest preached about the Roughriders, rather than the resurrection.

"That is the really interesting thing because there are a lot of religious leaders, ministers and priests, who are huge Rider fans, too," he said. "There are a couple of groups of nuns in Saskatchewan who are super committed Rider fans and they say things like 'we pray for the Riders to win' and I am certain that they are very dedicated religious sisters as well. But on game day, they are all about the Riders." ■



**UPCOMING HUSKIE ATHLETICS ACTION AT THE U OF S:** 

FRIDAY, SEPTEMBER 14

Football: vs. Calgary, at Griffiths Stadium (7pm)

**SATURDAY, SEPTEMBER 15** 

Men's soccer: vs. UBC, at Nutrien Park (noon)

**SUNDAY, SEPTEMBER 16** 

Men's soccer: vs. UNBC, at Nutrien Park (noon)

FRIDAY, SEPTEMBER 21

Football: vs. Regina, at Griffiths Stadium (7pm)

**SATURDAY, SEPTEMBER 22** 

Women's soccer: vs. Alberta, at Nutrien Park (noon)

**SUNDAY, SEPTEMBER 23** 

Women's soccer: vs. Mount Royal, at Nutrien Park (noon)

**SATURDAY, SEPTEMBER 29** 

Men's/women's cross country: Host Sled Dog Open

FRIDAY, OCTOBER 5

Women's hockey: vs. Alberta, at Merlis Belsher Place (7pm)

**SATURDAY, OCTOBER 6** 

Women's soccer: vs. Regina, at Nutrien Park (noon)

Women's hockey: vs. Alberta, at Merlis Belsher Place (7pm)

FRIDAY, OCTOBER 12

Men's hockey: vs. Calgary, at Merlis Belsher Place (7pm)

**SATURDAY, OCTOBER 13** 

Women's soccer: vs. UBC, at Nutrien Park (noon)

Men's hockey: vs. Calgary, at Merlis Belsher Place (7pm)

**SUNDAY, OCTOBER 14** 

Women's soccer: vs. Victoria, at Nutrien Park (noon)

# U of S to pay tribute to Towriss

*⊘* JAMES SHEWAGA

The spotlight will shine on the winningest coach in Canadian university football history this weekend.

The University of Saskatchewan and Huskie Athletics will honour long-time former football coach Brian Towriss prior to kickoff when the Huskies face the Calgary Dinos on Friday, Sept. 14 at Griffiths Stadium in Nutrien Park. Towriss served as Huskies head coach for 33 years from 1984-2016, guiding the team to three Vanier Cup national championships and setting the U Sports record for most victories (196) and most games coached (315).

"We are excited to pay tribute to Coach Towriss and to show our appreciation for all that he did for Huskie Athletics and for the University of Saskatchewan," said U of S President Peter Stoicheff. "His record of success helped raise the profile of our university across the country, but perhaps his most important contribution was his mentorship of superb student-athletes, and of individuals who have gone on to become outstanding leaders in the community as well. It is our great privilege to celebrate his legacy."

Stoicheff will be joined by



Former Huskies football coach Brian Towriss will be honoured by the university on Friday, Sept. 14 at Griffiths Stadium.

**SUBMITTED** 

Shawn Burt, chief athletics officer of Huskie Athletics, and Rylan Hunter, president of the Huskies Football Alumni Club, in the homecoming game ceremony. The night will feature a special announcement and commemorative items for fans in attendance.

"We are extremely proud to honour Brian Towriss for his remarkable record of achievement and his contributions to Huskie Athletics that spanned more than three decades of excellence," said Burt. "While Coach Towriss' success

preceded my time here on campus, his reputation was well-known across Canada for putting Huskies football into the national conversation year after year, and building the program into one of the most successful in the country. We're forever grateful for his contributions to Huskies football."

A nine-time Canada West conference coach of the year, Towriss was inducted into the Canadian Football Hall of Fame in 2017 and was awarded the Saskatchewan Order of Merit in 2007. A product of Moose Jaw, Sask., Towriss played

four years for the Huskies while earning a commerce degree before moving into the coaching ranks. Towriss coached 71 All-Canadians, 154 league all-stars and 47 players who went on to play professionally in the Canadian Football League, including current Huskies head coach Scott Flory.

"BT was instrumental in not only my career, but many others, and not only in football in this city, but in the province and across the country," said Flory, a former Huskies all-star who went on to play 15 seasons in the CFL with the Montreal Alouettes before returning to the U of S to coach. "He is a remarkable man and a trusted friend and mentor, and I am forever indebted."

Unfortunately for Flory, he will miss tonight's game, but for a very good reason, as he is also inducted into the Football Hall of Fame in Hamilton, Ont. Flory will be back to take part in the Sept. 15 "Thanks to BT" celebration being hosted by Huskies football alumni at the Saskatoon Field House. Former Saskatchewan Premier Brad Wall will serve as the honorary chair and TSN sportscaster Darren Dutchyshen the master of ceremonies of that event, which will also honour the 20th anniversary of the Huskies' 1998 Vanier Cup championship team. ■

### Bennett set for first season as Huskies coach

Former professional volleyball player Nathan Bennett is preparing for his first season as head coach of the University of Saskatchewan Huskies men's volleyball program.

Bennett joined the Huskies in August as the eighth head coach in the history of the program, after serving as an assistant coach at Thompson Rivers University in Kamloops, B.C., where he worked

with the WolfPack men's and women's volleyball teams.

"In addition to his impressive playing and coaching credentials, he brings an incredibly positive outlook, attitude and vision for our program into the city," said Chief Athletics Officer Shawn Burt.

"Nathan's approach, work ethic and attitude were exactly what we were looking for in the new leader of our men's volleyball program."

Bennett spent two years as head coach of the men's volleyball team at Capilano University in B.C., leading the squad to the league championship title while being named coach of the year. As a player, Bennett won a national championship with the University of Alberta Golden Bears in 1997 and spent 11 years in European

professional leagues between 2001 and 2012.

"My philosophy is built around my core values: trust and honesty, discipline and respect, clarity and consistency, and positivity in failure," said Bennett.

The Huskies open the 2018/19 Canada West conference season on the road on Oct. 19 against the Brandon University Bobcats. ■



### **COMING EVENTS**

#### CONFERENCES

#### **Wicihitowin Aboriginal Engagement**

Oct. 17-18, TCU Place, 35-22nd St. E. The Johnson Shoyama Graduate School of Public Policy is pleased to partner on the fourth annual Wicihitowin Aboriginal Engagement Conference, This year's event will focus on issues concerning Aboriginal engagement and human service delivery. If you're working towards respectful Aboriginal engagement and inclusion within a community-based setting, this event is for you. The conference will provide organizations with resources to authentically engage Aboriginal people as employees and volunteers; support organizations working to incorporate Aboriginal values within program and service delivery settings with the goal of creating culturally respectful organizations; and highlight reconciliation efforts in Saskatoon. Early bird registration: \$200 (deadline Sept. 17). Organizations with eight or more registrants get the early bird price. For more information, visit: afcs.ca/ pages/wicihitowin.html

#### SEMINARS/LECTURES

#### Department of Psychology's monthly colloquium series

The university community and the general public are welcome to attend. For more information, contact Peter Grant at 306-966-6675 or e-mail: peter.grant@usask.ca. Sept. 27, 3-4 pm, Arts 153. U of S professor

Gordon Sarty will give a talk entitled Building Portable MRIs for Astronauts and Behavioral Research. In this seminar, an overview will be given of the technology being developed to build portable MRIs. Working with the Canadian Space Agency will allow an MRI to be used for the first time in space, aimed at imaging muscle and bone in astronauts' ankles in the early 2020s. As we develop the MRI for the space station, we will look for earthbound uses and plan for an MRI in a lunar village.

Oct. 19, 3-4 pm, Arts 153. Chelsea Ekstrand, U of S PhD student, cognition and neuroscience, will give a talk entitled Where Words and Space Collide: The Neural Relationship between Reading and Attention. In this seminar, the relationship between reading and attention in the brain using functional magnetic resonance imaging, in order to extend our understanding of how these two basic processes interact, will be discussed.

#### Philosophy in the Community

7–9 pm, The Refinery, Emmanuel Anglican Church Basement. 609 Dufferin Ave. For more information, visit usask.ca/philosophy/ community

Sept. 14, Professor Emer O'Hagan will give a talk entitled What is Forgiveness? Although we forgive each other, and ourselves, on a regular basis, it can be difficult to explain exactly what forgiveness is. In forgiving we acknowledge but move past a misdeed, we let it go or wipe the slate clean. Philosophers have noted that forgiveness differs from

other ways we can move past a misdeed: by simply forgetting it, excusing it or justifying it. What does forgiveness amount to? In this talk, some of the key philosophical concerns regarding what forgiveness is will be presented, along with an open discussion.

Oct. 19, Derek Postnikoff, Department of Mathematics and Statistics, will present on re-envisioning the liberal arts. For much of history, pursuing higher education meant studying the liberal arts. Many people still endorse this viewpoint, considering liberal arts education to be the bedrock of a democratic society. On the other hand, a growing faction views liberal arts programs as elitist, subversive, and detrimentally impractical, championing vocational and professional training instead. But what exactly are the liberal arts? This talk will consider past, present, and possible meanings of this term, and make several suggestions aimed at reaching a mutually satisfactory understanding of the place of the liberal arts in education.

#### COURSES/WORKSHOPS

#### **Edwards School of Business, Executive Education**

Call 306-966-8686, email execed@edwards. usask.ca or visit edwards.usask.ca/execed Registration is open to the public and all university employees for upcoming programs:

- · Sept. 18, Leadership Essentials for Supervisors – Saskatoon
- Sept. 19, Type and Stress Management –

Saskatoon

- Sept. 24–28, Labour–Management Relations Certificate Program - Saskatoon
- Oct. 1–2, Process Mapping and Process Improvement – Saskatoon
- Oct. 2–30, Leadership Development Program - Saskatoon
- · Oct. 3-4: Analyzing and Improving Office and Service Operations (LEAN Office) -
- Oct. 3–4: Digital & Social Media Strategy and Tactics - Saskatoon
- · Oct. 11-February 16, 2019: Masters Certificate in Project Management – Saskatoon

#### Join in on The Conversation Canada

Faculty members, PhD students and post-doctoral fellows at the U of S have an opportunity to share their expertise and research with a wide audience by contributing articles and commentaries to a new academic newswire. The Conversation Canada. Editor-in-Chief Scott White will be on campus on Oct. 1 to hold workshops on writing for the newswire. You can sign up for 90-minute sessions at 8:30 am, 10:30 am, or 12:30 pm. For more information, contact Sarath Peiris at 306-966-8006 or email sarath.peiris@usask.ca. Reserve a spot at: eventbrite.ca/e/writing-for-the-conversation-canada-with-scott-white-editor-in-chieftickets-49226003301

#### Registration open for conversational language classes fall 2018

Learn, improve, maintain and master your speaking, listening and grammar skills in French, Spanish, Cree, German, Italian, Portuguese and Japanese. Classes limited to 16. Starting the week of September 17. For more information, call 306-966-4355 or 306-966-5539. Register online at: artsandscience.usask.ca/noncredit/languages/ language-schedule.php

Spanish weekender and turista immersions Oct. 12-14, 9 am-5 pm, RJD Williams Building. These courses are ideal for travellers who want to improve and converse with locals. The weekender is for those with little or no Spanish skills, while the turista is for those

who have some Spanish skills (equivalent to Spanish Level 2). Cost: \$330 + GST (includes manual, Friday beverages, Saturday and Sunday lunches). Call 306-966-4355 to register or visit: artsandscience.usask.ca/noncredit/ languages/language-schedule.php.

#### MISCELLANY

#### 2018 Alumni Achievement Awards

Sept. 20, 6-9 pm, Adam Ballroom, Delta Bessborough. The 2018 U of S Alumni Achievement Awards will recognize eight influential alumni who've made an impact in their communities and professions. Join us to celebrate their achievements at the 40th annual Alumni Achievement Award gala, which kicks off Alumni Weekend activities. The Alumni Achievement Awards are presented annually to U of S graduates who advance the reputation of the university and the Alumni Association. Award recipients are chosen for outstanding achievements and innovation; commitment to excellence; community engagement and leadership; and contributions to the social, cultural and economic well-being of society. The U of S Alumni Association Awards were established in 1978. For more information, visit: alumni. usask.ca/get-involved/awards.php#Alumni-AchievementAwards

#### Alumni Weekend 2018

Sept. 21–22, U of S campus. All U of S alumni are invited back to campus to celebrate Alumni Weekend. Join us as we:

- · Learn about U of S research, breakthroughs and discoveries
- Connect with your former classmates and professors
- Celebrate our alumni accomplishments and achievements
- Have questions about this year's Alumni Weekend? Email events@usask.ca or visit: alumni.usask.ca/alumniweekend/index. php to learn more.

Next OCN: Oct. 12, 2018 Deadline: Oct. 1, 2018

## Researchers using blueprint

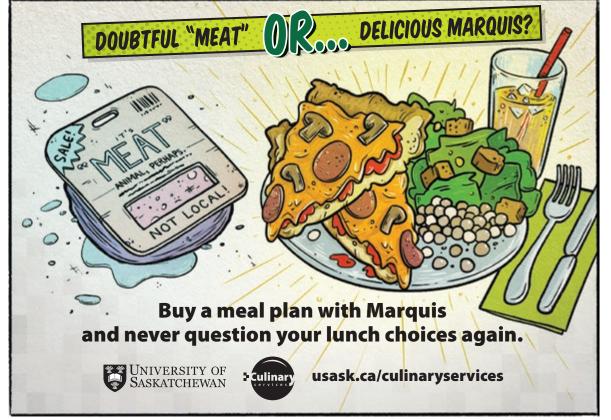
FROM PAGE 2

"By helping with selecting the most optimal plants in a breeding cycle, you end up with better performing cultivars being generated quicker than they were. That's important, particularly in a changing climate," said Sharpe.

Kirby Nilsen, a recent U of S PhD graduate and now an assistant

plant breeder at CDC, is among the first researchers worldwide to use the blueprint to develop pest-resistant wheat crops. He used the genome sequence to identify genes responsible for solid wheat stems, which act as a barrier to sawfly damage. ■

Sarath Peiris is assistant director, Research Profile and Impact, at the U of S.



## Medical school receives international ASPIRE award

*⊘* KATE BLAU

The College of Medicine was recently recognized with a major award at a prestigious international conference.

Dean of Medicine Dr. Preston Smith accepted the ASPIRE-to-Excellence Award in Social Accountability, while attending the 2018 Association for Medical Education in Europe conference in Basel, Switzerland.

"This award provides incredibly significant and valuable feedback on the great work our college is doing across education, research and community engagement to address the most important health concerns of our province," he said. "It tells us that our efforts to engage and support Indigenous and under-served communities, with our partners in government, education, research and health care, are on track."

The award goes to the medical school that has shown international leadership and demonstrated deliberate and sustained efforts to integrate social accountability into

Among the college's significant



Dr. Preston Smith with the 2018 ASPIRE-to-Excellence Award.

social accountability achievements over the past year was the implemen-

tation of the new Diversity and Social Accountability Admissions Program, which reserves six of the 100 seats in the medical doctor degree program for individuals from socioeconomically challenged backgrounds, beginning with the first-year class of 2018/19. All six seats were filled successfully in the first year, with 58 applicants in total.

"We're not surprised to have filled the seats," Smith said. "There are many very qualified individuals who don't have the socioeconomic advantages that are quite common among medical school students. Our medical community should reflect the community we serve and this is an important step in that direction."

The college continues to be a leader in Canada in Indigenous admissions, with 12 self-declared Indigenous students among the 100 first-year students for 2018/19. There is a total of 38 Indigenous students currently in the four-year MD program, and 89 who have graduated.

The college's Division of Social Accountability (DSA) facilitates work in this area and directly leads several key initiatives, like the poverty simulation workshop delivered for the first time in 2018 to first-year medical students, in collaboration with the United Way of Saskatoon, It also co-ordinates and studies student involvement with community-based organizations initiatives, and including the Saskatoon Refugee Health Collaborative, YXE Connects and the Saskatoon Poverty Reduction Partnership.

The division continues to lead the college's successful program, Making the Links Certificate in Global Health, which annually accepts up to 15 students for advanced training in socially accountable care. Training relies on community partnerships and involves students working in the urban core of Saskatoon or Regina, as well as six-week placements in one of four rural Indigenous communities in Saskatchewan, and an advanced six-week practicum in Indigenous health or underserved international populations. Graduates of the program are more likely to stay in Saskatchewan, train in primary care, and work in rural areas. ■

> Kate Blau is a communications specialist in the College of Medicine.

## SHRF supports new program pilot project

covering physical activity, nutritional health, cardio health, growth and development, and psychological health, with the opportunity to talk with doctors, child psychologists and Huskies student-athletes.

"To someone watching the camp, it is just kids having fun," said Erlandson. "But the kids learn important things about cardiovascular health and develop a social network, which is very valuable. The camp provides so much for the families, but it is tough to change behaviour in just one week."

"Once they leave the camp, they have no infrastructure in place to support chronic disease management outside of their regular cardiologist visits," Tomczak said.

Knowing that any significant behavioural change requires more substantive programming, Erlandson and Tomczak secured \$50,000 in funding from the Saskatchewan Health Research Foundation (SHRF) to pilot a longerterm program, one that is expected to run for about four months this fall.

The extended program will bolster all aspects of the week-long camp, but will also feature targeted sessions aimed at improving physical activity, arterial function, cardiopulmonary fitness, body composition, bone health and psychological functioning.

"Part of this program will include sessions for parents so that they can learn about talking with their kids about the condition and managing emotions," said Tomczak, adding that

clinical psychologists from the U of R will run those sessions.

"We will now be able to measure pre- and post-program outcomes," said Erlandson, "and measure if our program is making a difference."

Tomczak said that if they can prove it is effective in improving the health of children with CHD, then they have a foundation for "a permanent model that can be part of health care for kids with CHD. We are not aware of any such programming in Saskatchewan, or even Canada."

"One in a hundred children is born with CHD," said Erlandson. "It is the most common birth defect. By offering chronic disease management for CHD, we are definitely filling a health-care gap in Saskatchewan and beyond." ■



# TIME TRAVE

Pack your bags and set your sights on memory lane, because this year's *On Campus News* back page features landmark moments and events from our storied 110-year history.

Have a particular event you'd like to see featured? Let us know about it at news@usask.ca.

With files from University Archives and Special Collections.



Former U of S President John W.T. Spinks speaks at the official opening ceremony of the Law Building on Sept. 22, 1967. Former Canadian Prime Minister John Diefenbaker is seated fourth from right.







### **SEPTEMBER 1967**

#### LAW/COMMERCE COMPLEX OPENS

The official opening of the university's new Law-Commerce complex took place on Sept. 22, 1967 in a ceremony attended by former Canadian Prime Minister John Diefenbaker, an alumnus of the law program.

The complex, housing two of the university's oldest colleges (law courses began in 1913, accounting classes in 1917), was constructed at a cost of \$2,627,250, with the first classes held in the new facility in 1968. The complex completed the connection to the existing Arts Building, providing indoor pedestrian passage between Arts, Commerce and Law.

One of the highlights of the new Law-Commerce complex was a sculpture by Bill Epp, commissioned in 1968 for \$5,000. A work of steel encased in bronze, situated at the north entrance of the Law Building, the piece stands seven feet high by 10 feet wide and depicts a man and a woman reclining on a bench.

The new law building provided 81,154 square feet of finished space housing 26 offices, 14 seminar rooms and four classrooms including a large 80-seat lecture hall, as well as a library with space for up to 60,000 volumes and seating for 150 students. Renovations and additional classroom and lounge spaces were completed in the basement in 1980, with another major extension added in 2008.

Meanwhile, the new commerce building featured a 125-seat library and 51 office spaces, as well as nine classrooms and five seminar rooms. A two-storey addition to the commerce building, featuring six case study rooms and a 175-foot theatre room, was completed in 2002 at a cost of \$6 million, largely funded by PotashCorp. In 2007, the College of Commerce was renamed the Edwards School of Business, in honour of esteemed alumnus and long-time donor Murray Edwards.

