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A USASK CLASS LIKE NO OTHER

In this special edition of *On Campus News*, we focus on the Class of 2021, a class like no other at the University of Saskatchewan (USask). Never before has a graduating class of students finished their entire final year studying remotely, during the ongoing pandemic. In this issue, we feature a number of these outstanding undergrad and graduate students from a variety of USask colleges and schools. We also feature five remarkable individuals receiving honorary degrees during this year's virtual USask Spring Convocation, with the online celebrations scheduled for May 31 to June 4.

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

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

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USask adopts first Sustainability Strategy

SARATH PEIRIS

The University of Saskatchewan (USask) has adopted its first Sustainability Strategy as a key pillar of guiding what President Peter Stoicheff describes as “unapologetically ambitious and appropriately impatient actions” to become *The University the World Needs*.

“As both a large organization with a lot of infrastructure and, more importantly, a place of learning with an academic and research mission, we can do a lot in support of environmental and other forms of sustainability that other organizations can’t,” Stoicheff said.

“We can train people. We can do research that promotes and makes sustainability possible. We can develop and influence public policy. We graduate people who will become public servants and members of governments, and are part of local and national conversations on this important issue. This is why it’s imperative to be strategic about all of this at our university.”

Informed by the president’s Sustainability Advisory Circle, and



USask President and Vice-Chancellor Peter Stoicheff.

DAVID STOBBE

approved by University Council, the Board of Governors, and—as of April 24—University Senate, the new comprehensive strategy is a major step forward in the president’s commitment to sustainability after being appointed USask president in 2015. In his first address to the university’s General Academic Assembly in 2016, Stoicheff outlined

his vision for the future, noting the foundational walls would be sustainability, connectivity, diversity, and creativity—principles that remain at the heart of the University Plan 2025 to be a globally relevant.

The inaugural sustainability plan commits USask to action on achieving the United Nations’ 17

Sustainable Development Goals (SDG) by 2030, among them zero hunger, good health and well-being, clean water and sanitation, and strong peace and justice institutions. Many of the SDGs align closely with USask’s signature areas of research, including food security, water security, and One Health.

“If I were to boil down the spirit of this whole plan, I would say that it moves the sustainability agenda across every aspect of the university,” said Stoicheff. “If sustainability is to be a pillar of the university, ongoing governance and operational sustainability efforts have to be connected with the whole academic and research side as well, because we are more than a collection of facilities.”

Stoicheff said sustainability needs to be built into a broad spectrum of courses and degrees, and become part of the student experience, with specific support earmarked for sustainability research.

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IN CASE YOU MISSED IT

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

USask in top 100

For the second year in a row, the University of Saskatchewan (USask) ranked in the top 100 overall and higher in select categories in The Times Higher Education (THE) rankings of universities around the world for their social and economic impact, and for taking action to combat climate change and its impacts. USask ranked 13th in Canada for making cities inclusive, safe, resilient, and sustainable, ranked ninth in the country in the Zero Hunger category and placed fifth in the category of Good Health and Well-Being. The 2021 Impact Rankings rated 1,115 universities from 94 countries.

Student satellite

A group of USask students developing the province’s first cube satellite (RADSAT-SK) is getting closer to sending their project into orbit. The student team has successfully completed a critical design review of the satellite with the Canadian Space Agency and the construction of the first satellite-grade clean room in the USask College of Engineering building. The satellite is entirely designed by the student team, with minimal faculty oversight. The satellite is expected to launch in 2022, making it Saskatchewan’s first satellite in space. The team has raised \$100,000 for the project.

New LFCE director

Dr. Scott Wright (PhD) has been named the new director of USask’s Livestock and Forage Centre of Excellence (LFCE), effective May 19. Wright succeeds Dr. Bruce Coulman (PhD), whose last day as interim LFCE director is May 28, enabling a week and a half transition period. Wright’s career started in beef and forage research and he has held numerous leadership positions in agriculture, including executive director of the USask Feeds Innovation Institute and director positions with Agriculture and Agri-Food Canada. Wright obtained his master’s degree in animal science and his PhD in plant breeding from USask.

Cree helping Cree

USask researcher Dr. Holly Graham (PhD) has been awarded \$2.5 million over five years by Public Safety Canada to implement a crime prevention program called *nehiyaw wicihitwin* (Cree helping Cree), using culture as the intervention. The project was initiated by two Elders—Austin Tootoosis of Poundmaker Cree Nation and the late Jacob Pete from Little Pine First Nation. They approached Graham, assistant professor in the College of Nursing and USask’s Indigenous Research Chair in Nursing, to work with them and apply for a federal grant to help address a pressing community problem.

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

USask honours major research award recipients



Dr. Julita Vassileva (PhD)



Dr. Safa Kasap (PhD)



Dr. Steven Rayan (PhD)



Dr. Kerry McPhedran (PhD)

 SARATH PEIRIS, FOR RESEARCH PROFILE AND IMPACT

The University of Saskatchewan (USask) has announced its four major research awards for 2021.

USask's Distinguished Researchers are computer science professor Dr. Julita Vassileva (PhD), internationally recognized to be among the top two per cent of artificial intelligence (AI) and image processing researchers, and Dr. Safa Kasap (PhD), distinguished professor in electrical, computer and biomedical engineering, whose pioneering research to advance X-ray technology has had global impact.

USask's New Researchers Award recipients are Dr. Steven Rayan (PhD), associate professor in mathematics and statistics, internationally recognized for his contributions to the growing field of quantum materials that intersects geometry with physics, and Dr. Kerry McPhedran (PhD), associate professor in civil, geological and environmental engineering, acclaimed for innovative research on wastewater and clean water for Indigenous communities.

The awards are presented annually to faculty and research community members to recognize their significant contributions to

knowledge or artistic creativity.

Vassileva, who has earned accolades for her diverse, prolific, and influential research interests, and passion for improving the underrepresentation of women and minorities in computer science, is "honoured and happy for the huge recognition."

Her groundbreaking research areas include: AI in education and intelligent tutoring that incorporates personalization and user modelling; multi-agent systems that build trust to ensure technology is seen as beneficial, not to be feared, and collaboration in machine-to-machine interactions; designing incentive mechanisms that encourage participation in online communities; and persuasive technology that facilitate behaviour changes that benefit users and their communities.

Vassileva was among the first to publish papers in the growing field of adaptive hypermedia, where hyperlinks offered to a user are based on a model of that person's preferences, goals and knowledge. She was awarded the College of Arts

and Science Distinguished Scientist Award last year. She has supervised 50 graduate students, and was awarded USask's Distinguished Graduate Supervisor Award in 2014.

Vassileva was recognized in 2015 with a Saskatoon YWCA's Women of Distinction Award for science and technology. The "Science Ambassador" program she initiated as Natural Sciences and Engineering Research Council/Cameco Chair of Women in Science and Engineering for the Prairie Region today reaches 2,000 children in six remote northern communities annually.

• "I'm delighted to be recognized, especially because it's a university award. I love working here," said Kasap, whose research since joining USask in 1986 to enhance the electrical properties of selenium (Se) for use in medical X-ray imaging has revolutionized the field. His work on direct conversion flat panel X-ray imaging detectors has led to the use of these detectors in mammography and tomosynthesis. The research involved 25 years of collaboration with Analogic Canada and Dr. John Rowlands (PhD) at the University of Toronto.

About 70 per cent of mammog-

raphy machines today use Se detectors, whose superior resolution and greater sensitivity are improving cancer detection rates and reducing radiation doses received by patients.

Kasap has trained 25 post-doctoral fellows and five research associates. In 2012, he was awarded the Institute of Electrical and Electronics Engineers' J.M. Ham Medal, Outstanding Educator Award. He is a Fellow of the Royal Society of Canada and a Life-Fellow of IEEE.

• "I am humbled by this award, and thankful for the unwavering support that the university has offered me as I developed my research program," said Rayan.

He is lauded as a collaborative researcher and mentor by USask colleagues and students, and is respected by prominent international scholars as a visionary mathematician at the forefront of geometry and quantum materials research. He was recognized by the College of Arts and Science with a New Teacher Award in 2018, and by the University of Saskatchewan Students' Union with a Teaching Excellence Award in 2017.


Among Rayan's far-reaching initiatives has been establishing the interdisciplinary Centre for Quantum Topology and Its Appli-

cations (quanTA), where he serves as founding director. QuanTA is helping to advance a new generation of quantum innovations including quantum computing and novel energy-efficient technologies, and aligns USask with the federal government's push to make quantum material innovation a national priority.

At the invitation of Canadian Science Policy Centre, Rayan wrote an article on quantum innovation as a scientific grand challenge for Canada in the next decade, which was published in the November 2020 Canadian Science Policy Magazine alongside submissions by Dr. David Suzuki (PhD) and other prominent intellectuals.

• "This recognition is very exciting," said McPhedran, "and I want to stress that it wouldn't be possible without my excellent research collaborators, partners and students."

His most significant recent research contribution has been a project co-developed and co-led with USask toxicologists to monitor COVID-19 viruses in Saskatoon wastewater and project upcoming surges of infection so that health officials and citizens alike can be prepared. Wastewater surveillance can also provide information on such things as opiate-related surges and health-related micropollutants.

McPhedran was named Centennial Enhancement Chair in Water Stewardship for Indigenous Communities in 2018, and provides strong research leadership that not only contributes to improving access to safe drinking water on First Nations, but is community-centred and respectfully done as a true partnership. McPhedran is also recognized as an outstanding mentor and trainer of highly qualified personnel, and highly regarded in Canada and abroad for numerous papers in high-impact journals. 

Sarath Peiris is a former USask communications specialist and Saskatoon-based freelance writer.

Celebration of Teaching

Here are the 2021 recipients of the University of Saskatchewan (USask) teaching awards. The award winners were announced at the Celebration of Teaching event in April, hosted by the Gwenna Moss Centre for Teaching and Learning.

PROVOST'S COLLEGE AWARDS FOR OUTSTANDING TEACHING



DR. RANDY KUTCHER (PHD)
COLLEGE OF AGRICULTURE
AND BIORESOURCES



DR. ULRICH TEUCHER (PHD)
DEPARTMENT OF PSYCHOLOGY,
COLLEGE OF ARTS AND SCIENCE



DR. JORY LONGWORTH (DMD)
COLLEGE OF DENTISTRY



DR. LAUREEN MCINTYRE (PHD)
COLLEGE OF EDUCATION



PROF. BRANDY MACKINTOSH
EDWARDS SCHOOL OF BUSINESS



DR. JOEL FREY (PHD)
COLLEGE OF ENGINEERING



DR. MARK EPP (PHD)
COLLEGE OF KINESIOLOGY



PROF. ROBIN HANSEN
COLLEGE OF LAW



DR. GREG MALIN (MD, PHD)
COLLEGE OF MEDICINE



PROF. PATRICIA KING
COLLEGE OF NURSING



DR. KATELYN HALPAPE (PHARMD)
COLLEGE OF PHARMACY
AND NUTRITION



DR. BRUCE WOBESER (DVM, PHD)
WESTERN COLLEGE
OF VETERINARY MEDICINE

PROVOST'S THEMED AWARDS FOR OUTSTANDING TEACHING

OUTSTANDING NEW TEACHER



DR. SARAH DONKERS (PHD)
SCHOOL OF REHABILITATION SCIENCE,
COLLEGE OF MEDICINE



DR. JOANNE LEOW (PHD)
DEPARTMENT OF ENGLISH,
COLLEGE OF ARTS AND SCIENCE

SUPPORT OF TEACHING AND LEARNING



PROF. LISA KROL
USASK LANGUAGE CENTRE

GRADUATE STUDENT TEACHER



EMMA CHEN
DEPARTMENT OF CURRICULUM STUDIES,
COLLEGE OF EDUCATION

CGPS DISTINGUISHED GRADUATE MENTOR AWARD



DR. JEANETTE LYNES (PHD)
DEPARTMENT OF ENGLISH,
COLLEGE OF ARTS AND SCIENCE

MASTER TEACHER AWARD



DR. LEE SWANSON (EDD)
EDWARDS SCHOOL OF BUSINESS

Dr. Lee Swanson (EdD) has been a professor in management and marketing in the Edwards School Business at the University of Saskatchewan (USask) since 2008. He has become the lead entrepreneurship scholar and teacher and has impacted the curriculum, culture, and outreach of Edwards and has published teaching and research materials that have impacted the teaching of entrepreneurship across universities. His championing of entrepreneurship for more than a decade resulted in his Comm 447 elective being adapted into a core course. He led the development of the university-wide initiative InVenture, to provide opportunities for Edwards students and across campus to engage the entrepreneurship community.

Swanson has built authentic relationships with Indigenous communities, which has impacted greatly on the school and students across the university. Through a Social Sciences and Humanities Research Council-funded project titled *Building Northern Capacity through Aboriginal Entrepreneurship*, Swanson employed and mentored 27 graduate and undergraduate students as they worked with northern Indigenous communities.

Swanson creates a unique learning environment for students, helping them map their lives forward from the classroom into their careers. Life-mapping, as he calls it, involves mentoring students throughout the learning process and for years after and ensuring they have experiential learning opportunities to enhance their skills and networks and test their aspirations. Swanson is regarded as a teacher who impacts the lives of students through mentorship that extends for years after they have taken his class. His students assert that his commitment and personal approach to teaching made their learning positive and transformative.

ALUMNI SPOTLIGHT

Every month in *On Campus News*, we highlight exceptional graduates of the University of Saskatchewan (USask) in our Alumni Spotlight series. In this issue, we profile Dwayne Drescher (BEd'16), who teaches Inuvialuktun to children in Inuvik.

University of Saskatchewan alumnus Dwayne (Adjgالياق) Drescher is a graduate of the Indian Teacher Education Program (ITEP) in the College of Education.



Educator honoured for giving language back to his people

JOHN GRAINGER

At 34 years old, Dwayne (Adjgالياق) Drescher is not exactly a senior citizen. So it's no wonder Drescher was surprised when an Elder gave him the nickname "grandfather."

"I often questioned him why he would say that and he would never answer. He was always very quiet and he would giggle about this," said Drescher, who lives in Inuvik with his wife Deanna and three young daughters.

Finally, one day, the Elder provided the answer.

Drescher's nickname "grandfather" was given because he was named after Freddie Carpenter, who bore the Inuvialuktun name Adjgالياق. Carpenter was a well-known hunter/trapper in the territory who often travelled from Tuktuuyaqtuuq (Tuktoyaktuk) to Ikaariaq (Sachs Harbour) by boat to trap and trade Arctic fox fur.

Dwayne's grandmother knew Freddie Carpenter and gave Dwayne his Inuvialuktun name Adjgالياق (pronounced Uhj-gul-ee-ak), after him.

"The Elder told me I reminded him so much of Adjgالياق (Carpenter), his grandfather, that he would just call me 'Ataataga.'

I felt honoured that he respected my namesake so much, that he nicknamed me his grandfather. I guess what he was saying was that there is no age to wisdom. That's what I took from it. Grandfather was a wise man."

With that trait, no one should be surprised that Drescher, who was born in Fort Smith, N.W.T., and raised in Tuktuuyaqtuuq and Inuvik (Inuvik), was recently presented with a Northwest Territories Ministerial Literacy outstanding education award. The award is given to teachers who contribute greatly to teaching and enhancing literacy in the territory.

Drescher was also the Most Outstanding Graduate in the College of Education during his fall graduation for the bachelor's degree he received with distinction at the University of Saskatchewan (USask). Not only did he excel at the theoretical aspects of education, but now with the practical aspects as well.

Becoming a teacher was a direction the USask alumnus said came naturally to him. After graduating from the Indian Teacher Education Program (ITEP) program at USask, Drescher eventually

moved back to Inuvik to teach reading and writing skills to all ages of elementary school children. He is Inuvialuk and teaches Inuvialuktun, the native language of the area, at East Three School in Inuvik.

Drescher followed the teaching footsteps of his father, who also graduated with a Bachelor of Education in 1998 from USask.

Drescher's Inuvialuktun name Adjgالياق was passed to him from his grandmother, who saw similar traits in him as an infant that Carpenter had shown. The name Adjgالياق translates into English as "created by hands." Where Drescher lives now, the local dialect translates his name into "big hands."

"Now, when people say my name, they look right at my hands to see if they match my name," he said.

Ironically, Drescher really does have large hands. He can palm a basketball.

It was Drescher's father who pointed out that teaching was something that came naturally to him.

"He said to me, 'You know, Dwayne, you've always been a leader. You've always taught people, no matter what you have been doing.

I've seen you teach people how to skateboard. I've seen you teach people how to play hacky sack. It just comes natural to you.'"

Drescher's father laid it out to him, telling him he had a gift with language, and teaching was something that should be nurtured.

"In that moment, I kind of had an epiphany," recalled Drescher. "Knowing that not many people speak the language, I wanted there to be change. I wanted lots of people to start learning the language."

Before long, Drescher embarked on his teaching path through a local college and did a two-month summer program through the University of Alberta, the Canadian Indigenous Languages and Literacy Development Institute, before applying to USask's ITEP program. While he spent the majority of his youth in the Northwest Territories, he spent a year in Saskatoon while his dad was in university, so the USask campus was not foreign to him when he arrived.

After graduation, he started applying for teaching positions. Drescher was eager to get going because it was very important to

him to start teaching his language to his people.

"Just give me a job because I want to teach in my community to my people," he said. "That was always one of my goals—to educate and to inspire my people."

He was urged to not return home until he had experience teaching somewhere else, but the draw back home was too strong. When Drescher did put his signature to the job offer to be a language teacher in Inuvik, he almost felt a sense of relief.

"I felt like I had succeeded. This is what I wanted to do."

After Drescher received the award this winter, he admits to being a little surprised by the recognition.

"I was really humbled because I know of so many educators out there that I think work much harder than I do that without a doubt deserve the award far more than I."

Drescher's reaction to receiving the prestigious award speaks volumes about his passion and maturity far beyond his years—almost like he was a grandfather. ♥

John Grainger is a communications officer in University Relations.

CONVOCATION

CELEBRATION:

In this year's virtual University of Saskatchewan (USask) Spring Convocation celebration from May 31 to June 4, the university will honour more than 3,000 graduating students, and pay tribute to five remarkable individuals by awarding honorary degrees to Maria Campbell, Ed Ratushny, Trevor Herriot, Dr. Bryan Harvey (PhD) and Dr. That Ngo (PhD).

USask President and Vice-Chancellor Peter Stoicheff said he is looking forward to the university recognizing the extraordinary achievements of this year's recipients.

"We are proud to celebrate the impact these honorary degree recipients have made throughout their remarkable careers," said Stoicheff. "Their respective achievements span a broad spectrum of fields and disciplines, and most importantly, they have all been committed to the concept of community and service. We are grateful to have this opportunity to bestow the University of Saskatchewan's highest honour on them during this year's Spring Convocation celebration."

Here is a closer look at this year's recipients:



MARIA CAMPBELL
Honorary Doctor of Letters

She is a celebrated award-winning Métis author, playwright and filmmaker but first and foremost, Elder Maria Campbell prefers to be known as a community worker.

A dedicated volunteer, activist and advocate for Indigenous rights

and the rights of women and children for more than 40 years, Campbell opened doors for Métis writers when she authored her best-selling autobiography, *Half-breed*, in 1973. She has since written eight books and dozens of stage plays, including *Flight*, the first all-Indigenous theatre production in Canadian history and *Jessica*, co-written with Linda Griffiths, which won the Floyd S. Chalmers Award for best new Canadian play and the Dora Mavor Moore Award for Outstanding New Play. She has also been inducted into the Saskatchewan Theatre Hall of Fame.

An inspiration for Indigenous writers across the country, award-winning author, poet and playwright Daniel David Moses has referred to Campbell as "the mother of us all."

Campbell's contributions to community and culture have earned her multiple major awards and accolades, including being made an Officer of the Order of Canada in

2008, receiving the Distinguished Canadian Award in 2006, named to the Saskatchewan Order of Merit in 2005, and selected for a National Aboriginal Achievement Award in 1995. In 2012 she received the Pierre Elliott Trudeau Foundation Fellowship, and in May of this year was awarded the Saskatchewan Lieutenant Governor's Lifetime Achievement Award in the Arts.

For the past 30 years, Campbell has been a mentor for young people, including University of Saskatchewan (USask) students. She is currently the cultural advisor at USask's College of Law and at Athabasca World University. Previously, Campbell was an Indigenous scholar and writer in residence at USask, where she was also a lecturer for seven years and an assistant professor for 10 years in the College of Arts and Science.

Campbell, born in Prince Albert National Park, celebrated her 81st birthday on April 26. She spends her summers at the old Dumont

TREVOR HERRIOT
Honorary Doctor of Letters

An award-winning writer, social justice activist and influential naturalist from Regina, Trevor Herriot is passionate about protecting Canadian grasslands and prairie habitats for future generations.

Herriot earned a bachelor's degree with honours in English from the University of Saskatchewan (USask) in 1979, and was celebrated in 2018 as a distinguished alumnus of St. Thomas More College at USask. A celebrated author, he has received multiple awards, including the prestigious Cheryl and Henry Kloppenburg Award for Literary Excellence in 2017 for his body of acclaimed literary work. His first book, *River in a Dry Land: A Prairie Passage* earned the Saskatchewan Book of the Year Award and several national honours, in addition to being nominated for the Governor General's Award for Non-Fiction.

One of the province's most distinctive literary voices, Herriot has written six books, and has had several essays and articles published in the likes of the *Globe and Mail* and *Canadian Geographic* magazine, as well as in several anthologies. He has produced radio documentaries for the CBC, is a regular guest on media broadcasts, and has appeared in and consulted on video/film documentaries including *The Nature of Things* with David Suzuki.

Herriot has taught creative writing courses at St. Peter's College, led workshops at the Banff Centre, and has served as writer-in-residence at the Roderick Haig-Brown House on Vancouver Island and at

homestead in Batoche, on the banks of the South Saskatchewan River. Campbell speaks three Indigenous languages—Cree, Michif and Saulteaux—and has had her books translated into German, Chinese, French, Italian, Spanish and Catalan. She serves as an Elder on



the Regina Public Library. He is a popular lecturer and speaker, delivering keynote addresses on environmental and cultural topics. A passionate prairie conservationist, *The Walrus* describes Herriot as "the pre-eminent prairie naturalist of his generation."

As a writer of European heritage, Herriot has made it his life's work to discover what it means to be a settler in a place where the land and its Indigenous people continue to suffer under persistent colonialism and racism. He advocates for Indigenous voices to take a central place in all conversations about land use and protection, and is a member of the Treaty Land Sharing Network, a group of settler land stewards beginning the crucial work of honouring the treaties. In his writing and work with Indigenous activists to protect Crown land, he defers to those with experiential and community knowledge, such as Elder Norman Fleury of USask's College of Education, whose voice is heard throughout Herriot's fifth book, *Towards a Prairie Atonement*, telling the story of Ste. Madeleine, a Métis community forced off the land in the 1930s. ♣

the Saskatchewan Aboriginal Justice Commission, and is a founding member of the Grandmothers for Justice Society, a group of Indigenous grandmothers who brought attention to and advocated for an inquiry into the freezing deaths of Indigenous men in Saskatchewan. ♣



THAT NGO
Honorary Doctor of Science

Studying abroad at the University of Saskatchewan (USask) changed everything for Dr. That Ngo (PhD), whose decision to leave Indonesia

in the 1960s opened up a whole new world of opportunity.

Barred from applying to state schools back home in Indonesia by the Suharto regime military dictatorship, Ngo headed overseas to Saskatoon where he would graduate with honours in 1970 and earn his PhD in biochemistry in 1974 at USask. Ngo went on to become a celebrated biochemist, researcher scientist and innovator, serving as president and CEO of a number of companies in Canada, the United States and China, including firms that he founded. Ngo published more than 140 researcher articles, edited seven books, and went on to hold 14 different industry patents.

Ngo was the co-inventor of the Ngo-Lenhoff Assay, a groundbreaking technological procedure that benefits diabetes patients worldwide. The development led to the home-based OneTouch blood glucose test that became the industry standard and is still used by diabetes

patients to this day.

Ngo went on to earn numerous awards and honours, including being named a fellow of the American Institute of Chemistry, the National Academy of Clinical Biochemistry, and the Royal Australian Chemical Institute, as well as earning the Society of Chemical Industry Merit Award. Ngo was named a member of the American Association of Clinical Chemistry, and earned the 1992 Most Innovative Biotechnology Product award by the University of California-San Diego.

In 2016, he was selected one of the College of Arts and Science's Alumni of Influence, and in 2020 received the Honoured Supporter Award from the Saskatoon chapter of the Association of Fundraising Professors. A popular guest speaker, Ngo has delivered numerous national and international lectures.

Now retired and living in California, Ngo continues to open doors for other enterprising students after

establishing the That Ngo Fund for Study Abroad in the College of Arts and Science. Ngo's endowed fund provides financial support for USask students who want to have the chance to experience international learning opportunities, as he did 55 years ago.

Ngo has also become a prolific writer of poetry, newspaper articles

and four cookbooks, in addition to authoring his 2013 memoir titled *Chinese-Indonesia: An Odyssey through Racism, Ethnicity and Science*. The autobiography is his deeply personal account of leaving his home in Indonesia in search of new opportunity in Canada, and finding his future at USask. ♥



BRYAN HARVEY
Honorary Doctor of Science

A world-renowned barley breeder, Dr. Bryan Harvey (PhD) spent four decades contributing to the field of plant science and to the Canadian agriculture economy through his work with the Crop Development Centre (CDC) at the University of Saskatchewan (USask).

During his time at USask starting in 1966 until his retirement in 2005, Harvey bred or co-bred more than 60 varieties of barley, leading pioneering research that benefitted the brewing industry in North America, Latin America, Asia and South Africa. His work contributed significantly to Canada's leading role in world malting barley exports and resulted in hundreds of millions of dollars in trade each year. Two of his barley varieties, Harrington and CDC Copeland, earned Seed of the Year honours in 2009 and 2019, highlighting their importance in the seed industry and to crop production in Canada.

The highly regarded professor emeritus also served as assistant dean of the College of Agriculture, director of the CDC and chair of the Department of Horticulture Science. Harvey later moved into

the Office of the Vice-President Research at USask, serving as co-ordinator of agriculture research, acting vice-president research, and special advisor to the VP-research. Harvey was also the author of eight books and book chapters on cultivar development, and close to 50 refereed journal publications during his prolific career.

Harvey's efforts earned him multiple awards and accolades, including being appointed to the Order of Canada in 2007, recognizing his lifetime of outstanding achievement, dedication to the community, and service to the nation. He was inducted into the Canadian Agricultural Hall of Fame in 2020, and was one of only 57 Saskatchewan residents to receive the Queen Elizabeth II Diamond Jubilee Medal in 2012, awarded in recognition of significant contributions to Canada.

Harvey was inducted into the Saskatchewan Agriculture Hall of Fame in 2006, and received the Saskatchewan Order of Merit in 2005. He earned honorary lifetime memberships from the Saskatchewan, Alberta and Canadian Seed Growers Associations and the Saskatchewan Agricultural Graduates Association, and has received fellowships in the Agricultural Institute of Canada, the Crop Science Society of America, and the American Society of Agronomy.

Harvey earned an Alumni Achievement Award from the USask Alumni Association and an Outstanding Contribution to Industry Award from the Canadian Seed Trade Association and the Master Brewers Association. The Canadian Seed Growers Association presented Harvey with the Clark-Newman-Clayton Award for exceptional contribution to Canadian pedigreed seed production and he received the Presidential Award from the Crop Science Society of America. ♥



ED RATUSHNY
Honorary Doctor of Laws

Professor Ed Ratushny was born and raised in Kamsack, Sask., in a vibrant community 20 minutes from the family cottage at Madge Lake. He describes his childhood as idyllic, playing high school football, curling and basketball, as well as for local senior hockey and baseball teams. He played saxophone in a dance band (including university summers) that covered his university expenses.

He received his Bachelor of Arts in 1964 and law degree in 1965 at the University of Saskatchewan. He articulated and briefly practised law in Saskatoon before pursuing graduate studies and his lifetime career as a professor.

In some respects, his career has been unique in its diversity, but always had the common pattern of extending academic research, writing and expertise beyond the classroom and journals, to provide expert advice and guidance to a broad range of public institutions. He became a trusted advisor to public servants, administrative tribunals, cabinet ministers and Chief Justices from across Canada. In turn, these symbiotic relationships imported broader experience and deeper understanding into Ratushny's classrooms and his related academic writing.

When his USask College of Law Dean, Otto Lang, became Canadian Minister of Justice, he saw the void of any rational process or support structure for assessing the suitability of potential judicial appointees. He created the position of Special Judicial Advisor to the Justice Minister and appointed Ratushny to a role that continues in

Canadian government today.

In 1990, the Canadian Judicial Council retained him regarding the questionable conduct of appellate judges in the matter of the wrongful conviction of Donald Marshall Jr., and Ratushny continued to serve as advisor and counsel regarding federal judicial conduct for more than 25 years. His book on *Self-Incrimination* has been cited frequently by the Supreme Court of Canada and his award-winning book *The Conduct of Public Inquiries* appears frequently in commission reports.

He established one of Canada's first courses on sports law and has acted frequently as an arbitrator in amateur sports issues such as doping. He has contributed significantly to women's hockey development and is a certified NHL hockey agent, and was retained by the NHLPA during its transition from the Alan Eagleson regime.

His professional achievements have been recognized by the Order of Canada, the Order of Ontario, an honorary doctorate from the Ontario Law Society and a variety of other prestigious awards. He has also been the Canadian representative in legal events around the world. ♥

USask graduate values interdisciplinary research



Elizabeth Reid is graduating with a Bachelor of Science double honours degree in computer science and mathematics, and a Bachelor of Music individualized degree in voice.

SUBMITTED

SHANNON BOKLASCHUK

Elizabeth Reid has “always been interested in a lot of things,” including both the arts and science.

That made choosing a single major at the University of Saskatchewan (USask) a difficult task—so she didn’t. Instead, Reid—who opted to pursue two degrees in USask’s College of Arts and Science—is set to graduate during Spring Convo-

cation with a Bachelor of Science double honours degree in computer science and mathematics and a Bachelor of Music individualized degree in voice.

“When I was in Grade 12 and trying to decide what I wanted to study in university, I had quite a hard time narrowing my interests down to choose just one or two subjects.

—I knew that I definitely wanted to pursue music and mathematics, but I had also recently taken a computer science class and really loved it, and I couldn’t envision myself giving it up,” said Reid, who was born in Saskatoon and raised in Yorkton. “As luck would have it, I found some information on the USask website about their second-degree program, which meant that I could do both a BMus and a BSc double honours degree at the same time, which was perfect for me.”

“I’ve always felt like there are a lot of connections between these three areas, though sometimes people find that surprising,” she added. “But really, there is structure to music that can be expressed through mathematics, especially when it comes to music theory and the nature of sound itself. And there are many ways to be creative in both math and computer science, even just by figuring out how to solve interesting problems. So I think it has been very rewarding to study all three areas, and further explore some of the connections between them.” Reid, who first became a USask student in 2015, has excelled throughout her studies. She has made the Dean’s Honour List and received numerous scholarships and awards—the David L. Kaplan Music Scholarship, the James G. and Edith Duthie Memorial Scholarship, the Judy Peachey Memorial Scholarship, and the Linda Carmichael Recognition Award for Women in Computational Sciences—as well as Natural Sciences and Engineering Research Council of Canada undergraduate student research awards in 2018, 2019 and 2020.

In April 2021, Reid was also

honoured with the Best Thesis Prize in Mathematics (Interdisciplinary) from the Department of Mathematics and Statistics. Her thesis was co-supervised by Dr. Steven Rayan (PhD), from the Department of Mathematics and Statistics, and Dr. Jennifer Lang (PhD), from the Department of Music.

“My thesis was about the different ways we can mathematically model the singing voice—basically, how we can either represent what is going on physically when someone sings, like the movement of their vocal folds, or how the sound waves produced during singing can be modelled directly,” Reid said. “These models can be useful for a lot of things, like understanding voice pathologies, as visualization tools for voice pedagogy or even to create sound effects and totally artificial singers. So, it is important to understand how the different types of models work and which are best suited to different modelling tasks.”

Another highlight of Reid’s undergraduate experience was working as a summer research assistant in the lab of Dr. Regan Mandryk (PhD), a faculty member in the Department of Computer Science, in 2018, 2019 and 2020. Reid had the opportunity to work on several projects in the lab related to the field of human-computer interaction (HCI), including one that involved gamifying cognitive psychological tasks.

“Last summer I started working on a project about toxicity in games, specifically how we can use machine-learning techniques to identify toxic behaviour automatically from voice chat data,” Reid

said. “I ended up continuing the toxicity project for my computer science honours research, and just finished writing a paper about that.”

Outside of her busy academic schedule, Reid still found time to perform as a member of the Greystone Singers choir, the Saskatoon Opera chorus, and the USask concert band, as well as to enrol in ballet classes. She is grateful for the guidance and support she received throughout her studies from Rayan, Lang and Mandryk, as well as from her voice instructor, Dr. Garry Gable (DMA), and pianist and vocal coach Kathleen Lohrenz Gable.

“I would say the best part about studying here was being able to pursue all the things I love in a really supportive environment,” said Reid. “I was able to work with great professors and research supervisors, and I met a lot of talented and passionate students who helped to inspire me to do my best.”

After receiving her degrees, Reid plans to continue performing and singing whenever she can. She will also begin a master’s degree in computer science at the University of British Columbia, with a focus on HCI, in the fall.

“I really like interdisciplinary research. There are so many overlaps between different subjects that are just waiting to be explored, and seeing how it all comes together is very rewarding,” she said. “I also believe that you can learn a lot from other disciplines, like new ways to solve problems or think about the world.”

Shannon Boklaschuk is a communications officer in the College of Arts and Science.

Becoming a mom while completing a nursing degree



Yorkton nursing student Veronica Chase with her son Jackson and spouse Dominick.

PHOTO SUBMITTED

BY KYLIE KELSO

“The nursing program is difficult on its own, let alone becoming a first-time mother in the middle of it.”

For Veronica Chase, that has been the challenge she has faced head-on for the past four years.

Chase grew up in a house where her mom was a nurse and her dad was a physician. Working previously in the hospitality industry, she loved making a difference for people and taking care of them. That’s when she decided she wanted to become a nurse.

“Helping people has always been important to me,” said Chase. “I knew I wanted to go to nursing

school, but I was too reluctant to register. Thank goodness my friends decided to apply for me and help me through the registration process, or my university journey would have never begun.”

Chase has just completed her Bachelor of Science in Nursing (BSN) degree through the University of Saskatchewan (USask) nursing program at Parkland College in Yorkton.

During the pre-professional year of university, she found out she was expecting. Her little boy Jackson was born during her first year in the nursing program.

“The nursing program is a challenging one, so I wasn’t sure how everything would turn out,” said Chase. “I had a lot of breakdowns, stress, and exhaustion in school before I had a baby. It was heavily exacerbated having a newborn who was colicky and thought sleep was unnecessary.”

Chase credits the smaller class sizes in Yorkton and her understanding instructors for her ability to complete the nursing program, while becoming a first-time mom.

“It was because of my supportive classmates and instructors that I was able to finish my

degree,” she said. “Jackson was sick a lot and it made for some long nights, but my classmates were always willing to work around my schedule. I remember one night, a classmate came over to study and my son had been crying and unwilling to sleep. I was exhausted, so my classmate held him for the majority of our study session. My instructors were also very understanding and as long as I was transparent about missing class, they would send me the class notes.”

Chase is thankful for the USask Access & Equity Services (AES) program that helped her complete her degree.

“During the last part of my pregnancy and into Jackson’s first eight months, I needed the AES program to help get me through. One day when I was trying to write a final exam, I had to rely on an invigilator, who was set up through AES, to play with him in the room while I wrote my final.”

Although it definitely made her post-secondary experience difficult at times, becoming a mom has helped her think differently as a nursing student.

“I was able to offer a different view in some situations, as I was able to see the family and patient perspective, as I had been a patient only a few months prior. During my obstetrical rotation, I had classmates asking for advice on how to hold newborns or take care of their specific needs. It was nice to be able to facilitate some of my classmates learning, outside of the academic side of things.”

“The USask College of Nursing holds themselves to high standards and the workload in the BSN program is not something to mess

around with,” said Chase. “Luckily, I have a very supportive spouse and friends and family who were able to visit and alleviate some stress for me, while completing my program. Although there was lots of studying and homework, I still managed to find a way to prioritize family time.”

Now that her degree is complete, Chase has to balance being a mom and trying to study for the national licensure exam to become a registered nurse (RN).

“I am not writing until after the summer, as my spouse will be away for work. My full-time job this summer is being a mom to Jackson.”

Once she passes her exam and becomes an RN, Chase hopes to work in community or home care/palliative nursing.

“I cannot say enough about my nursing school experience with the USask College of Nursing through Parkland College,” she said. “It was a great program to make friends, as you all know what you’re going through as students and those friends can support you in ways others cannot. It feels like it’s been a long journey and of course mine was a bit different than others, but my classmates are some of my best friends and I’m so grateful for the opportunity to have completed this program with some of the best future nurses I know!”

Is Chase done with school? She would love to become a nurse educator one day.

“I always enjoyed training in my work places and I think teaching others is a great way to reinforce your own learning.”

Kylie Kelso is a communications officer in USask’s College of Nursing.

Graduating medical student ready to start residency



Regina-based medical student Balsam Arwini is set to graduate at USask's virtual Spring Convocation celebration.

 KRISTEN MCEWEN

Fourth-year Regina-based medical student Balsam Arwini has always been interested in learning about science and advocating on the behalf of others.

As she prepared for Spring Convocation with the University of Saskatchewan (USask) Class of 2021, Arwini reflected on what brought her to the path of medicine.

“Coming to medicine has been

a combination of my interest in science but also seeing how people have been affected by different factors in their lives and improving their quality of life,” she said.

Arwini discovered her love of science and biology in high school and went on to earn a biochemistry degree at the University of Regina. While completing her education, Arwini volunteered in different

communities throughout Regina, and worked with families of victims who have experienced intimate partner violence.

Through working with vulnerable populations, she learned about people's stories and the factors that impacted their day-to-day lives.

“I wanted (a career) that could put those two together,” Arwini said. “At the time, medicine was the

way I wanted to go.”

Initially from Swift Current, Arwini decided to pursue medicine at the USask College of Medicine Regina campus, located at the Regina General Hospital. Studying in the Queen City allowed closer proximity to her family and offered additional opportunities. Each year approximately 40 out of a class of 100 medical students study at the Regina campus.

“I really liked the idea of connecting with a smaller group of people, and the available opportunities for hands on-training and getting to know your preceptors and other health professionals,” she said.

During her first year of medical school, Arwini volunteered with the Student Medical Society of Saskatchewan (SMSS) as one of the class-year representatives.

“You get to know your classmates, you get to advocate for them and get to know the faculty and how the College of Medicine works,” she said.

In Year 2, she took on the role of SMSS Vice-President Academic, which focuses on student interests from an academic point of view, including navigating challenges like changing requirements for students in the medical education program, learning concerns, personal circumstances, and ensuring student voices are heard.

“You get to know where everybody comes from, the different issues that happen in their lives, my classmates would come to me,” Arwini added. “It's a really nice experience to gain their trust and help them as much as I could with my knowledge of how the system

and education works.”

When entering the college, first-year medical students are paired with students in years above them in a peer-to-peer mentorship program.

After her participation in the program as a mentee, Arwini took on the role of mentor throughout her second and third-year.

“Your idea of medical school before coming in, and actually being in medical school, is completely different,” Arwini said. “It's really nice to be able to go through those experiences in Year 2 and 3 as you start being with a mentor, get to know your mentees and their interests.”

As a fourth-year student, she also had the opportunity to mentor learners as they entered their clerkship in Year 3.

“I try to listen and really try to hear where they're coming from and try to offer advice that makes sense,” Arwini said. “I really enjoyed being a mentor and giving back in that sense.”

Arwini looks forward to her upcoming residency with the Department of Obstetrics and Gynecology in Regina and has advice for the incoming cohort of medical students.

“Don't be afraid to try new opportunities or new initiatives,” she said. “You may think you might not be suited for the role, but it will be helpful for you in finding out what physician you want to be and what you want to do, in addition to providing care for patients.”

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

Archer Bell: From reality TV to completing his law degree



After learning Mandarin and becoming a reality TV star in China, Archer Bell is now completing his law degree at USask.

 SARAH TREFAK

On June 2, 2021, Archer Bell will graduate with a Juris Doctor degree from the University of Saskatchewan (USask) College of Law, the culmination of a global academic journey that took him overseas to earn a degree in Mandarin from the University of Xiamen, and featured a return trip to China to become a reality TV star.

Bell began learning the Chinese language when he was 15 years old,

when each Sunday he would go to a local Chinese school for three hours to study.

“I really loved the language,” he explained. “I’ve taken a few different language classes, but Mandarin really stuck.”

During his undergraduate studies at USask, a professor suggested the idea of moving to and studying language in China as a way to become fully fluent in Mandarin.

“I originally applied to go for one year, but I ended up just loving it so much that I stayed and finished the rest of the program,” he said.

Along with focusing on his language studies, Bell taught English to children and worked as a translator and interpreter while in China. He also made an effort to integrate himself in Chinese culture and society as best he could.

“I didn’t want to just be living

there and leading a Western life. I wanted to completely immerse myself and learn.”

Since moving back to Saskatoon, Bell has remained connected to the Chinese community through his involvement with the Confucius Institute at USask, where he served as student club president and helped to organize Chinese language and cultural activities on campus.

Following his first year of law school, Bell was granted the opportunity to travel back to China after qualifying to compete in Chinese Bridge—a popular reality television show in the country. He finished top 10 among 150 students from 122 countries in the competition that tested participants’ knowledge of Chinese language, poetry, history, geography and more.

Bell’s other involvements in law school have included working as a teaching assistant in the legal research and writing course, competing as part of the Kawaskimhon and International Academy of Dispute Resolution moot teams, and participating in the 2020 Global Negotiation Conference where he and his teammates received the top honour of Most Constructive Team.


Bell, along with most other graduating students at USask, completed his final year of studies completely online. While at first he was optimistic things would return to normal within months, he has learned to temper his expectations and make the best out of a less-than-ideal situation.

“I still try to meet with my friends and classmates in as safe a way as possible. The other day we biked downtown and went for a walk down by the river,” he said. “We’ve also held some Zoom parties where we can all get online and chat.”

Due to the closure of the law building in March 2020, Bell is already well aware of what he is going to miss most about law school once he graduates.

“I mean the whole experience, but if I had to pick one thing that I’m really going to miss, it would be the law library,” he said. “I literally spent more time there than I did in my own home. I love that place, and I think that’s a common sentiment across the law school populace.”

“In general I’ve just had such a great experience,” he added. “So many professors have made a really profound impact on my life, especially professors like Michaela Keet who just go above and beyond. I didn’t have that experience in my undergraduate degrees. So many faculty members at the College of Law take the time to connect with students and make it a great experience. I’m going to miss that.”

Bell will move to Calgary in July where he will spend the next year articling at Stikeman Elliott LLP. At the moment, he is still unsure of which area he would like to practice in, but he looks forward to experiencing the wide range of opportunities that await him at the firm. 

Sarah Trefiak is the communications officer in the USask College of Law.

Budding plant scientist thrives in USask PhD program



USask PhD student Zelalem Taye with his family; wife Kalkidan, son Amen, and daughters Haleluya and Barkot.

 BRETT MAKULOWICH

Zelalem Taye studied in Africa, Asia and Europe before making the journey to the University of Saskatchewan (USask) for his PhD.

Taye will officially receive his doctoral degree in Plant Sciences at USask Spring Convocation, celebrated online May 31 to June 4.

Originally from Harar,

Ethiopia, he discovered USask when he saw a PhD vacancy posted by Dr. Eric Lamb (PhD). Lamb was looking for students for his project titled, Linking Soil Microbes to Crop Productivity which is under the Phenotyping the Plant Microbiome theme in the USask Plant Phenotyping and Imaging Research

Centre (P2IRC).

Excited by the project, Taye contacted Lamb, who connected him with current and previous students in his group, to see what the lab experience was like. It was a unique selling point he didn't receive with other potential PhD programs.

"I knew I was in the right place,"

said Taye. "I was looking to match my academic goals with a place where I can raise my young family—only Canada and USask provided that. At USask, there is opportunity for everyone to excel."

Taye made the journey to Canada in 2016, with his wife Kalkidan, son Amen and daughters Haleluya and Barkot joining him later in 2017.

"My international travels throughout my academic journey have shaped my world view and crafted me," said Taye. "I believe this will be my children's experience as well."

He was met with innovative learning methods at USask. Automated Agricultural Analysis, a course led by professors involved with P2IRC, brought together computer science, engineering and plant science students for the first time.

"This collaborative course broke down boundaries among the disciplines and pushed students to find common ground to tackle challenges in agriculture," said Taye.

When the pandemic began, Taye was thrown into remote learning, as a student, teacher and parent. He was a sessional lecturer teaching PLSC 423: Landscape Ecology and Vegetation Management, while writing his thesis and homeschooling his two oldest children during the shutdown.

"My advice for remote learners is to set small goals within the day accompanied by short breaks to help with focus and to differentiate between work and non-work time," said Taye.


In January 2021, Taye successfully defended his PhD thesis, titled Beneficial Plant-Microbe Interaction in Agroecosystems: Deciphering the Rhizosphere Microbial Community in Field Grown Brassica napus L. His research into the rhizosphere bacterial community will provide insights to design new strategies that combine both biocontrol and breeding approaches to address challenges in canola production and other agricultural challenges.

Although unsure about defending his thesis online, Taye's defence went well—very well.

"My PhD thesis defence was one of my best presentation experiences," said Taye.

It was so good that Taye was nominated for a USask PhD Thesis Award. He also received the 2019/20 award for the Outstanding PhD Student in the Department of Plant Sciences, the USask Teacher-Scholar Doctoral Fellowship, and the Saskatchewan Wheat Development Commission Graduate Scholarship.

Currently, Taye is working as a post-doctoral research fellow in the Department of Plant Sciences at USask. His goal is to obtain a faculty position. Taye's academic journey has taken him across the globe and to his new home in Canada.

"I am grateful for Canada and for one of the best universities in agriculture—the University of Saskatchewan." 

Brett Makulowich is a communications co-ordinator in the College of Agriculture and Bioresources.

Kanawayihetaytan Askiy graduate supports First Nation communities' land management



Graduating College of Agriculture and Bioresources student Robby Bear collects soil samples for his ecology class.

 BRETT MAKULOWICH

Robby Bear is graduating at Spring Convocation with the Kanawayihetaytan Askiy Certificate from the College of Agriculture and Bioresources at the University of Saskatchewan (USask).

Kanawayihetaytan Askiy

means “let us take care of the land” in Cree. The program examines environmental, legal and economic aspects of land and resource management in Indigenous communities. Students learn about Indigenous rights, strategic

planning, land use planning, traditional knowledge, resource management, intellectual property law and project management.

Bear is a proud member of Ochapowace First Nation. He chose to pursue the Kanawayihetaytan

Askiy (KA) Certificate to help with his role as a consultant supporting First Nations to improve environmental issues and support economic development.

“I realized there is a need to build capacity within First Nations communities on land management and business practices,” said Bear. “Having effective land management and economic development governance in place will allow our communities to grow and create sustainable practices for future generations.”

As a consultant, Bear has participated in solid waste feasibility studies with several First Nation communities. Working with Indigenous Services Canada, he meets with communities, accesses their needs, and writes reports to improve their solid waste management. To build upon his knowledge to help First Nations, he enrolled in the KA program with funding from Indigenous Services Canada.

“My studies at USask have developed my knowledge base, skills and leadership,” said Bear. “I now have an enhanced understanding of government and legislation as it relates to First Nations, how the implementation of a land code supports self-governance, and proper research and business plan techniques.”

“During my classes, it became quite clear that no matter what region your First Nation community is located, there are so many similarities with respect to Aboriginal title and striving for self-governance and

improving the quality of life.”

Due to the pandemic and remote learning, Bear was able to complete the one-year KA Certificate, at home in Yorkton, Sask. While his classes were online, he still had opportunities for hands-on learning experiences, such as collecting soil samples for his ecology class taught by Dr. Melissa Arcand (PhD).

“The course load was well blended,” Bear said. “My experience with the College of Agriculture and Bioresources and USask was very positive.”

Bear is following in his family footsteps by attending USask.

“I have been honored to have my two eldest children attend USask and while supporting my children in chasing their dreams, I realized that I’m not too old to further my education to support my First Nation and surrounding communities,” said Bear.

After graduation, Bear will support Ochapowace First Nation and surrounding First Nations in land management and share the knowledge gained from the KA program.

“I encourage all First Nations to participate in educational programs such as Kanawayihetaytan Askiy and USask as well as other capacity development initiatives to improve our communities for future generations.”

Brett Makulowich is a communications co-ordinator in the College of Agriculture and Bioresources.

STM graduate facing the future focused on the common good



St. Thomas More student Veronica Lucas will graduate with a Bachelor of Arts degree in sociology.

JACQUIE BERG

JACQUIE BERG

Coming from a family of teachers, Veronica Lucas was always aware of the value of education.

“Educating yourself is always a good thing. Period,” said Lucas. “You never stop learning. I found the opportunity to advance human connection skills in my degree most valuable, with many of my liberal arts courses additionally serving as important training for critical thinking—helping me to understand and connect with people on another level.”

This spring, Lucas will graduate

with her Bachelor of Arts degree in sociology, with a minor in Critical Perspectives on Social Justice and the Common Good.

The minor is described as “an interdisciplinary course of study designed to prepare students to be responsible critics of contemporary societies and effective agents for positive social transformation.” This program is co-ordinated by St. Thomas More College (STM) at the University of Saskatchewan (USask) and can be completed in conjunction with any degree in the College

of Arts and Science.

“I was attracted to the overlap between the two programs, with a focus on the common good. With my grandmother as inspiration, I saw much that I could learn from her, but also the areas of vulnerability for seniors and elderly. I would like to be the voice of those that cannot advocate for themselves—whether in areas of care, finances, or their health,” Lucas said.

There is a lot of Lucas family history with STM and USask. Veronica’s great grandfather was the Dean

of Education, her parents and grandparents attended STM, and her great grandmother served as the curator at the college. So, although from Lloydminster, there was no questioning whether Veronica would follow her sister to Saskatoon upon graduation.

While Lucas started out enrolled in studies to become a nutritionist, a Newman Centre (the Catholic student club on campus) retreat ended up changing her direction.

“I realized more than anything, I wanted to help people. I felt connection more with the sociology courses, and since my existing electives applied, I forged ahead.”

Awarded a high school scholarship for social justice, and as STM’s Basilian Scholar award recipient in 2019, recognizing application of the student’s gifts in meeting community needs, Lucas joined STM’s Service and Justice Project—volunteering to serve marginalized community groups—in her first year at USask. Some of these projects included services support at Luther Care, weekly visits and card playing with Sherbrooke Community Centre residents and serving as a peer mentor at the college for the Service and Justice Project in her third year.

Lucas’s college extracurricular activities extended to Newman Centre, STM Just Youth, Peer Health, STM Strategic Planning Committee, reading at college liturgies, and as student representative for the STM corporation retreat. Social life and human interaction—a key focus of study in sociology—became collateral damage of required COVID-19 restrictions.

“Completing a degree in a pandemic year was challenging, and a little disappointing in the student experience lost,” said Lucas. “Living in a basement suite, isolated from friends, and making the best of online learning, I was thankful for the chance to go in person to STM to study and escape. Although there was only limited access, I needed that campus experience to feel more like a typical student.”

“Maintaining connections with student clubs during COVID was also a challenge, but an opportunity to get creative,” Lucas shared. “While some events had to be cancelled, others survived by converting to virtual initiatives and through social media. It was exciting that we were still able to host from STM a national conference virtually—making connections with Catholic students from across Canada.”

“My work at Sherbrooke Community Centre continued last summer amidst COVID-19 restrictions,” Lucas added. “In these challenging times, you become family for many of the residents. I took them to appointments, was there to listen, and shared unique learning experiences.”

“Looking to the future, I hope to spend some time gathering real work and life experience and then perhaps go back to university for a social work degree. I would like to be a social worker in long-term care to help elderly patients transition.”

Jacquie Berg is the director of communications, marketing and student recruitment at St. Thomas More College at USask.

USask drama department celebrates 75th anniversary



University of Saskatchewan students rehearse a play in Greystone Theatre in 1968.

✍ SHANNON BOKLASCHUK

A series of online events will be held in June to celebrate the 75th anniversary of the Department of Drama at the University of Saskatchewan (USask).

Established in 1945, it is known as the oldest degree-granting drama department in the British Commonwealth. That historical significance is what sets it apart from its Canadian counterparts, said department head Dr. Moira Day (PhD).

“Unlike the States which, in the early decades of the 20th century, began to develop independent departments of theatre that combined academic and applied practical courses in theatre leading to a degree in the area, Canada

largely followed the British model of teaching dramatic literature as a part of other humanities literature courses, and confining theatre production to campus theatre clubs or societies. We were the first Department of Drama of the American model established in Canada and the British Commonwealth,” said Day, who joined the College of Arts and Science as a faculty member in 1991 and became head of the department in 2017.

“Just as significantly, our founding in 1945 corresponded with the establishment of the Massey Commission meant to bring the Canadian arts and performing arts fully into the professional era

following the Second World War—and our department was designated as the model for university-based theatre training in Canada,” she said.

The drama department turned 75 in 2020, but anniversary plans were put on hold due to the COVID-19 pandemic. The department didn’t want the milestone to go uncelebrated, however, so a series of virtual events will now take place from June 1–19, 2021, including Greystone Theatre performances of Kevin Kerr’s play *Unity* (1918). The show, directed by College of Arts and Science graduate Skye Brandon will be performed live in Emrys Jones Theatre and streamed



Carla Ortiz



Moira Day

online. On June 17, viewers are invited to attend a pre-show discussion with Brandon and history and theatre scholars as they explore the interconnection, similarities and differences between the human, cultural and artistic responses to the Spanish flu pandemic in 1918 and to COVID-19 in 2020–21.

Brandon is one of many notable Department of Drama alumni, including Alumni of Influence Award winners Kim Coates and Gregory Nelson. Prof. Carla Orosz, a drama faculty member and associate department head, is another highly respected graduate. She called the 75th anniversary a huge milestone in the department’s history.

“When I started as a student in 1999, I had no idea the history of the drama department, nor did I know I would still be a part of the department so many years later. As a relatively new professor in the department, I am still learning so much

history about us and this celebration is a great vehicle for us all to learn the impact the drama department has had on so many people,” said Orosz. “When you are a student, you do not realize there was this history before you arrived. I have so much joy listening to stories from days in the Hangar Building and what life was like here so many years ago.”

Orosz, who is part of the committee organizing the anniversary celebrations, said all are welcome to attend the online events. Current drama student James Miller is putting together a website to document the department’s history, including taking Greystone Theatre photos and playbills out of storage and presenting them digitally. Attendees at the anniversary events can expect to reminisce about the past, and also hear about the department’s future plans.

Orosz noted that the Department of Drama is a close-knit community because of its relatively small size. The professors get to know their students “as more than just students and, once graduated, they quickly become colleagues,” she said.

“The drama department also has a great connection to the theatre community in Saskatoon,” said Orosz. “You do not need to look very far to see the leaders here in Saskatchewan theatre are all mostly USask alumni. Their training prepared them to either get work at established companies or take the leap and create their own. If it were not for our alumni, we would not have Live Five in Saskatoon or—if we look even further back—25th Street Theatre. These companies are vital to the arts and culture in Saskatoon and the USask drama department was a part of that. That is something to be proud of and something that we strive to continue in our current students. They are the future, and they will be the ones to shape our city and our province.”

For more anniversary event information, go online to artsandscience.usask.ca/drama/anniversary.

Shannon Boklaschuk is a communications officer in the College of Arts and Science.

USask scientists probe tick-borne Lyme disease

✍️ GEORGIA HURRY

While most people dread dealing with ticks, University of Saskatchewan (USask) researchers are keen to work with the parasite as they investigate the host-pathogen system responsible for Lyme disease in Canada.

“[Lyme disease] is something that people care about. ... They are worried about ticks and tick-borne diseases,” explained Dr. Maarten Voordouw (PhD), assistant professor in the Western College of Veterinary Medicine’s (WCVM) Department of Veterinary Microbiology and the research team’s leader.

Lyme disease, the most common vector-borne disease in the northern hemisphere, is caused by a tick-borne spirochete bacterium called *Borrelia burgdorferi* that requires a tick vector and a suitable vertebrate host so it can replicate and persist in nature. The transmission cycle begins when a tick picks up the bacterium while taking a blood meal from an infected host, such as a small mammal or bird. People and companion animals are accidental hosts for the bacterium, which can cause Lyme disease in humans and dogs.

Compared to the rest of Canada, the risk of contracting Lyme disease in Saskatchewan is low. Blacklegged ticks (*Ixodes scapularis* and *Ixodes pacificus*), which transmit *B. burgdorferi* in Canada, aren’t common in this province. Most ticks in Saskatchewan are the American dog tick (*Dermacentor variabilis*), which cannot transmit the Lyme disease bacterium.

However, the situation can quickly change since ticks can migrate to new geographic locations once attached to migratory birds

and other hosts.

In addition, many different strains of *B. burgdorferi* circulate in North America. These strains differ in their genetics, their clinical symptoms, and potentially, their transmission from different hosts. Voordouw and his team want to understand the factors that explain why some strains are common in North America, while other strains are rare.

“One of the big questions in ecology and evolutionary biology is what explains species diversity (or strain diversity): why do we have so many strains of *Borrelia burgdorferi* in the same ecosystem?” said Voordouw.

His team is studying several strains of *B. burgdorferi* commonly found in Canada. By introducing the different strains into laboratory mice (via tick bite), and then infesting these mice with ticks to compare the host-to-tick transmission success between strains, the researchers can gain information on the “fitness” of each strain in a laboratory model system.

As well, their research will hopefully provide useful information about which *B. burgdorferi* strains are most common in Western Canada—details that are still unknown for this region.

“In Canada, there is a perception that the diagnostic tests are not adequate. [These tests] are based on well-defined strains that are found in the eastern United States, and we know that we have different strains here in Western Canada,” said Voordouw. “So, we will be able to test whether these diagnostic tests can detect the dozen different Canadian strains that we are working with.”

With more clarity about the

strain diversity of *B. burgdorferi* for different regions of Canada, Voordouw adds that the WCVM team’s research findings may have the potential to fine-tune diagnostic tests for Lyme disease that target western Canadians and their pets.

Voordouw is also interested in the effects of *Borrelia* infections on the tick vector. Parasites are constantly evolving and can eventually “learn” to manipulate the physiology and behaviour of their hosts.

“Research has repeatedly shown that mosquitoes infected with malaria are more aggressive and bite more,” said Voordouw. “[The manipulation] makes it much more favourable for the pathogen to invade the host. Parasites capable of manipulation are smarter and harder to eradicate.”



Dr. Maarten Voordouw (PhD) – second from left – and his WCVM research team search for ticks near Saskatoon, pre-pandemic in 2019.

EMILY JENKINS

Could the same be true for ticks infected with the Lyme disease bacterium? Voordouw believes vector manipulation is less likely for Lyme disease due to the constraints on the life cycle of hard ticks.

“From my perspective, the interests of the bacteria and the tick are largely aligned. The tick wants to get a blood meal so it can become an adult and mate, and *Borrelia* wants the tick to take a blood meal

so it can infect a host.”

Voordouw and his WCVM team received financial support from the Natural Sciences and Engineering Research Council of Canada and the Saskatchewan Health Research Foundation. ♥

Georgia Hurry of Summerland, B.C., is a fourth-year biology student in the USask College of Arts and Science.

Major funding for VIDO at USask

✍️ UNIVERSITY COMMUNICATIONS

The Government of Canada has announced \$59.2 million to the University of Saskatchewan’s (USask) Vaccine and Infectious Disease Organization (VIDO) to support the development of its vaccine candidates and the expansion of its research facilities, including a National Centre for Pandemic Research.

“This major investment in USask’s VIDO will help Canada address COVID-19 and be well prepared for future infectious disease outbreaks,” said USask President Peter Stoicheff. “We are very grateful for this crucial federal government support. It signals Canada’s recognition of VIDO’s global prominence in vaccine research and develop-

ment that will protect the health and safety of all Canadians. Combined with the support from both the Saskatchewan government and the City of Saskatoon, VIDO can now begin its important work as Canada’s centre for pandemic preparedness.”

This is in addition to commitments made by the Province of Saskatchewan (\$15 million), City of Saskatoon (\$250,000), and private donors. The centre will expand VIDO’s research capacity and help strengthen Canada’s response to emerging infectious diseases including future pandemics.

“We are excited about this announcement as it allows VIDO to expand our capacity to rapidly

respond to emerging human and animal infectious diseases and supports vaccine development including COVID-19,” said VIDO Director and CEO Dr. Volker Gerds (DVM, PhD).

Part of the funding—announced April 19—will support new animal housing. In addition, VIDO is looking to upgrade areas of its containment Level 3-agriculture facility to biosafety Level 4.

“This funding commitment is a strong signal of confidence in the University of Saskatchewan’s ability to deliver discovery the world needs to ensure health of humans and animals,” said USask Vice-President Research Baljit Singh. ♥



Nelson Lokombo



Connor Berglof



Josh Hagerty

Lokombo joins elite list of Huskie football draft picks

JAMES SHEWAGA

After making Huskies history, Nelson Lokombo is now focused on his football future in Saskatchewan.

The University of Saskatchewan (USask) kinesiology student and Huskie football All-Canadian was selected second overall by the Saskatchewan Roughriders in the May 4 Canadian Football League (CFL) draft on a night he won't forget.

"It was just very exciting, and definitely a nice night with my family," said Lokombo, who was named the U Sports defensive player of the year in 2019. "I know fans in Sask are definitely going to be happy with a university kid staying in the province. So I am excited to get going."

Lokombo is one of four Huskies to be selected either first or second overall in the modern history of the CFL draft, joining Ben Heenan (first overall in 2012), Dylan Barker (first overall in 2008) and Dan Farthing (second overall in 1991).

Lokombo was the first of three

Huskies drafted this year, along with offensive lineman Connor Berglof, a College of Arts and Science student selected in the third round by the Ottawa Redblacks, and safety Josh Hagerty, an Edwards School of Business student picked in the sixth round by the Toronto Argonauts.

"Often we throw around a lot of superlatives about athletes, like tough, resilient and smart, but that absolutely does describe these guys. Having their 2020 season taken away from them and missing out on an opportunity to really shine has been tough," Huskies head coach Scott Flory stated. "These guys have fought through, they've battled. They are humble, hard-working, low maintenance guys and I'm so proud of how focused they've been."

Lokombo, who studied kinesiology remotely in 2020/21 while training at home in Abbotsford,

B.C., set a Huskie record in 2019 by racking up 197 return yards on four interceptions, returning two for touchdowns. After the 2020 U Sports football season was cancelled due to the pandemic, Lokombo ran a 4.66 in the 40-yard dash in pre-draft testing this year and quickly began moving up the draft rankings.

"As the night approached, I had a feeling that (the Roughriders) were interested, so I am glad it worked out," he said.

Lokombo hopes to play professionally this season, while continuing to work towards his Bachelor of Kinesiology degree in the off-season. Looking back, Lokombo said he is happy that he decided to study at USask and suit up for the Huskies.

"I am definitely happy with my choice," said Lokombo. "As a high school player, deciding to come to Saskatchewan for university was definitely a great choice for me and I'm glad that it worked out this way."

While Lokombo said he would love to sign with Saskatchewan, his agent is also exploring free-agent opportunities for him in the National Football League.

"Signing is the next step, but right now I am kind of taking a few weeks off here and I am going to see what my agent says and we will see what the (Roughriders') contract looks like," he said.

When the CFL resumes—pandemic permitting—Lokombo is poised to join three other Huskie first-round draft picks with the Roughriders. Lokombo's teammate Mattland Riley, an offensive lineman, was drafted seventh overall by the Roughriders in 2020 and signed his first contract in January. Meanwhile, the Roughriders also signed free agent former Huskies offensive lineman Evan Johnson in February after playing three seasons with the Redblacks, who drafted him in the first round (ninth overall) in 2017. 🍀

HUSKIE HIGHLIGHTS

Chinn new Huskies chief athletics officer

Shannon Chinn has been named chief athletics officer for Huskie Athletics at USask, effective June 15. "It is an incredible honour to come home and join such a historic and successful athletic program," said the former U Sports student-athlete, who was director of Look Sport and has worked with the NHL, CFL, TSN, Canada Games, Pegasus World Cup, Carleton University, and is a Football Canada board member.

Cote named men's hockey associate coach

Brandin Cote has been named the first associate coach in the history of the Huskie men's hockey team. On July 1, the former assistant with the WHL's Swift Current Broncos joins new head coach Mike Babcock. "I am thrilled to have the opportunity to join an institution as prestigious as the University of Saskatchewan," said Cote, who has a Bachelor of Education degree.

Dally rejoins women's basketball team

Former U Sports All-Canadian Laura Dally has been named the new full-time assistant coach to Lisa Thomaidis with the Huskie women's basketball team. The Canada West player of the year helped lead the Huskies to their first national title in 2016, scoring 25 points and named most valuable player. A former national team and professional player, Dally earned a Bachelor of Arts degree at USask.

Stage set to resume Canada West sports

The USask Huskies joined all Canada West conference members in affirming their commitment to return to play in 2021/22. During the virtual annual general meeting May 4-5, universities approved alternate regular-season and playoff formats beginning this fall, focusing on regional play where possible. Resumption of play is still dependent upon public health approval in all four provinces.

Engineering remote lab experience made possible thanks to USask donors

✍ INALIE PORTADES

In the beginning of the fall 2020 term, the computer engineering department at the University of Saskatchewan (USask) faced a dilemma. Due to the remote delivery of classes, students in CME 341 (Logic Design Using FPGAs) class could not access laboratory equipment on campus essential to their labs and studies, such as circuit boards.

“We didn’t want to compromise the quality of these labs—it’s very important for students to have that hands-on connection with the hardware even in a remote learning environment,” said Dr. Brian Berscheid (PhD), professor in the College of Engineering who teaches CME 341.

Considering the increased financial challenges that some students have faced due to the pandemic, purchasing their own boards was not a viable option. The department of computer engineering decided to find a source of funding to provide at-home circuit boards for students.

USask alumni collectively

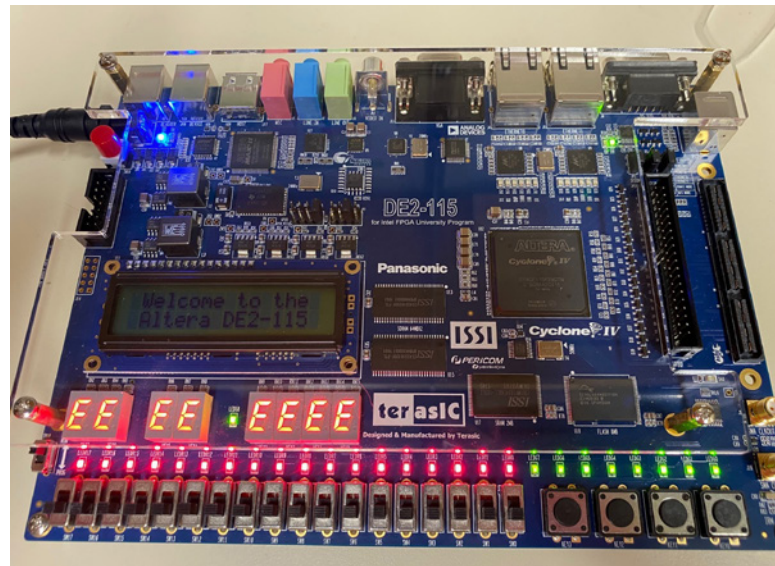
donated \$25,000 to help purchase DE2-115 circuit boards for all 64 students signed up in the CME 341 class. These circuit boards were delivered to students and replicate the quality and experience they would normally get in a lab on campus.

Alumni like Dr. Hugh Wood (PhD), also a retired USask engineering professor, said he knows the importance of hands-on learning and was pleased to help students navigate their labs in a remote environment.

“The department was quite concerned that students’ laboratory experience would suffer, so we decided to work with them and find a way to deliver the same quality of labs while staying at home,” said Wood.

Before the transition to remote learning, Berscheid noted that the DE2 boards were set up and maintained by the department’s lab support staff, who ensure everything is ready to go for students when they walk in to the lab.

To ensure that students are supported using the boards at



The DE2-115 is a development board containing a Field Programmable Gate Array chip that is configured by the students to implement various digital circuits.

home and learning to the fullest, the department provided detailed instructions online through Canvas, the online learning management system provided by the university.

A strong sense of collaboration was demonstrated by the students in CME 341 as they learned together and provided helpful tips to each other while using the boards.

Thanks to donors’ generosity, students may reuse these circuit boards for other classes.

“Our boards are commonly used throughout a number of our classes and we have a sequence of classes that build upon one another,” Berscheid added.

If the class is online again this fall, the department plans to follow a similar approach by sending circuit boards to students at home.

“The students all spoke very positively about how these boards helped them make the connections between what they are learning in class and the real world,” said Berscheid.

In a survey sent out to CME 341 students to collect responses about their experiences with the boards, one student stated: “I honestly couldn’t imagine doing this year without the DE2-115 board. It provides utility and a great learning experience where we get to debug out code using the physical switches and hex displays.”

Other students also spoke highly about the DE2 boards: “I have used the board in three of my classes. Being able to work with the physical device has made my lab experience a lot better ... I would like to thank all the donors for their generous contribution.”

Inaliev Portades is a communications co-ordinator in University Relations.

USask strategy supports sustainable development goals

FROM PAGE 2

Stoicheff said it’s not surprising that leaders of the University of Saskatchewan Students’ Union approached his office in 2016 to sign a memorandum of understanding that commits to working together to support, promote and champion sustainability initiatives on campus—a request he was happy to oblige and fund.

“That was a very influential moment for me, when I realized that although I was saying some things about sustainability, the students were really behind this commitment

and if I wasn’t part of it, they would be leading it some other way,” he said.

While there’s concern that mitigation measures are unaffordable, Stoicheff said: “One way or another, we are going to have to come to terms with the university being more environmentally sustainable. That’s going to cost more money no matter how you look at it. It’s going to cost a lot less money if you can be strategic about it.”

USask’s Sustainability Strategy is framed around five commitments, five goals and 17 actions geared to achieving the SDGs:

COMMITMENT 1 is to be responsive to the university’s social, economic, environmental and cultural settings, and to influence and be influenced by them as solutions to sustainability challenges are created, mobilized, and shared.

COMMITMENT 2 is to foster an entrepreneurial campus spirit, and use campus operations and community as a living laboratory to develop, scale up, and share sustainability solutions. The goal by 2030 is to reduce university greenhouse gas emissions by 45 per cent from 2010 levels, leveraging USask’s research

and cutting-edge discoveries to help develop energy-efficient solutions, and to reach net zero by 2050.

COMMITMENT 3 is empowering action by supporting a generation of learners and achievers to shift mindsets and expand skillsets to accelerate action to achieve the SDGs. The goal is to create new forms of teaching and learning that produce engaged, enlightened, empathetic, ethical and empowered citizens.

COMMITMENT 4 is to capitalize on strengths by bringing together

the campus community to create knowledges focused on designing and implementing innovative and workable solutions to sustainability challenges.

COMMITMENT 5 is to catalyze social change by promoting, engaging, and supporting the sharing of knowledge, expertise, and experiences to effect needed social changes.

Sarah Peiris is a former USask communications specialist and Saskatoon-based freelance writer.



INNOVATION AND EXPERIMENTATION: STRAW GAS CAR

 JAMES SHEWAGA

The University of Saskatchewan (USask) has a long history of exploring alternative energy sources.

More than a century ago, one of the most ambitious and audacious attempts to develop alternative fuel on campus was the creation of the infamous straw gas car, a 1918 invention still on display in Saskatoon's Western Development Museum (WDM). Making use of the mounds of straw created in the process of threshing wheat and usually burned after harvest, USask researcher Dr. R.D. MacLaurin (PhD), head of the Department of Chemistry, built a small extraction plant to power a motorized vehicle using straw for fuel.

At a time when gasoline, kerosene and coal, among others, were all being tested as the most feasible fuels to power piston engines, the straw gas process proved promising at first. However, the early USask researchers soon determined that the amount of usable fuel produced was too small and the mileage for vehicles powered by straw gas was much lower than other fuel options.

That early research project was abandoned a year later after MacLaurin and three other faculty members were dismissed in a dispute with President Walter Murray over research funding, leading to the "University Crisis of 1919." The crisis aside, researching the story of this innovative investigation of alternative fuel sources is a fascinating aspect of Patrick Hayes' position as an archives technician in University Archives and Special Collections.

"The University of Saskatchewan was created not just to educate the people of the province, but also to make life better through innovation. Straw gas is but one example of exploring ideas for the betterment of the wider community," Hayes said.



USask's unique experimental straw fuel car—the McLaughlin Motor Car Model D45—on campus in 1918.

"Universities are the engine of innovation in Canada and USask has led the way in a variety of fields. New innovations build on the foundation of earlier innovations. Breakthroughs grow from past efforts. Many of our present areas of expertise and excellence grew out of work started in the first few decades."

The USask straw fuel car—the McLaughlin Motor Car Model D45—featured a large gas tank mounted above the roof that housed the gas used to power the experimental vehicle, which made its public debut on a test drive from the university campus to downtown Saskatoon in August of 1918. A replica of

that unique USask vehicle is featured in the WDM's Fueled by Innovation exhibit, which features a variety of early alternative fuel vehicles from Saskatchewan and around the world.

That innovative spirit continues today in research from the likes of distinguished engineering professor Dr. Ajay Dalai (PhD)—USask's Canada Research Chair in Bioenergy and Environmentally Friendly Chemical Processing since 2001—to young doctoral student Tumpa Sarker, who recently discovered a method for creating better biomass fuel pellets as an environmentally friendly energy source. 