



July 2022 - Issue 54

Discovery Digest is a glimpse into how University of Saskatchewan research, scholarly and artistic work is making a difference for Saskatchewan, Canada, and the world. Curated by the Research Profile and Impact unit, Office of the Vice-President

Research. [Feedback welcome!](#)

Looking for more research stories? [Visit Discovery Digest online.](#)

This Month's Stories



[New VIDO Vaccine Development Centre supports vaccine innovation protecting Canadians, animals](#)

The University of Saskatchewan's (USask) Vaccine and Infectious Disease Organization (VIDO) has completed the construction of its Vaccine Development Centre (VDC), strengthening and expanding Canada's domestic biomanufacturing capacity.

The VDC will have manufacturing capabilities for human and animal vaccines and will support Canada's emergency response for possible future pandemics. As such, the centre will play a key role in Canada's Biomanufacturing and Life Sciences Strategy. The VDC will be one of only a few GMP biomanufacturing facilities in the world that produce vaccines under containment level 3. Dignitaries and USask staff attended the event on June 28 to celebrate the completion of the facility. [Read the USask story.](#) [Read a full overview of the facility in CBC.](#)

USask hosts first ever Research Intersections event

The first ever Research Intersections event took place at the Gordon Snelgrove Gallery on June 28, 2022. A group of USask scholars were asked by Dr. **Baljit Singh** (PhD), USask VP Research, to come together to create an event that would celebrate the diversity of research.



The event offered a chance for conversation and engagement between participants, where, as a group, they could begin to unlearn divisive methodologies and begin to understand how expertise is not threatened by close examination and true connection with others. [Watch the full recap video to get a glimpse of the event.](#)



Patient-oriented research in Saskatchewan receives \$25.2 million in support

The Saskatchewan Centre for Patient-Oriented Research (SCPOR) based from USask has entered a second phase of operation, thanks to a \$12.6-million grant from the Canadian Institutes of Health Research (CIHR) and matching funds provided by a group of partners.

Patient-oriented research includes patients as partners on research teams. As experts in their own personal healthcare journey, patients, their families and their informal caregivers provide unique perspectives that help increase the likelihood that research will be implemented and lead to improved patient experiences. [The full story.](#)

New project has big impact on bison genome biobank's development at USask

Researchers' aim of developing the world's first bison genome biobank at the University of Saskatchewan (USask) received a critical boost on July 14 with Genome Canada's funding announcement of \$5.1 million for the Bison Integrated Genomics (BIG) project. USask veterinarian and reproductive biologist Dr. **Gregg Adams** (DVM, PhD) leads IntegrOmes' multi-agency research team.



The BIG project will apply new genomics solutions to better protect and conserve the wood bison population in Canada. Genome biobanks are used to store and redistribute

genetic material to preserve genetic diversity. Researchers will use genomic tools for disease surveillance and vaccine development. [The full story.](#)



[Abracadabra to ABCs under scrutiny by USask researchers](#)

A multi-disciplinary group of USask researchers have been awarded a total of \$805,522 by the federal government for five social science and humanities research projects that will explore a diverse plethora of topics – from historical truths of the lives of female magic practitioners, to how today’s teacher education programs can be improved with insights gained from previous programs.

Other project topics being explored include differing perceptions of safety among populations, how human welfare, care and dignity is fostered between soldiers and prisoners of war, and the academic and personal learning outcomes of using Indigenous land-based pedagogies in K-12 classrooms. [The full story.](#)

Looking for more research stories? [Visit Discovery Digest online.](#)



[Teeth from royal cattle herds of Mesopotamia shed light on ancient urban cultures](#)

Newly published cutting-edge research led by USask Near Eastern archaeologist Dr. **Tina Greenfield** (PhD) reveals how domesticated livestock were managed in one of the world’s earliest cities. Mesopotamia, the region bordered by the Tigris and Euphrates Rivers, is known as the “Cradle of Civilization.” The early Mesopotamians employed complex systems of land use, animal herds and irrigation to feed a dramatically growing population.

The findings provide a glimpse into how the Sumerian peoples of ancient Mesopotamia were fed, traversed the landscape, and interacted with each other, as well as differences in how royal versus non-royal members of society lived and died in Ur, one of the world’s earliest cities. [The full story.](#)

USask researcher partners internationally to hone students' skills to tackle global sustainability issues

Dr. **Maureen Reed** (PhD) and her colleagues want to transform the mentorship of sustainability scholars and practitioners — the people who tackle issues such as climate change, biodiversity loss, poverty, and water security. The international program, TRANSdisciplinary Education Collaboration for Transformations in Sustainability (TRANSECTS), offers flexible and accessible pathways for training, professional development, mentorship, and networking for the next generation of sustainability change makers in Canada and internationally.

Funded through a SSHRC Partnership Training grant, the training will engage a diversity of scholars and practitioners from the Global North and Global South to deepen understanding of sustainability challenges and build skills to tackle these challenges by learning from one another. [The full story.](#)



Investment in USask project aims to give ag producers better access to data

The Government of Canada is investing \$400,000 over two years in a USask-led project to make interpreting and selecting data from agriculture technology easier. The project, funded through PrairiesCan under its Regional Innovation Ecosystem (RIE) program, involves a wide variety of partner organizations.

Led by College of Engineering and College of Agriculture and Bioresources, this partnership establishes a “living lab” at USask’s Livestock Forage Centre of Excellence (LFCE), with facilities near Clavet. The lab will bring together producers, established tech companies, and ag-tech start-ups to create an environment and a platform to reduce current barriers to adoption of smart farming practices, enhancing the probability of success for all. [The full story.](#)

Pewaseskwan at USask signs MOU with SFNWC to support research with Indigenous women

The Saskatchewan First Nations Women’s Commission (SFNWC) at the Federation of Sovereign Indigenous Nations (FSIN) and pewaseskwan—the Indigenous Wellness Research Group (IWRG) at USask —are signing



a memorandum of understanding on June 24 to commemorate the start of a research alliance.

Undertaken in the spirit of reconciliation, pewaseskwan and the SFNWC will work towards a shared accountability framework which meaningfully operationalizes the existing FSIN/USask MOU and supports Indigenous research. Dr. **Alexandra King** (MD), Cameco Chair in Indigenous Health and Wellness, co-leads pewaseskwan in its research. She met with FSIN Vice-Chief **Aly Bear** to sign the agreement on Friday at pewaseskwan's offices on the USask campus. [The full story.](#)



[USask projects ask 'what's water worth?'](#)

There's a huge non-market value to the life-sustaining liquid that goes far beyond the price utilities charge for domestic and industrial water use. That vital aspect is typically left uncalculated by policy- and decision-makers in Canada because this country simply doesn't collect the data or have the tools needed to assess the value of services that water provides to the economy and society-at-large.

Now, an ambitious two-year project, co-led by USask researcher Dr. **Patrick Lloyd-Smith** (PhD), aims to fill the knowledge gap with Canada's largest ever co-ordinated effort to establish what freshwater is worth. [The full story.](#)

[USask project creating COVID-19 archive to share and learn from critical experience](#)

A diverse team led by USask medical historian and researcher Dr. **Erika Dyck** (PhD) is creating a digital archive of provincial residents' experience with the COVID-19 pandemic to ensure that their stories and material can prepare the province to better cope with future health crises.



The goal is to create a qualitative dataset that will enable future researchers to measure the diverse social, political, and cultural impacts of this critical point in provincial history, and help Saskatchewan and Canada prepare for when global pandemics are projected to occur more frequently. [The full story.](#)

[Q+A: USask graduate student takes research experience to the world stage at the UN](#)



[Examining period poverty with nursing researcher April Mackey](#)



[USask researchers awarded NSERC funding for future innovation in science, health and engineering](#)



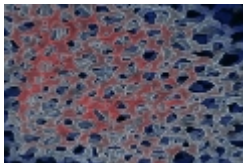
[WCVM set to hire pollinator health research chair at USask](#)



[USask researchers celebrated for successful project exploring health impacts of radon gas in Indigenous community](#)



[USask research sheds light on building blocks of photosynthesis at a cellular level](#)



[One in five Prairie residents thinks free speech limited or non-existent](#)



[Global water basins hotspots prioritize areas under threat](#)



[Museum of Antiquities acquires replica Sleeping Hermaphrodite sculpture](#)



[Q+A: USask students launch high-altitude balloon into near space](#)



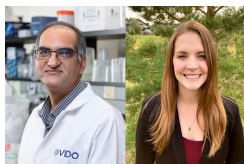
[USask researchers Dr. Sean Prager \(PhD\) and Dr. Christy Morrissey \(PhD\) appointed to Health Canada's new Science Advisory Committee on Pest Control Products](#)



Researchers Under the Scope podcast: [Dr. Ivar Mendez \(MD, PhD\): The Robot Will See You Now](#) and [Hot-boxing Rats and Brain Neuroscience, with Dr. Robert Laprairie \(PhD\)](#)



[Global Institute for Food Security at USask announces new Chief Scientific Officer](#)



USask teams to establish research programs to better understand and treat serious diseases

In **THE CONVERSATION**

USask is a founding partner of national academic newswire, [The Conversation Canada](#), which provides independent, high-quality journalism. Get in touch with [Research Profile and Impact](#) if you are interested in submitting a story or opinion piece.

Social assistance cuts are contributing to high rates of HIV, syphilis in Saskatchewan

Dr. **Holly Ann McKenzie** (PhD), Postdoctoral Fellow,
USask's College of Medicine

Dr. **Alana Cattapan** (PhD), Assistant Professor, Political
Science, University of Waterloo



The province of Saskatchewan leads the country in preventable, opportunistic illnesses enabled by poverty. With new changes to income support programs and increased housing instability, things are getting worse. [Read the full article in The Conversation.](#)

**To discover more research stories and past newsletter editions, visit
Discovery Digest online.**

From the Office of the Vice-President Research



Awards and Recognition

Find out if there are any upcoming awards deadlines or let us know about awards in your discipline that should be added to our [external awards list](#). If you are interested in pursuing a potential nomination, please reach out to research.communications@usask.ca to discuss what support is available.

USask hosts international leaders to tour innovative facilities, discuss research partnerships



The Ambassador of Vietnam toured the USask campus on June 24 to explore some of USask's innovative research centres at the Global Institute for Food Security and the Canadian Light Source synchrotron facilities, along with Saskatchewan Ministry of Advanced Education and Trade and Export Development leaders. Consul General of Japan in Calgary Mr. Tatsukuni Uchida also visited with USask International Office staff to explore opportunities for USask-Japan partnerships in research, academic exchange and mobility of students and faculty members.

The University of Saskatchewan is committed to building international partnerships that address global challenges, finding solutions through research to be what the world needs.



[SURE Summer Symposium - register student projects today!](#)

The USask Student Undergraduate Research Experience (SURE) is hosting their annual end of summer Symposium for undergraduate research, scholarly, artistic, and applied projects. This event, led by the Office of the Vice President Research via Research Acceleration and Strategic Initiatives' Undergraduate Research Initiative, aims to welcome undergraduate students from all disciplines to showcase their summer research work.

The Symposium will be held online via Canvas August 22-31 with an in-person event in Convocation Hall on Thursday, August 25th. **Undergraduate student registration** to participate in the Symposium can be found here: [Student Registration SURE Symposium summer 2022](#) and the deadline to register is July 15th. [Find more information.](#)

Stay connected with research news



Click the icon to the left to follow the USask Research [Twitter page](#) to stay in-the-know, with exciting research news delivered right to your newsfeed. Don't forget to follow [USask Research on LinkedIn](#), [@VPR_USask](#) and [@USask](#) on Twitter for more of the latest research and university news.

Use the hashtag **#USaskResearch** when sharing about USask-related research findings, publications or achievements on social media.

Upcoming events



Upcoming events are featured in the USask Office of the Vice-President Research website event calendar for your convenience in finding events of interest to attend. [Visit the full calendar here.](#)

In the news

- Other USask research has also been featured in:
 - June 15 – *Food in Canada* - [New opportunities for Canadian oats in the plant-based food sector](#)
 - June 16 – *Washington Post* - [These maps illustrate the seriousness of the western drought](#)
 - June 17 - *Global News* - [PhD student's thesis research leads to new beer](#)
 - June 17 – *Saskatoon StarPhoenix* - [Taking the Pulse: Majority of survey respondents feeling the pinch of inflation](#)
 - June 17 – *TIME* - [The Truth About Fasting and Type 2 Diabetes](#)
 - June 18 – *The Globe and Mail* - [Wild boars are invasive, adaptable and dangerous, and pose a growing threat to the country.](#)
 - June 18 – *CBC News* - [From drought relief to filling streams, heavy rain proves beneficial in Sask.](#)
 - June 23 – *The Western Producer* – [Helping the world by feeding the fish](#)
 - June 23 – *The Globe and Mail* – [Building capacity to manufacture vaccines](#)
 - June 29 – *Nature* - [COVID antibody drugs have saved lives — so why aren't they more popular?](#)
 - July 1 – *Medscape* – [Adding Vitamin D to food: could this prevent cancer deaths?](#)
 - July 4 – *Real Agriculture* - [New online tool allows cattle producers to decide how to best test for, and mitigate the spread of, Johne's disease](#)
 - July 7 – *La Ronge Now* - [Art exhibit highlights bond between people and dogs in northern communities](#)
 - July 8 – *The New York Times* - [The U.S. May Be Losing the Fight Against Monkeypox, Scientists Say](#)

We want your feedback! [What do you think of Discovery Digest?](#)

You are receiving this email because you are a student, faculty or staff at USask. Questions?



UNIVERSITY OF
SASKATCHEWAN

BE WHAT THE WORLD NEEDS

Comments? Send an email to [Research Profile and Impact](#).
