

January 2026 - Issue 96

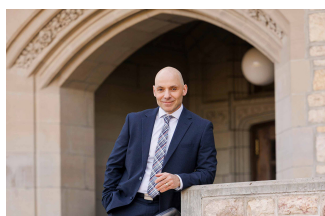
Discovery Digest is a glimpse into how University of Saskatchewan research, scholarly and artistic works are making a difference for Saskatchewan, Canada and the world. Curated by the Research Profile and Impact unit, Office of the Vice-President Research. [Feedback welcome!](#)

TEDxUniversityofSaskatchewan – Meet the Speakers!

What do school lunches, digital agriculture and competitive sports have in common? They are all part of the big ideas featured at TEDxUniversityofSaskatchewan. **On February 1, 2026**, 13 of USask's leading faculty, researchers and students will hit the stage to explore the edges of research, scholarly and artistic work. Learn more about this year's speakers and their groundbreaking ideas [at the link here!](#)



This Month's Stories



[President Vince Bruni-Bossio welcomes USask community back to campus](#)

From new USask president **Vince Bruni-Bossio**:

"I want to warmly welcome you to a new year and a new academic term at the University of Saskatchewan. It is my honour to be writing to you as the university's 12th president and vice-chancellor."

Check the link to read the full letter.

[USask's economic impact measured in billions: new study](#)

A new study shows that USask is providing a multi-billion-dollar impact on provincial and national economies, while preparing students for successful careers.

The findings are confirmed in a new study, the [USask Economic and Social Impact Analysis 2024/25](#), commissioned by USask and conducted in partnership with the independent scientific research institute RTI International. The data – which was released on

Dec. 18, 2025 – spotlights the many ways the university contributes to the province and the country on economic, social and environmental levels. The study shows USask contributes \$2 billion annually to Saskatchewan's gross domestic product (GDP) and a \$2.4 billion economic impact nationally.



[A look back at USask's 2025 innovative research projects](#)

USask is one of Canada's top research universities, and in 2025 USask researchers pushed the boundaries of research, scholarly and artistic work across numerous disciplines.

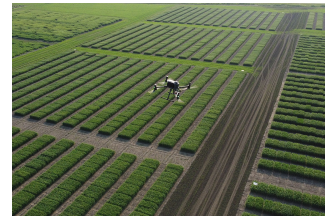
From pea milk to pandemic preparedness, from wheat genes to wildfires, USask researchers have raised the bar for innovative research that has an impact on

Saskatchewan, Canada and the world.

Listed here are 11 USask research stories from 2025 that helped define the work of the year.

[USask receives millions for innovative crop research projects](#)

More than \$4.5 million is going to 24 USask-led, crop-focused research projects through the Agriculture Development Fund (ADF), a joint federal and provincial government program for supporting crucial agricultural research projects.



In addition to the ADF funding, multiple USask experts are part of a research team led by Agriculture and Agri-Food Canada that received \$2.5 million through the Strategic Research Initiative (SRI) for a project studying the management of herbicide-resistant kochia and wild oat plants.

"Agriculture in Saskatchewan and the research done at USask to support this industry are critically important. They have real implications for the people of Saskatchewan, Canada and around the world," said **Dr. Trevor Crowe (PhD)**, acting dean of the College of Agriculture and Bioresources. "Funding from the Agriculture Development Fund provides support for the research that drives growth and innovation."



[Better berries: USask research lays groundwork for saskatoon berry breeding](#)

Originally from Slovenia, **Dr. Anže Švara (PhD)** had never even heard of Saskatoon before seeing a job opening at USask, let alone the tiny purplish berries that the city's name comes from.

But now, Švara is helping lead an innovative new research project that will give plant scientists and breeders new insights into understanding and breeding new types of saskatoon berries in the future.

"We have two key questions: can certain saskatoon berry plants breed with other saskatoon berry plants? And is there diversity that can be utilized to develop new varieties with

improved traits?” said Švara, an associate professor with the Department of Plant Sciences at the College of Agriculture and Bioresources and the lead of the USask Fruit Program.

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

[Unlocking even more value in Canada's canola industry.](#)

Canada's canola industry generates \$43.7 billion in economic activity each year, according to the Canola Council of Canada. Canola oil is currently the primary output, but researchers from USask are exploring new ways to get even more value from this hybrid plant developed in the 1970s.



Runrong Yin is a graduate student in USask's College of Engineering; Edgar Martinez Soberanes conducted this research as part of his PhD (engineering) and now works in USask's College of Agriculture and Bioresources. They used the Canadian Light Source (CLS) at USask to analyze a new processing technique that could enable companies to make better use of all parts of canola seeds.



[JSGS doctoral student: Understanding conflicts in public funding of science](#)

Policy research becomes transformative when students step beyond the classroom to present their work and engage in national conversations that connect their work to academics, policy practitioners and the broader scientific community.

Recently, **Dean Shames**, a PhD student at the Johnson Shoyama Graduate School of Public Policy, USask campus, presented his dissertation at the Stem Cell Network's Annual Till & McCulloch Meetings in Ottawa, as part of a collaboration with JSGS faculty members **Dr. Amy Zarzecny (PhD)** and **Dr. Louis-Robert Beaulieu-Guay (PhD)**.

Shames' research focuses on science policy: examining how scientists and the public connect, interact and influence the funding of science.

[USask AgBio research: Saving Prairie grasslands](#)

As the United Nations spotlights the International Year of Rangelands and Pastoralists 2026, USask researchers are in a race against time to preserve vital lands and resources.

Before the 1800s, herds of millions of bison roamed the Great Plains, contributing to widely diverse flora and fauna in rangeland ecosystems. In fact, pre-colonization, Canada had 61 million hectares of native grassland; now, there are 11 million, or less than 20 per cent.



Researchers in the USask College of Agriculture and Bioresources are seeking ways to preserve, protect and improve those lands.

“No landscape in Canada is more impacted by human activity,” said **Dr. Eric Lamb (PhD)**, professor in the Department of Plant Sciences. “Of our mixed-grass prairie, there's much

more remaining because the soil is not as good, so we don't use it so much for annual or perennial cropping. Only five per cent of grassland in the parkland remains intact."

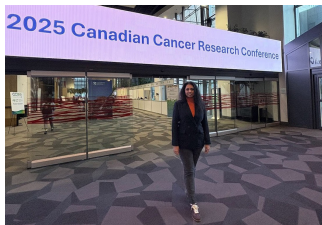


[USask entrepreneurship program gets boost from PrairiesCan](#)

USask has received \$450,000 in funding from Prairies Economic Development Canada (PrairiesCan) to support SIGMA, a unique interdisciplinary program that trains and develops future entrepreneurs.

SIGMA (Saskatchewan Innovation Growth and Market Acceleration) is housed in USask's College of Engineering and is a one-of-a-kind program in Canada that promotes entrepreneurship, provides education and creates opportunities for burgeoning tech innovators. SIGMA programming and events include industry-focused speaker sessions, mentorship and a four-month intensive lab with the goal of supporting users to build and apply skills learned through USask classes and move their innovations to the marketplace.

SIGMA is led at USask by associate professor and La Borde Chair in Engineering Entrepreneurship **Tate Cao** in the College of Engineering's Ron and Jane Graham School of Professional Development.



[Health researcher: What my USask degree did for me](#)



[National consortium formed to accelerate Canadian pea breeding through genomic selection](#)



[Five ways our research strengthened animal health in 2025](#)

USask Signature Series Podcast - Season 2

The **USask Signature Series Podcast** is an exploration and celebration of the interesting and the innovative, the fun and the fantastic, the cutting-edge and creative of USask research.

You'll hear from USask experts across a variety of disciplines and research areas as they tackle the questions and opportunities the world needs today.

Check out the podcast on Spotify, Apple Podcasts or wherever you get your podcasts!

Here are the newest episodes of the USask Signature Series:

- S2E07 – [How can VR and AI help us learn?](#)
- S2E06 – [What makes holiday marketing so effective?](#)

If you have an idea for an episode of the podcast, please email research.communications@usask.ca.



Stay connected with USask research news



Make sure to follow USask Research on Instagram at [@usaskresearch](#), and on [LinkedIn](#) and [Twitter/X](#) to stay in-the-know, with exciting research news delivered right to your newsfeed. Don't forget to also follow [@VPR_USask](#) and [@USask](#) on Twitter/X for more of the latest research and university news.

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

In The Conversation

Being involved in *The Conversation* is a unique and renowned avenue for sharing research and study with both colleagues and the public. We strongly encourage researchers to explore *The Conversation* as a way to share and distribute their expertise! Feel free to reach out to research.communications@usask.ca if you have questions.

Upcoming events

Have any upcoming research events? Please email research.communications@usask.ca with your event title, information and any links for registration to include in the Discovery Digest.

Information and Community for Researchers



Nominations open for USask Internationalization Recognition Awards

As part of the University of Saskatchewan Blueprint for Action, the International Office announces the J.W. George Ivany Internationalization Award, Global Research Leadership Award for Faculty, Global Research Leadership Award for Students and International Engagement Service Award for Staff. These awards are to recognize the achievements of faculty, staff, postdoctoral fellows and students who provide outstanding contributions to the internationalization of USask. Nominate a deserving colleague for an Internationalization Award.

Nomination deadline: **March 31, 2026, 4 pm CST/SK time**

Visit internationaloffice.usask.ca/awards for details.

Opus i2Build 2026: Ready to turn your research into a startup?

Applications for the Opus i2Build 2026 cohort are now open!

If you're a USask student, staff or faculty member with a research-based idea, this is your chance to build it on campus.



Apply by February 8. Successful applicants will be notified mid-February, and the program kicks off March 3.

Deadline to apply: **February 8, 2026**

Visit <https://opus.usask.ca/programs/innovate2build.php> for more information.

Tri-Agency Undergraduate Summer Research Awards: Call for Applications

USRAs provide paid, full-time work over the summer as a student assistant on a research project under the supervision of a USask faculty member



Application Deadline:
Friday, January 23, 2026
5:00 PM Sask Time



The Tri-Agency Undergraduate Student Research Awards Competition is open

Looking for a summer research opportunity? Apply for a [Tri-Agency Undergraduate Student Research Award \(USRA\)](#) for paid research experience under faculty supervision.

Available Award Streams for Summer 2026:

- NSERC USRAs
- NSERC USRAs for Indigenous Student Researchers – additional awards available beyond the general NSERC USRA allocation, see [eligibility criteria](#)
- NSERC, SSHRC & CIHR USRAs for Black Student Researchers

Deadline: **January 23, 2026, at 5:00 PM (SK Time)**

Learn more and apply at the [link here](#).

Living Skies Postdoctoral Fellowship Program

The Living Skies Postdoctoral Fellowship (PDF) program is accepting applications for 2026. Open to all eligible USask faculty members, the unique program is meant to foster interdisciplinary collaborations and recruit PDFs to USask.

Deadline: **February 23, 2026, 4:30 PM (CST)**

[Click here](#) for more information.

New preferred suppliers for specialty gaseous products

USask has established preferred supplier contracts with Air Liquide Canada and Linde Canada for the purchase of specialty gaseous products. Benefits of the new agreement include: access to a broad range of technical expertise, improved pricing and greater flexibility and resilience within the supply chain. For information on purchasing specialty gaseous products, please refer to the knowledgebase article [How do I Buy Gaseous Products?](#) If you have additional questions, please contact procurement@usask.ca.

If you have any important information for USask researchers, please contact research.communications@usask.ca!

Submitting to Discovery Digest

If you would like to submit a research-focused event or news item for consideration for Discovery Digest, please submit a link and a description of no more than 150 words to research.communications@usask.ca with the subject line "Submission – Discovery Digest," along with the month and year you are submitting for.

Please indicate whether your submission is a recommendation for a news item, event or information for researchers. If you would also like to submit a photo, please make sure it is a 3:2 aspect ratio image.

The Discovery Digest goes out on or as close to the 15th of each month as possible. **Please ensure any submissions are sent in by at least the 8th of each month to be considered for inclusion.**

In the news

- Jan. 14 – National Post, Toronto Star – [National consortium formed to accelerate Canadian pea breeding through genomic selection](#)
 - Jan. 14 – CBC News – [This U of S lab got people high and put them in a driving simulator. The results aren't shocking](#)
 - Jan. 13 – Regina Leader-Post, Saskatoon StarPhoenix – [Draining wetlands creates \\$171 million worth of annual carbon emissions: Sask. study](#)
 - Jan. 13 – CBC Radio, Global News – [The City of Saskatoon is looking at improving its road construction to make better roads for winter](#)
 - Jan. 13 – Saskatoon StarPhoenix, Regina Leader-Post – [Crop research in Saskatchewan receives \\$9.7 million investment](#)
 - Jan. 6 – CBC News – [What happens if you use cannabis while pregnant? Scientists turn to mice to find out](#)
 - Dec. 29 – Global News – [Canola research out of USask may boost canola value for Saskatchewan](#)
 - Dec. 21 – Forbes – [Some ChatGPT users say swapping out models is like 'replacing a service animal'](#)
 - Dec. 18 – Saskatoon StarPhoenix, Regina Leader-Post – [U of S researchers identify cause of decades-old pig disease](#)
 - Dec. 16 – Saskatoon StarPhoenix, CTV News, CJWW, CKOM – [U of S research partnership studies trauma in Saskatoon firefighting](#)
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Banner image photo credit: **Be careful of what you are doing, the cells are watching!** - by **Minh Vu**, MSc Student, College of Medicine

Images of Research 2025 - *Runner-up, More Than Meets the Eye*

This image offers a unique glimpse into the intricate relationship between nicotinic receptors (nAChRs – dark blue) and serotonergic type 3 receptors (5HT3Rs – light blue) within a superior cervical ganglion (SCG) neuron. Although 5HT3Rs are known to be highly expressed alongside nAChRs in SCG neurons, the underlying reason remains a mystery. The composition forms an evocative "eye" shape and a dynamic scene: a dense flow of axons encircling an SCG neuron, with a tiny vesicle appearing as a "tear drop". This artistic element evokes the sensation of the "eye" weeping, perhaps from the cellular stress induced by the intense axonal traffic. Scientifically, this tiny vesicle is on a vital journey, carrying signals to communicate with other neurons! Membrane lipid rafts (pink).



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

You are receiving this email because you either subscribed manually to Discovery Digest or were a former subscriber to USask Monthly Research Update. Questions? Comments? Send an email to [Research Profile and Impact](#).
