

December 2021 - Issue 47

In this issue: Investigating what makes COVID-19 variants more infectious, the 50th anniversary of Herzberg's Nobel Prize, potential impacts of exponential increase in wild pigs on the Prairies, making downtown living more attractive for Saskatoon residents, and much more!

Every month, USask Research Profile and Impact highlights research from across campus. *Discovery Digest* is a glimpse into how USask research, scholarly and artistic work is making a difference for Saskatchewan, Canada, and the world. Feedback welcome!

Top Stories



USask researchers among top scientists cited worldwide in Stanford list

On a recently published list, more than 130 University of Saskatchewan (USask) researchers were featured prominently among the world's top scientists, social scientists and academics, enhancing USask's reputation as a world-class research

university. The 135 USask experts listed were among the world's most-cited and the top researchers within their discipline areas.

The study, led by Professor John Ioannidis of Stanford University, combines several metrics to systematically rank the most influential scientists by scientific field as measured by citations. The study analyzes data that covermore than seven million scientists in 22 major fields. **The full story**.



USask, City of Saskatoon study explores how to make downtown living attractive

A new study funded by Research Junction, a joint initiative by USask and City of Saskatoon, found that making parts of downtown more pedestrian-focused, creating more diversified housing close to the riverfront, and repurposing barren or underused properties to meet community needs

are among key ideas to make downtown Saskatoon a more desirable place to live.

USask College of Arts and Science professor in the Department of Geography and Planning Dr. **Ryan Walker** (PhD) and graduate student **Zoe Hagen** were co-investigators on the study that surveyed 470 residents in downtown Saskatoon and 10 other neighbourhoods.

The city will use the findings from this research to help in planning major and minor projects downtown, including streetscape and public realm projects. **The full story**.

COVID-19 Research



Saskatoon hospital foundations offer support to USask's VIDO

Three of Saskatoon's hospital foundations—
Royal University Hospital Foundation, Jim Pattison
Children's Hospital Foundation, and Saskatoon City
Hospital Foundation—have partnered to donate \$230,000
in support of Canada's Centre for Pandemic Research at

the USask Vaccine and Infectious Disease Organization (VIDO).

Meant to honour the hard work of front-line doctors, nurses, medical, support staff and research initiatives across the hospitals and Saskatchewan, the donation adds to the support received from other private donors and all levels of government. This funding will help expand VIDO's infrastructure and support research. **The full story**.



USask biomedical researcher investigating what makes COVID-19 variants more infectious

USask biomedical scientist Dr. **Anil Kumar** (PhD) is leading a research team in investigating how COVID-19 variants function and interact with a host's cells, thanks to a \$100,000 grant from the Canadian Institutes of Health Research.

With predominantly four main variants currently circulating around the world—Alpha, Beta, Gamma and Delta—and a new variant of concern, Omicron, spreading quickly, Kumar and his team are studying specific mutations in the genome of the variants and their pathways for virus replication. These mutations cause the variants to be more contagious and infectious. **The full story**.

COVID-19 Research

USask researchers in a wide range of fields are undertaking critical research to help combat COVID-19. Read other stories.

Health research

USask researchers pave the way to accessible health care for those with inflammatory bowel disease



USask researchers from the College of Nursing and the College of Medicine are spearheading a project to improve the virtual care experiences of patients with inflammatory bowel disease (IBD) in Saskatchewan.

The research – led by Dr. **Noelle Rohatinsky** (RN, PhD) and Dr. **Juan-Nicolás Peña-Sánchez** (MD, PhD) - aims to assess the level of satisfaction of patients, their families and health care providers when using virtual care technologies to treat and manage IBD. The project will also consider issues of patient access to the appropriate virtual technologies and the importance of providing equitable access to health care specialists. **The full story**.



USask dentistry research team proves biofilm method can be used to inexpensively test new tooth decay treatments

Researchers will be able to test new potential tooth decay treatments inexpensively and in small amounts, thanks to new research from a USask dentistry research team including professor Dr. **Walter Siqueira** (DDS, PhD) and

post-doctoral research fellow Dr. Lina Marin (DDS, PhD).

The research team used a human saliva-based dental biofilm to simulate the formation of dental plaque and cavities. The biofilm was treated with both a sugar solution and a conventional fluoride treatment to determine if it would act similarly to a human mouth. **The full story.**



Pewaseskwan at USask signs MOU with FSIN to create research alliance

The Federation of Sovereign Indigenous Nations (FSIN) and pewaseskwan – the Indigenous Wellness Research Group (IWRG) at USask – have signed a memorandum of understanding on Nov. 23 to commemorate the start of a research alliance. The alliance will be focusing on health-

related projects, such as research to support the development of a First Nations primary and public health care system in Saskatchewan. Dr. **Alexandra King** (MD), Cameco Chair in Indigenous Health and Wellness and co-lead of pewaseskwan, signed the agreement on campus with FSIN Vice-Chief **David Pratt**. **The full story**.



Barriers and facilitators related to undertaking physical activity among men with prostate cancer

Prostate cancer and treatments lead to significant acute, chronic, or latent adverse effects that result in declines in patients' physical functions, quality of life and reduced sense of masculinities.

Drs. **Schroder Sattar** (PhD) and **Diane Campbell** (PhD) from the College of Nursing are working with a team on a scoping review to document the nature and extent of literature related to physical activity and how it can improve many health outcomes in men with prostate cancer, specifically looking at the facilitators, preferences, and barriers to physical activity in this population. **The full story**.

Animal health



USask research helps keep your poultry happy from farm to Thanksgiving table

Dr. **Karen Schwean-Lardner** (PhD) and her research team at the USask College of Agriculture and Bioresources (**Tory Shynkaruk** and **Kailyn Buchynski**), are working closely with industry partners to ensure the welfare of all poultry, including turkeys, broilers and laying hens on

commercial farms.

Americans ble up nearly 46 million turkeys over the Tharholiday long weekend, just a Canadians devoured 2.5 milthe birds on this occasion in October. Schwean-Lardne 's work focuses on developing feed strategies to help poultry cope with summer heat stress, investigates the effects of LED light flicker on the health and welfare of turkey hens, and will help to establish temperature parameters for the humane transport of turkeys for processing. **The full story**.



Wild pigs on the Prairies: USask researchers documenting exponential increase

The exponential increase in the number of wild pigs on the Canadian Prairies is a huge concern for USask researchers who are sounding the alarm about the possibilities of an ecological and agricultural disaster occurring as a result of the rapid expansion of the damaging and dangerous invasive species. USask researcher Dr. **Ryan Brook** (PhD) of

the College of Agriculture and Bioresources explains why.

With limited resources, Brook and his graduate students and volunteers with the USask-based Canadian Wild Pig Research Project have been charting increased wild pig sightings across the Prairies, with the majority occurring in Saskatchewan where feral pigs have been seen in 80 per cent of the province's 296 rural municipalities. **The full story.**



USask ornithologist's study on how birds guard their nests from predators featured in *The Atlantic*

A new study by USask College of Arts and Science biology researcher and ornithologist Dr. **Karen Wiebe** (PhD) along with University of Oslo

researcher Dr. **Tore Slagsvold** (PhD) was highlighted in *The*

Atlantic on Nov. 16. The study examined the tendency of birds to use piles of feathers to

deter predators from destroying their eggs and nests.

In the study, predator birds were found to avoid nests with feathers in favour of those without. The research describes how piles of loose feathers are used to emulate an 'attack' scene that causes other birds to avoid the area in fear of impending violence. The finding is unique, as previously it was assumed birds incorporated feathers in their nests only for insulation of their eggs and structural purposes. **Read the full article in The Atlantic. Read the full publication**.



USask researcher makes important link between climate change and disease prevalence in the Canadian Arctic

USask Western College of Veterinary Medicine PhD candidate **Kayla Buhler** has spent her academic career in the sky and on the ground of the Canadian Arctic, examining how infectious diseases are transmitted through wildlife interactions with their environment.

The study has established important links between the prevalence of disease, wildlife behaviour and their environment. Findings include that diminishing sea ice contributes to higher exposure rates of polar bears to tularemia (rabbit fever), while Arctic foxes seem to contract Bartonella bacteria through nest flea contact from goose nests.

Current research regarding vector-borne disease prevalence in the Arctic and its effects on both wildlife and people is limited. Buhler's work aims to fill this gap. **The full story.**



Veterinarian's vision revives German anatomy textbook

WCVM radiation oncologist Dr. **Monique Mayer** (DVM) worked with a team of USask staff and students to complete an English translation of *The Lymphatic System of the Dog*, a 1918 textbook by German anatomist Dr. Hermann Baum. Now available through the university's open publishing system, **the book** investigates the anatomy and drainage patterns of the canine lymphatic system.

Despite being written over 100 years ago, much of Baum's exhaustive work hasn't been repeated. The information is still relevant for veterinarians in their clinical work, and for researchers investigating the lymphatic system in dogs and in humans. **The full story.**



Cresty necks flag metabolic issues in horses

A recent study conducted by USask researchers confirms that a cresty neck score (CNS) is a reliable visual marker of abnormal insulin metabolism in horses. The study, which was published in the *Journal of Equine Veterinary Science*, was conducted by scientists

from WCVM and the College of Pharmacy and Nutrition.

Veterinarians use CNS to measure the fat deposits along the upper curve of horses'

necks. Among the 32 horses in the study, the team found that animals with scores of 3 and higher (0 to 5 scale) were more than 11 times as likely to have insulin dysregulation (ID). **The full story**.



USask scientists at WCVM investigate bovine pathogen

A WCVM research team is evaluating how a panel of drugs might affect Mycoplasma bovis—a bacterium that's responsible for causing bovine respiratory disease or "shipping sickness" in cattle.

Shipping sickness is the most common and most costly disease for the beef cattle industry. Effective drugs to treat the condition are hard to find due to the unique biological make-up of the bacteria. The project, led by Dr. **Tony Ruzzini** (PhD) and in collaboration with Dr. **Murray Jelinski** (DVM), aims to develop a commercially available treatment. **The**

Food security research

full story.



Global Institute for Food Security at USask announces new Bangladesh office and new Research Chair

Canada and Saskatchewan's strength in agriculture research and development now has an expanded footprint in the People's Republic of Bangladesh, as the Global

Institute for Food Security (GIFS) at USask has announced a new international office in the South Asian country, as well as a new Research Chair in Food Security.

The Global Institute for Food Security Regional Office in Bangladesh, inaugurated on December 12, will support GIFS' multidisciplinary research, training and development partnership with the Bangladesh Agricultural Research Council (BARC) of its Ministry of Agriculture, designed to help promote sustainable food security in the country. Based at GIFS, the newly created Bangabandhu Research Chair in Food Security has been awarded to Dr. **Andrew Sharpe** (PhD), GIFS' director of genomics and bioinformatics. **The full story**.



USask and Olds College sign agriculture and livestock research MOU

Two of Canada's leaders in agriculture and agri-food education and applied research, Olds College and USask, signed a memorandum of understanding (MOU) to collaborate in joint activities related to automation and increased incorporation of digital data in agriculture.

Both USask and Olds College recognize that the agricultural sector needs technical solutions to maintain Canada's place as a global leader and are seeking to combine their strengths to drive innovation. Areas that could benefit from working together include sensors and sensing, data transfer and security, data analytics, and artificial intelligence

and controls to support the growing technical shift in agricultural production. **The full story**.



Global Agri-Food Advancement Partnership launched to support agri-food start-up companies

Saskatchewan agri-value startups have a new support system to help them succeed: the Global Agri-Food Advancement Partnership (GAAP) is beginning its work of

assisting startups and growing the agri-food industry in Western Canada.

GAAP will attract new talent, create new jobs, and increase international partnerships. A stronger ecosystem will support startup companies as they develop tools to tackle global challenges of our day, such as food security and climate change. **The full story**.



USask AgBio professor named among top experts worldwide in soil

On Dec. 3, Dr. **Leon Kochian** (PhD), associate director of the Global Institute for Food Security and Canada Excellence Research Chair in Global Food Security, was named by Expertscape as a soil

expert. Expertscape is a ranking program used to objectively rank institutions and individuals by their expertise in various biomedical subjects.

Kochian's research focuses include plant mineral nutrition, and ways of developing more resilient root architecture that can better tolerate environmental and health stresses.



USask Crop Development Centre (CDC) celebrates 50 years

To mark its 50th anniversary, the USask Crop Development Centre (CDC), CDC is celebrating the people and

innovations that have made the CDC a staple in Canadian agriculture. Visit the new **CDC** website and watch a celebratory video (10 minutes).



2021 edition of Agknowledge now available

The 2021 issue of **Agknowledge** is here! Featuring mustread research news from the USask College of Agriculture and Bioresources, topics include improving the

sustainability of the beef industry through applied research, how soil science can help mitigate climate change, and more.

Water security research

USask water experts named to list of most highly cited researchers

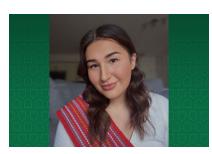


Two USask Global Institute for Water Security researchers have been named to Clarivate's 2021 Highly Cited Researchers list. Researchers honoured on this list have published multiple academic papers that rank in the top 1% of citations in their field that year.

Dr. **Jay Famiglietti** (PhD), executive director of the USask Global Institute for Water Security and Canada 150 Research Chair in Hydrology and Remote Sensing, is a leading hydrologist and has previously served as a senior water scientist in the NASA Jet Propulsion Laboratory. His research work has been cited approximately 17,610 times across 176 published papers, including in prestigious journals such as Nature.

Dr. **Martyn Clark** (PhD), associate director of the Centre for Hydrology and Coldwater Laboratory and a professor in the USask College of Arts and Science Department of Geography and Planning, is a leading hydrologist who has recently served as the Editor-in-Chief of the journal Water Resources Research. His research focuses on developing hydrologic models and understanding the sensitivity of water resources to climate change. His work has been published in 189 publications and cited approximately 15,500 times. **See the full list of 2021 recipients here.**

Arts and humanities



Exploring the contributions of Métis women in the establishment of a distinct people: USask research

USask College of Arts and Science graduate researcher **Kate Gillis** is exploring the currently largely unknown contributions of Métis women in the establishment of Métis people from the Red River region (now Manitoba).

To further explore the roles and connections of women in the establishment of the Métis identity, her research team will collaborate with the Provincial Archives of Manitoba, the Société Historique de Saint-Boniface, and Hudson's Bay Company Archives in Winnipeg, to reconstruct the genealogical connections in the Red River region and identify key matriarchal figures. **The full story.**



USask historian reflects on Gerhard Herzberg's life

Fifty years ago, on Dec. 10, 1971, Dr. **Gerhard Herzberg** accepted the Nobel Prize in Chemistry—the capstone to a remarkable life in science.

PhD candidate in history **Dimitry Zakharov** is lead historian on Herzberg50, a national project commemorating the

50th anniversary of Herzberg's Nobel Prize. Over the past six months, Zakharov pored over books, letters, personal effects and more to understand Herzberg's story and legacy. He is

writing a series of six articles examining Herzberg as a scientist and as a person.

As part of its work marking the 50th anniversary of Herzberg's Nobel Prize, USask created a new **international student award**, named **two prominent spaces on campus after Herzberg** and launched a **commemorative website**. **The full story**.



USask research featured in new CBC Nature documentary series episode

USask College of Medicine associate professor Dr. **Julia Boughner** (PhD) and Canadian Light Source associate
scientist **Adam Webb**'s evolutionary biology research was

included in *CBC's The Nature of Things* documentary series with an episode entitled '*The New Human*'. The episode premiered Nov. 26 on *CBC* and *CBC Gem*.

The documentary focuses on "a whirlwind tour into the minds of experts who remind us that our bodies are always changing in reaction to the world around us," and includes research work from an international team of biologists, historians, geneticists and statisticians. **More details.**



USask PhD candidate's research shines light on Indigenous water governance in Manitoba

USask graduate student **Warrick Baijius** (pictured) hopes his doctoral research into issues of water insecurity faced by Indigenous people in Manitoba will lead to positive policy changes.

Baijius' thesis explored how Indigenous water justice is a multidimensional concept, and each dimension must be addressed to achieve water justice. The work was co-

supervised Dr. **Bob Patrick** (PhD), a faculty member in the Department of Geography and Planning in USask's College of Arts and Science, and Dr. **Chris Furgal** (PhD), a faculty member in the Department of Indigenous Studies at Trent University.

The research took a mixed-methods approach, which included community-based research with the Wuskwi Sipihk First Nation and involved participant observation and semi-structured interviews. **The full story.**

Commercialization



USask signs MOU with Agtech Accelerator to support industry in Saskatchewan

USask has signed a memorandum of understanding with the Agtech Accelerator, accentuating the university's role in the innovation ecosystem and building a pipeline of talent for the agricultural industry. The Agtech Accelerator is a venture capital-backed accelerator

assisting early stage start-ups that are seeking solutions to global agricultural problems

through innovation and technological advances.

The accelerator will provide companies with the tools they need to grow, secure capital, and create high-quality job opportunities for both undergraduate and graduate students right in Saskatchewan. Through partnerships with Saskatchewan post-secondary institutions, the accelerator can collaborate directly with researchers and educators, and work to fill both knowledge and labour gaps in the sector. **The full story.**

Space research



Understanding space, improving life on Earth

The SuperDARN (Super Dual Auroral Radar Network) is a global network of scientific radars monitoring conditions in the near-Earth space environment. The Saskatoon component is a cluster of 20 massive radar antennas in a field just east of the city. SuperDARN was recently highlighted by *The Globe and Mail*.

Built to study activity in the Earth's upper atmosphere, it was one of the first such sites in a network that now includes 36 locations around the world, and contributions by 11 countries. USask physicist Dr. **Kathryn McWilliams** (PhD), director of SuperDARN and chair of the international SuperDARN Collaboration, said that SuperDARN helps position Canada as a global leader in monitoring space weather conditions, as the study of forecasting of space weather is in its infancy. SuperDARN receives support largely from the Canada Foundation for Innovation Major Science Initiatives Fund. **The full feature in** *The Globe and Mail.*

Undergraduate research



USask undergraduate researcher investigates the impact of COVID-19 on people living with HIV

USask College of Kinesiology undergraduate student **Topaza Yu** has joined forces with a University of Toronto research team to understand the effects of COVID-19 infection in those living with human immunodeficiency virus (HIV).

Through a comprehensive literature review, the study found the effectiveness of COVID-19 vaccines in those receiving HIV management treatments is similar to those without HIV. The study also found that those living with HIV may benefit from the protective effects of HIV treatments in the management of their response to the COVID-19 virus.

This is among the first research to examine the appropriate strategies to manage the effects of co-infection of COVID-19 and HIV. The work was conducted under the supervision of mentor Dr. **Reina Bendayan** (PharmD) at the University of Toronto Leslie Dan Faculty of Pharmacy. **The full story**.

Accolades



USask professor receives Mitacs Award for Exceptional Leadership

USask College of Arts and Science professor Dr. **Raymond Spiteri** (PhD) is the recipient of the 2021 Mitacs Award for Exceptional Leadership. Since 2002, Spiteri has led many Mitacs-funded research projects involving a total of 19 industry partners and employing 21 USask student

interns.

Projects have included designing a software method of fitting clothing on a virtual avatar for Internet shopping purposes, and working with Canadian Light Source staff to develop an improved computer model to assist in a decision-making process about proposed system upgrades.

The award is given by Mitacs to an academic supervisor with an exemplary record of developing collaborations with industry partners that provide valuable research and training experiences to interns. **The full story.**



International journal honours late USask AI researcher

Computer scientists from around the world came together to honour the memory of USask researcher Dr. **Jim Greer** (PhD) through a special issue of the International Journal of Artificial Intelligence in Education.

Greer, who died in 2018, was a faculty member in the Department of Computer Science and a world leader in the field of artificial intelligence in education. Dr. **Julita Vassileva** (PhD) and Dr. **Gord McCalla** (PhD) served as guest editors of the special issue, which features 24 papers submitted by researchers who were influenced by Greer. **The full story**.

International



Designing the future of accelerator physics

CERN, one of the world's largest and most respected centers for scientific research, USask, and the Canadian Light Source are paving the way for a new accelerator for world-class research. The three organizations have signed a memorandum of understanding for the Future Circular Collider Feasibility Study.

The CLS and CERN have high-tech facilities that accelerate particles to help scientists to probe matter, and to understand the origins of the universe. These capabilities can also find applications beyond research in fundamental physics, such as helping to address global problems like food security, cancer, and climate change.

All three organizations are planning for a future accelerator with sensitivity to energy scales an order of magnitude higher than current accelerators. **The full story**.



Research and scholarship MOU signed between USask and Vietnamese university

Today (Dec. 15), the University of Saskatchewan and the University of Economics and Law under the Vietnam National University Ho Choi Minh City, Vietnam, signed a memorandum of understanding (MOU), establishing a partnership to advance research and scholarship between the two institutions.

The MOU will serve as the framework for a new student and faculty exchange agreement and will facilitate joint research partnerships in the areas of economics, law and management.

From the OVPR



Survey to discover USask research projects based in the Canadian and Global North

Are you a USask researcher who is undertaking a project in the Canadian and Global North (north of the southern limit of the discontinuous permafrost zone)?

The Office of the Vice-President Research is conducting a survey to take an inventory of USask research projects conducted in the North. Survey responses will be used to develop an improved strategy to communicate the important research being done in these areas. It also provides an opportunity to let USask research communications know if you have a story you would like to share about your work.

Let us know about up to three of your current USask North Research projects by filling out the survey **here**. Reach out to **research.communications@usask.ca** with any questions or concerns.

Telling your research story



Enter NSERC's Science Exposed Image Competition by Jan. 24.

If you have eye-catching images from research projects from any scientific or engineering field, submit your photos to the Science Exposed competition by

January 24, 2022.

Individuals or groups that have most successfully combined creativity and science will be eligible for a total of three \$2,000 Jury Prizes and a \$2,000 People's Choice award. The contest is organized by the Natural Sciences and Engineering Research Council (NSERC)

and Association francophone pour le savoir (Acfas). Submit your image here.



USask "Images of Research 2022" to launch in March

USask's "Images of Research" competition, organized by Research Profile and Impact, launches in March. Snap your research, scholarly, and artistic work and enter your images for the chance to win glory and cash prizes. Get those shutters clicking and check **Research.USask.ca** for past winners and contest details.



Follow USask Research Profile & Impact on LinkedIn

Follow the USask Research Profile and Impact page to stay in the know, with exciting research news delivered right to your LinkedIn newsfeed. As a unit of the Office of the Vice-President Research, our mission is to help share USask research stories with the world.

We will be sharing current research, exciting findings, new research directions and partnerships regularly. Come see what we're up to at USask by making us part of your

professional network, and check back often for updates.



Share your research story on social media

Use the hashtag **#USaskResearch** when sharing about USask-related research findings, publications or achievements on social media. Using our hashtag will allow OVPR and USask to find your posts and share them on our own channels. You can also search the hashtag at any time to find relevant research-related content. Don't forget to follow **@VPR_USask** and **@USask** on Twitter for the latest research and university news.



Eating disorders have increased during COVID-19 – here's how to recognize them and how to help

USask pediatrician Dr. **Ayisha Kurji** (MD)

Eating disorders are often misunderstood, but earlier treatment improves outcomes. Let's dispel some myths, learn how to recognize eating disorders and what to do if someone you love is struggling.



Indian Residential Schools: What does it mean if the Pope apologizes in Canada?

USask St. Thomas More College professor Dr. **Christopher Hrynkow** (PhD, ThD)

A papal apology, if done in 'a good way,' could help remove barriers to transforming harmful relationships between Indigenous Peoples and the Catholic Church.



Write about your own research in The Conversation

USask is a founding member of The Conversation Canada, an online academic journalism hub/newswire where researchers write plain-language editorials and explainer articles about their research. Articles written by USask researchers have been read more than 3.5 million times since the university entered into a partnership with the SSHRC-funded Conversation Canada in June 2017.

Writing is easier than you think!

Watch a video from Conversation Canada Editor-in-Chief Scott White.



Want to reach a broad audience with your research? Consider pitching an item to the Conversation. Wondering where to start? Read a short explainer on how to write for The Conversation Canada. Read previous USask articles here and get in touch with Research Profile and Impact.

Upcoming events



NEW! Upcoming events are now stored 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**.

Upcoming events include:

Campus Conversations on Research, Scholarly, and

Artistic Works - Wed, Jan 5 12 pm

#WomenAndWater Lecture Series: Transborder Collaboration: Women and High Mountain Water -Thu, Jan 13 12:30 pm

The 2022 North American Society for Pediatric Exercise Medicine (NASPEM) Biennial Meeting -Wed, Aug 3

In the news

• The month's top stories:

USask, City of Saskatoon study explores how to make downtown living attractive – the story was covered by 11 media outlets, including *Global News*, *CBC News*, and *CTV News*, and seen by an estimated 18.9 million people

- **USask professor receives Mitacs Award for Exceptional Leadership** the story was covered by 77 media outlets, including *The Guardian, Global News,* and *The StarPhoenix*, and seen by more than 9 million viewers.
- USask chickpea research aims to improve important food source for low- and lower-middle-income countries seen by more than 1 million people, the story was featured in 12 outlets, including *Technology Networks, Scienmag*, and *The World News*.
- USask signs MOU with Agtech Accelerator to support industry in
 Saskatchewan the story was featured by Farms.com, paNOW, Education News
 Canada, and 16 other media outlets, and seen by an estimated 425,000 people.
- **USask and Olds College sign agriculture and livestock research MOU** the story was covered by 10 outlets, including *Education News Canada, Farms.com*, and *saskNOW*, and seen by an estimated audience of 365,000 people.
- USask's COVID-19 research has been featured in:
 - Nov. 16 *Popular Science* The animal kingdom is full of coronaviruses. Here's what that means for COVID's future.
 - Nov. 27 The New York Times How Did the New Covid Variant, Omicron, Get
 Its Name? The New York Times
 - Nov. 29 *Macleans* The team of scientists guarding Canada against COVID variants—'the known unknown'
 - Nov. 29 Global News VIDO-InterVac running vaccine trial in Africa as
 Omicron variant spreads | Watch News Videos Online
 - Nov. 24 CBC News Opinion: We can't protect our kids from everything, but we can and we must protect them against COVID-19 infection - Dr. Alexander Wong
 - Dec. 1 Wired The Omicron Variant Is a Mystery. Here's How Science Will
 Solve It
 - Dec. 5 CityNews Toronto Omicron variant casts doubt on Canadians' hopes for Christmas celebrations
 - Dec. 8 CBC News Tracking omicron: Canadian scientists race to understand new variant
 - Dec. 14 CBC News Sask. wastewater researchers begin search for omicron variant
- Other USask research has also been featured in:
 - Nov. 14 CBC News Marketplace tested Perrier, LaCroix, Bubly sparkling waters to see which is most acidic
 - Nov. 15 CBC Radio U of S research helping to inform culturally appropriate diabetes interventions in Indigenous communities
 - Nov. 15 Saskatoon StarPhoenix –

U of S study reveals factors behind vaccine resistance in Saskatchewan

- Nov. 15 Global News University of Saskatchewan researchers part of a worldwide chickpea study
- Nov. 17 CTV News 'We don't see agricultural residue as a waste':

U of S researchers tackling Sask.'s arsenic problem in water

- Nov. 17 National Post U of S undergrad researcher investigates COVID-19's impact on people living with HIV
- Nov. 19 The Globe and Mail The power of illumination | From the Research
 Excellence and Innovation Report
- Nov. 19 The Globe and Mail Opinion: After a year of disasters, it's urgent that we address Canada's climate Dr. John Pomeroy
- Nov. 22 Researchers Under the Scope podcast: Slips, trips and spills: preventing falls with Dr. Cathy Arnold
- Nov. 23 Saskatoon StarPhoenix –

U of S researcher pioneers solution for trying on online purchases

- Nov. 24 Toronto Star Wild boars may invade RMNP
- Nov. 25 Saskatoon StarPhoenix New graphic novel explores psychedelic research on the Prairies
- Dec. 2 Saskatoon StarPhoenix Researcher helps women share first-person reality of gang lifestyle
- Dec. 3 Phys.org Prairies facing ecological disaster from uncontrolled spread of wild pigs
- Dec. 3 CBC Radio How two-spirit people are 'coming in' to their communities
- Dec. 6 The Globe and Mail Feeding the world with innovation
- Dec. 6 Researchers Under the Scope podcast: Treating diabetes with black bag medicine: Dr. Stu Skinner
- Dec. 8 Global News Downtown Saskatoon still lacking grocery store, safety concerns remain: study
- Dec. 14 Saskatoon StarPhoenix U of S student fosters innovation in energy and food security



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