

BE WHAT THE WORLD NEEDS

Office of the Vice-President Research

2023-24 ANNUAL REPORT

LAND ACKNOWLEDGEMENT

The University of Saskatchewan is on Treaty 6 Territory and the Homeland of the Métis. We pay our respect to the First Nations and Métis ancestors of this place and reaffirm our relationship with one another.



"Caribou and the climate calamity" by Dr. Kayla Buhler (PhD), alumnus, Department of Veterinary Microbiology

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COVER PHOTOGRAPHY

"A curious male honeybee" by Dr. Marina Carla Bezerra da Silva (DVM), PhD student, Department of Veterinary Pathology

VICE-PRESIDENT'S ADDRESS

On behalf of the Office of the Vice-President Research (OVPR), it is my honour to provide members of the University Council and other esteemed members of the University of Saskatchewan (USask) community a fulsome report of USask's 2023-24 research, scholarly and artistic work (RSAW).

As I reflect on the year that was my third as the Vice-President of Research, it is evident that RSAW not only remains one of the cornerstones of USask's strengths, but the work we are doing is being recognized more broadly than ever before. People around the world are taking notice of the immense influence and impact USask research has on the global scale.

This past year, the OVPR continued to provide leadership and strategic direction to USask's RSAW enterprise through our extensive programs, services, and supports that enable us to be the university the world needs. I'm proud to say we've made great strides towards our ambitious pursuits to actively shape USask's collective RSAW efforts. The services we provide allow our researchers the opportunity to go beyond what was previously thought impossible.

There has been growing concern across our country that Canada is not making the much-needed investments in its research and training programs. As chair of the governing body of the U15 Group of Canadian Research Universities, USask's president, Peter Stoicheff, created productive partnerships with national and international institutions to reinforce collective commitment for research, innovation, and collaboration and advocate for increase in research and graduate student funding. On June 1, 2023, Debby Burshtyn, Dean of the USask College of Graduate and Postdoctoral Studies (CGPS) and outgoing president of the Western Canadian Deans of Graduate Studies addressed the Standing Committee on Science and Research to raise concerns regarding the lack of funding to graduate and postdoctoral students across this nation, and the need to ensure fairness and prevent exclusivity. Finally, it was my honour to be a member of the influential Bouchard Advisory Panel on the Federal Research Support System in 2023 that identified ways Canada could better support its research ecosystem, infrastructure and innovation.



Vice-President Research, Baljit Singh

Collectively, USask played an important role in this national advocacy leading up to the announcement of the federal budget in April to increase funding for research infrastructure, student scholarships and innovation signaled a big leap for the research ecosystem of Canada.

At my last Campus Address in September, I announced the lofty goal of hitting $400 M research revenue in 2029. I'm thrilled to report we have made monumental strides towards achieving this goal. This year, USask received $323.9 M in research revenue, an increase of over $85 M over the previous year. This impressive number reflects the efforts of many collective voices across the academy who contribute to the success of our unified goals.

Often, research doesn't show itself as revenue but in societal impact. USask hosted and planned many research-focused events throughout the year that had great impact on our communities, and you will read more about these one-of-a-kind research programs in this report. Also of note is the roughly 70 artistic performances, exhibitions, and curations at USask this past year. These pieces greatly and immeasurably enrich our lives and enhance the reputation of USask's RSAW enterprise.

A substantial change we saw this year was moving the CGPS into the OVPR portfolio. This was a major strategic move that allows CGPS and OVPR to work together to enrich the graduate experience and alignment with USask's RSAW efforts. Dean Burshtyn's enthusiasm, leadership and expertise related to graduate and postdoctoral research has had great influence within the RSAW spectrum.

OVPR's areas of focus centered around enhancing the RSAW experience for the members of the academy and growing our innovation here at home and around the globe. We were able to reflect and consider several OVPR-lead projects and programs that would amplify these goals.

Our new program DARE (Discovery, Achievement, and Research Excellence) empowers our newly recruited professors and provides resources and programming so early career researchers can hit the ground running when they arrive at USask.

Both human and animal ethics is an area where we've put substantial effort into breaking the bottleneck and wait times. There is work to be done, but we've swung the pendulum in the right direction, with the right people in place to get the job done. I expect to see improvements over the coming months.

We continue to build partnerships in Bangladesh, Germany and India, and there are clear outcomes from these partnerships. Our international efforts strengthen ties with government, top research institutions, and private industry. Discussions with these groups focus on topics ranging from quantum technologies to agriculture and sustainability.

And there is much to celebrate! We've been able to celebrate our people through strategic storytelling that highlights our RSAW successes, awards, and rankings. While we celebrate our wins, we can't get complacent. Ultimately, there's still work to be done.

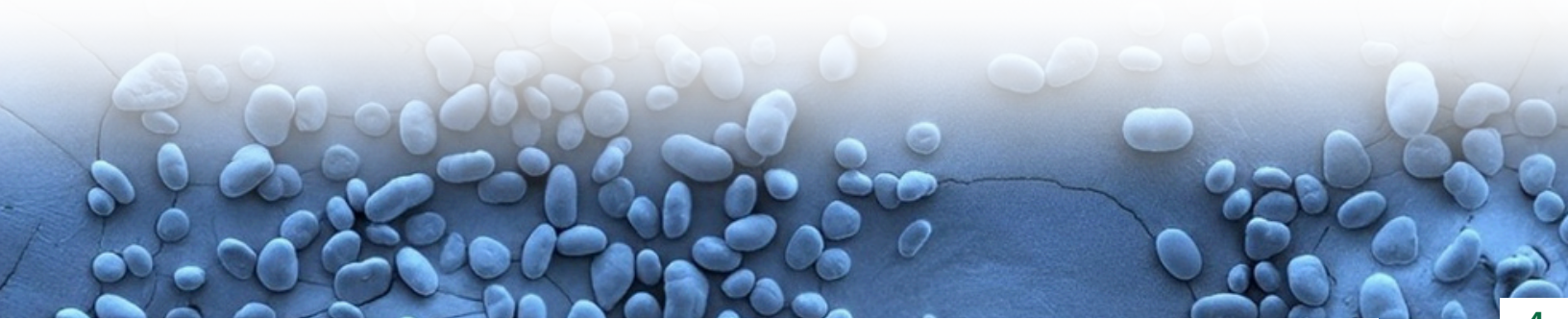
I've been encouraging members of USask to think differently about the RSAW enterprise. OVPR has committed to supporting deans and executive directors across the academy to develop goals and targets through strategic planning and associated performance indicators. This is a new endeavour because we at USask have generally not set RSAW targets and developed plans to resource the initiatives to attain those targets.

We've made recent changes in our faculty complement planning, which is co-led by Professor Airini, USask's provost and vice-president academic, and myself. These changes align our resources at the institution behind our ambitions, goals, and research agenda. Alignment with our deans, centre directors, Signature Area leads, associate deans of research, graduate students, post-doctoral scholars, undergrad students and individual researchers is vital in reaching our collective mission.

I'm confident in this university's ability to amplify our innovation at every level - be it local, national or international. We have the pieces in place to foster a strong RSAW environment that garners results.

RSAW plays an undeniable role in the future of our lives and creates sustainability in our ways of life. I invite you to flip through the pages of this report to gather a sense of the OVPR's efforts and to learn more about the exciting future of RSAW that lies ahead of us at this prestigious university.

Baljit Singh
Vice-President Research
University of Saskatchewan



"The fine art of fractionation: faba bean starch granules magnified" by Oneli Mapalagama, MSc student, Department of Food and Bioproducts Science

OFFICE OF THE VICE-PRESIDENT OF RESEARCH (OVPR)

OVPR provides key services and supports to researchers, fostering connections between USask's RSAW endeavors and communities worldwide. Together, the units of OVPR facilitate the development of local, national, and international partnerships, manage grant and contract submissions, support knowledge mobilization, ensure compliance, and highlight the university's impact and achievements.

Innovation Mobilization and Partnerships

Innovation Mobilization and Partnerships (IMP) builds strong ecosystems and research partnerships to support mobilizing USask innovations with the goal of creating external value for society, the economy, and the environment. IMP teams conduct technology transfer, research contracting, intellectual property management, venture creation, and innovation ecosystem engagement activities. IMP is the organizational home of Opus, USask's pre-accelerator program for founders with research-backed innovations with which they want to build new companies.

International Office

International Office (IO) supports the USask community to engage in international research, by identifying funding opportunities, and bringing teams and global partners together to work on international projects. IO's work supports and coordinates international initiatives highlighted in the university's "International Blueprint for Action 2025 – a vision for a globally significant university."

Ethics

Ethics upholds the approved ethical standards and guidelines for research conducted on campus. Services include reviewing and approving submissions, developing policies, providing education and training.

Research Acceleration and Strategic Initiatives

Research Acceleration and Strategic Initiatives (RASI) supports the university research community in the incubation and development of research grants, infrastructure projects and initiatives, and management of the federal research chairs programs. Key goals of RASI are to provide researchers and the university with services and programs that afford a competitive edge when applying for external research funding, ensure alignment with granting agency and national research security requirements, and to support good management of external funding. RASI supports the development of a robust research culture through targeted programs and initiatives, including the Undergraduate Research Initiative and DARE program.

Research Profile and Impact

Research, Profile and Impact (RPI) tells the university's research story to the world – through strategic communications involving print, video, web, social media, speeches, presentations, and events. RPI plays a critical role in building USask's reputation as a U15 research-intensive institution, which in turn helps bolster USask's placement in university rankings and attracts top talent, public and private investment, as well as support from alumni and partners. As the university's liaison with federal and provincial granting agencies, RPI ensures compliance with communication requirements and leads high-profile events to showcase USask's research funding successes.

College of Graduate and Postdoctoral Studies

The College of Graduate and Postdoctoral Studies (CGPS) recently moved under the Vice-President of Research portfolio. Dean Debby Burshtyn and Baljit Singh continue to incorporate CGPS strategy into RSAW planning to deepen graduate student and postdoctoral scholar experience. Leadership has been working closely with deans, centre directors and department heads on the alignment of graduate student programming. Work continues to collaboratively find more graduate student funding and international opportunities.

CPGS prepares an annual report for University Council, for further information on the College's priorities, activities, please refer to that separate report.



"Family of fungi" by Olivia Yurach, MSc student, Department of Soil Science

CONNECTING WITH COMMUNITY

The OVPR is building a dynamic RSAW culture that creates new knowledge across a broad array of disciplines, but also helps improve the economic, social, and cultural vitality of our region and beyond. Through dedicated efforts of faculty, staff, and students, USask's RSAW is creating positive change and addressing critical social issues locally, nationally and internationally. Several events this past year showcased projects that highlight the immense and often indefinable effects research can have on community.

→ Critical research into regenerative and digital agriculture at USask has been accelerated because of a $2 M donation from BMO on April 12, 2023. The donation supported two initiatives within the College of Agriculture and Bioresources: the BMO Soil Analytical Laboratory and the Jarislowsky and BMO Research Chair in Regenerative Agriculture. BMO's gift is part of the university's upcoming Be What the World Needs campaign.

→ An art exhibition featuring representations of the bond between dogs and humans, and based on work led by Dr. Jordan Woodsworth made an appearance at Wanuskewin on Jan. 20, 2024. Named Atim Maskikhiy — Cree for "Dog Medicine" — the art exhibition developed from Woodsworth's research is touring across Saskatchewan with the support of the Organization of Saskatchewan Art Councils (OSAC).



Panelists at the Atim Maskikhiy - Dog Medicine Tour Launch (Photo: Brandon White Photography)

CGPS in collaboration with the OVPR hosted the USask Graduate Research Showcase on Oct. 6, 2023. The event welcomed distinguished guests and elected officials to network with some of CGPS's top research talent to discuss how emerging research at USask works to advance Saskatchewan's economic and social growth. The Master's students, PhD students, and postdoctoral scholars who presented their research at the event demonstrated what USask does for the people of Saskatchewan through research, scholarly, and artistic work.

USask-led project, "Remember Rebuild Saskatchewan," launched a new Saskatchewan contribution to the national COVID in the House of Old (CIHO) Exhibit on June 12, 2023, which looks at the impacts of the pandemic in Canadian residential care homes, remembering the thousands of Canadian care home residents and workers who died of COVID-19 or suffered through extended periods of stress and isolation. The CIHO show features seven stories from Elders who lived-in long-term care during the COVID-19 pandemic.

Researchers at USask, including Dr. Michael Nickerson, have cooked up a new way to fight local food insecurity in Saskatchewan: a dry soup mix product to be distributed by the local food banks across Saskatchewan. The Farm2Kitchen soup mix product is a collaboration between the USask College of Agriculture and Bioresources, the Global Institute for Food Security (GIFS), Saskatchewan Food Industry Development Centre Inc. (Food Centre), and the Regina Food Bank and the Saskatoon Food Bank & Learning Centre. The unique and impactful partnership was announced at a media event on Dec. 18, 2024.

A collaboration between graduate students from USask and the University of British Columbia (UBC) secured a winning spot in the 2024 Social Sciences and Humanities Research Council (SSHRC) Storytellers Challenge on May 15, 2024, marking the first time a collaborative entry has placed top five in the contest's eleven-year history.



Baljit Singh (left) and radio host Brent Loucks (right) share a laugh during USask's Giving Day. Singh was one of several USask members to be interviewed on Sept. 12, 2023 as part of Giving Day, in support of USask's Be What the World Needs Campaign

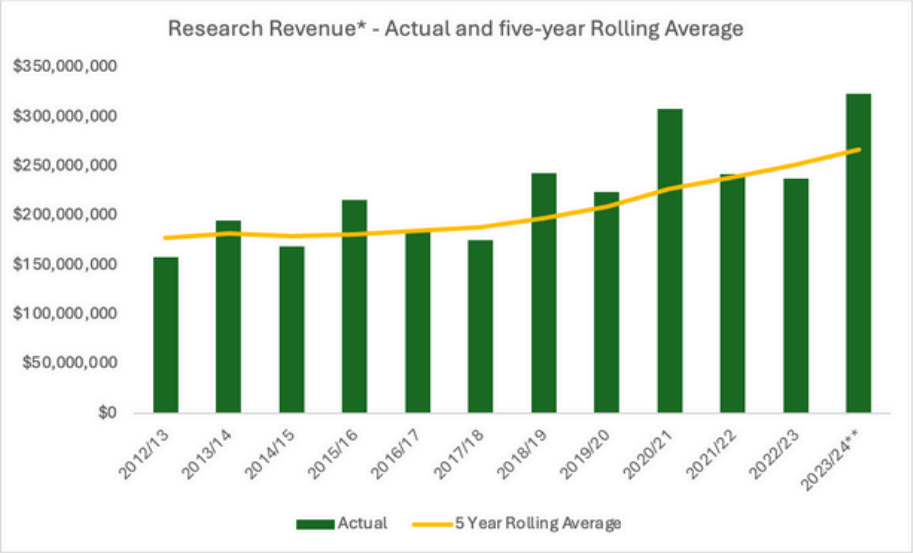
RESEARCH FUNDING

Research Revenue

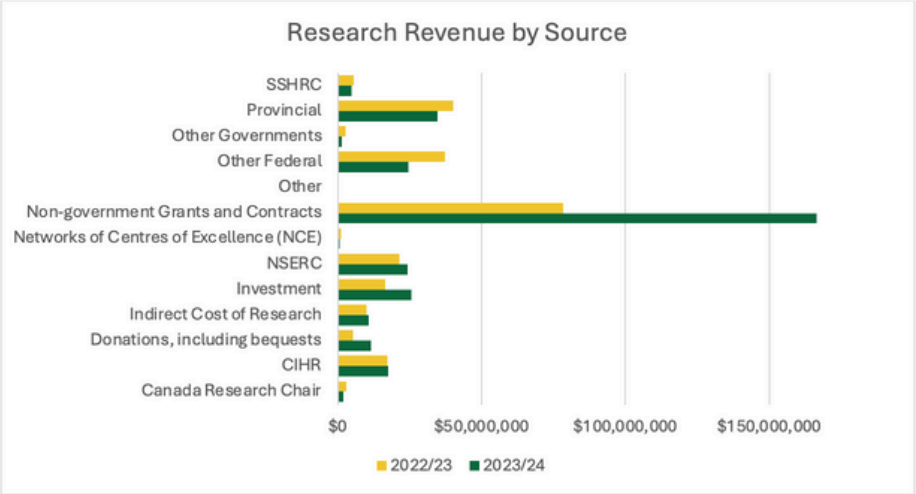
Research revenue is defined by the actual receipt of funds by the institution. This means that revenue is recognized only when the money has been officially received and processed by the university.

To date, USask has received **$323.9 M** in research revenue in 2023/24 (final numbers will be confirmed by July 2024). This historic amount is an **$85 M** increase from the previous year.

USask's research revenue provides a full picture of research funding received by the university, including research awards (grants and contracts from national and international agencies), indirect cost of research, investments, and donations. Over the last five years (2019/20-2023/24), USask has reported record research revenue levels with a **five-year average of $267 M**. This is a 34 per cent increase over the previous five years (2014/15-2018/19), which had a five-year average of **$198 M**.



*Research revenue amounts are shown as and when the money is received. Installment amounts are shown under each year the installment is received in. **Data is incomplete for 2023-24 until July 2024.



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Research Awarded

Awarded research refers to the total amount of funding for this reporting period that has been granted to the institution based on the date of award acceptance, regardless of when the funds are received.

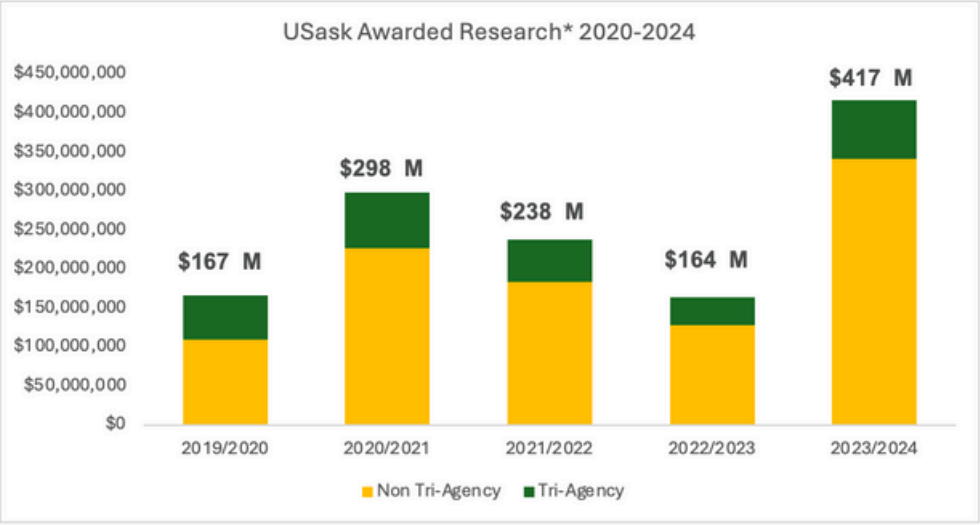
USask received $417 M in awarded research funding in 2023/24 fiscal year, which is the highest amount awarded to USask in a single year.

The success is attributed to the following:

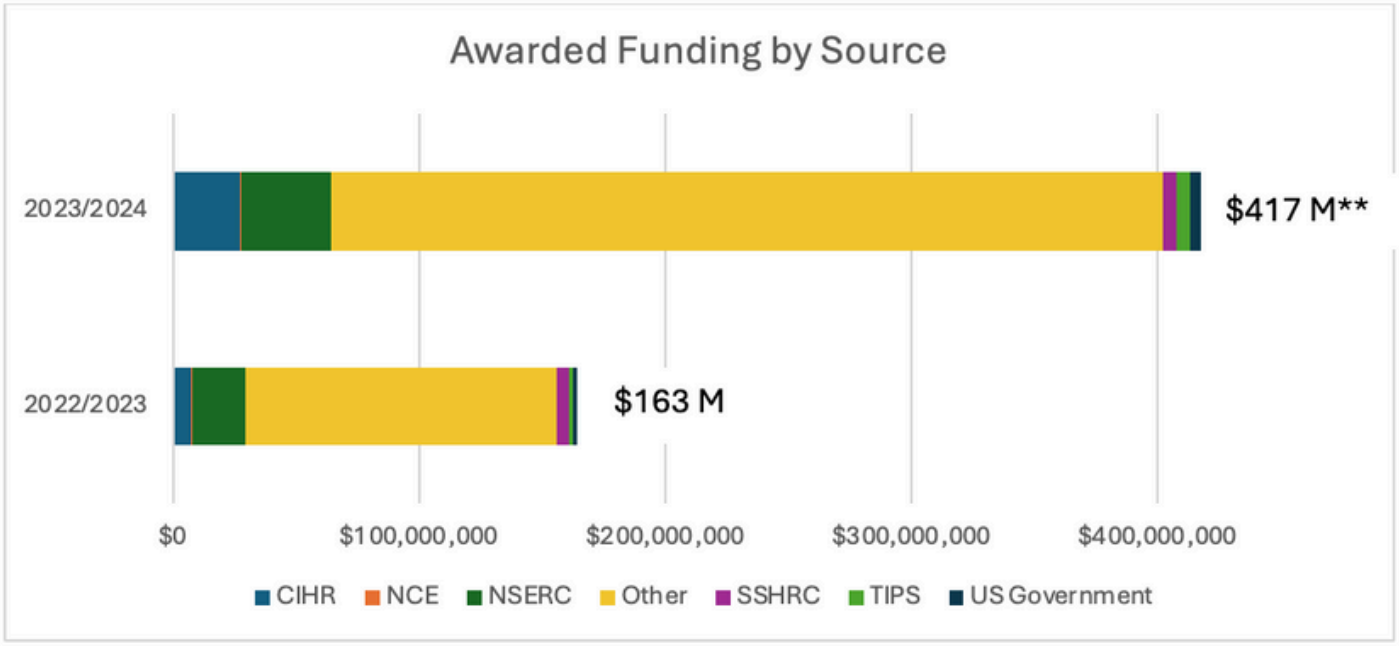
- Several large-scale research grants.
- USask was awarded close to $75 M in Tri-Agency funding – a seven-year high for USask. This includes a notable increase to Canadian Institutes for Health Research (CIHR) funding. This rise is attributable to the strategy implemented by Dr. Marciniuk, aimed at enhancing health research across campus. For example, USask was awarded a total of $12 M in spring and fall 2023 project grant competition from CIHR, achieving an application success rate of 42 per cent in this competition, which was number one in the country.

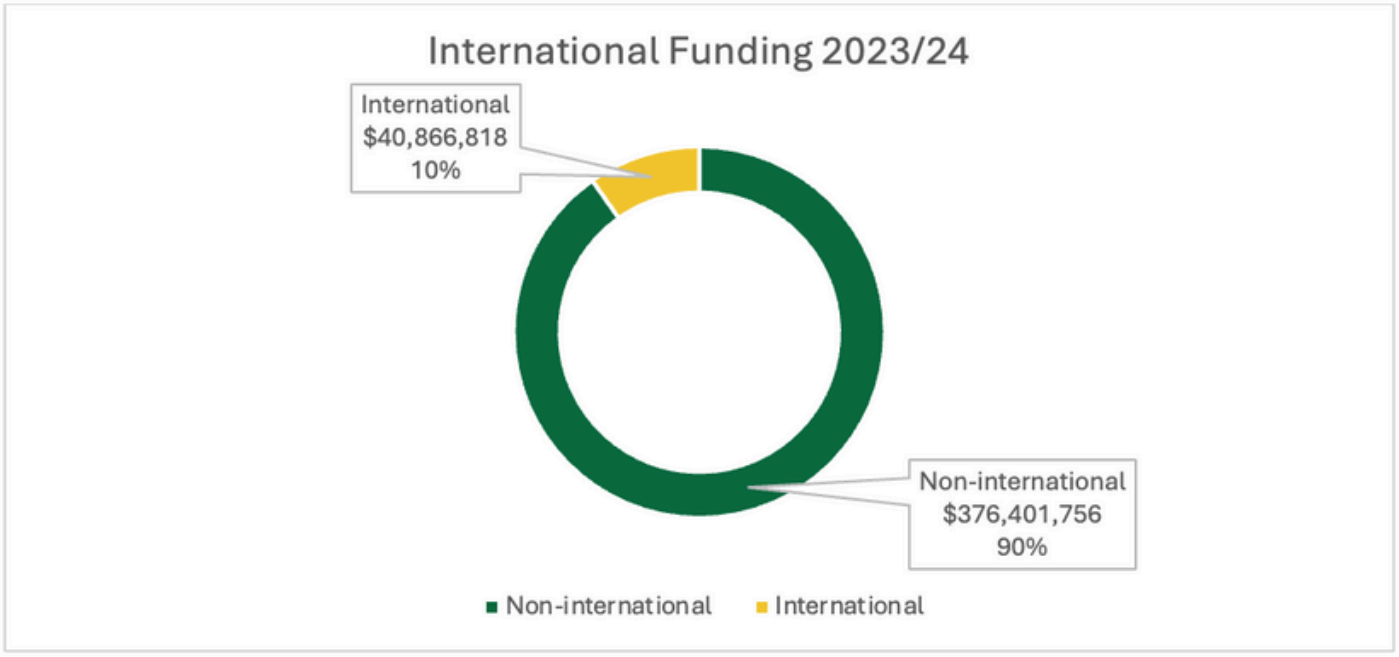
This sum also includes the formal acceptance of the $170 M Canada Foundation for Innovation Major Science Initiatives awards that fund the following national research facilities:

- Canadian Light Source: $97.2 M
- Vaccine and Infectious Disease Organization (VIDO): $53.9 M
- Global Water Futures Observatories: $16.3 M
- SuperDARN Canada: $2.6 M



*Total research amounts recorded / shown under the year (fiscal year) the award was accepted. The total of all installment amounts, if any, are shown under the date of acceptance of award.
** The $170 M USask received from the Canada Foundation for Innovation Major Science Initiatives (MSI) fund for the Canadian Light Source, Vaccine and Infectious Disease Organization (VIDO), Global Water Futures Observatories, and SuperDARN has significant impact on this year's results. Although this information was announced in last year's report, the funding amount is recognized as part of the Research Awarded for 2023-24.


Awarded Funding by Source
2023/2024
2022/2023
$417 M**
$163 M
$0
$100,000,000
$200,000,000
$300,000,000
$400,000,000
CIHR
NCE
NSERC
Other
SSHRC
TIPS
US Government


International Funding 2023/24
International
$40,866,818
10%
Non-international
$376,401,756
90%
Non-international
International



Dr. Nazeem Muhajarine (right) at a reception in Mozambique on March 14, 2024. Minister Ahmed Hussen (centre) announced funding worth $65.8 M for six projects in Mozambique at the event; $20 M of which is directed to USask

Key grant successes in the last year include:

A) Large-scale Research Grants

OVPR supports the development of large-scale and institutionally significant research grant proposals, helping faculty navigate the complexity by providing a suite of strategic and practical supports. A few examples of key grants that USask was awarded in 2023-2024 include:

- Dr. Nazeem Muhajarine's research project "Sexual and Reproductive Health for Young Women in Inhambane" received a $20 M investment from Global Affairs Canada. The project aims to improve education, treatment, infrastructure, and services for the sexual and reproductive health and rights of girls and women in Mozambique.

- The HAWC (High-altitude Aerosols, Water vapour and Clouds) mission, led by Dr. Adam Bourassa, has received $17 M in research funding. HAWC is the Canadian contribution to an international, NASA-led four-satellite Atmosphere Observing System (AOS) mission. USask leads a Canada-wide group of 14 universities and numerous industry partners in collaboration with the Canadian Space Agency.

- Four separate projects led by Dr. Kevin Ansdell, Dr. Chris Holmden, Dr. Yuanming Pan, and Dr. Camille Partin were awarded NSERC Alliance Missions grants totaling a combined $4.13 M in investment.

- The *Computational Agriculture* program, led by Dr. Ian Stavness, received **$1.65 M** in funding for an NSERC CREATE. This program will be the first of its kind to offer dedicated cross-disciplinary training in agricultural and computer science and will train over 80 students over its six-year term.

- Julie Kaye's project "Building Indigenous Legal Lodges: Restoring Access to Justice and Preventing Violence Against Indigenous Women, Girls, Trans, and Two-Spirit+" was awarded a **$700,000** grant by SSHRC and Women and Gender Equality Canada.

B) Other Notable Successes:

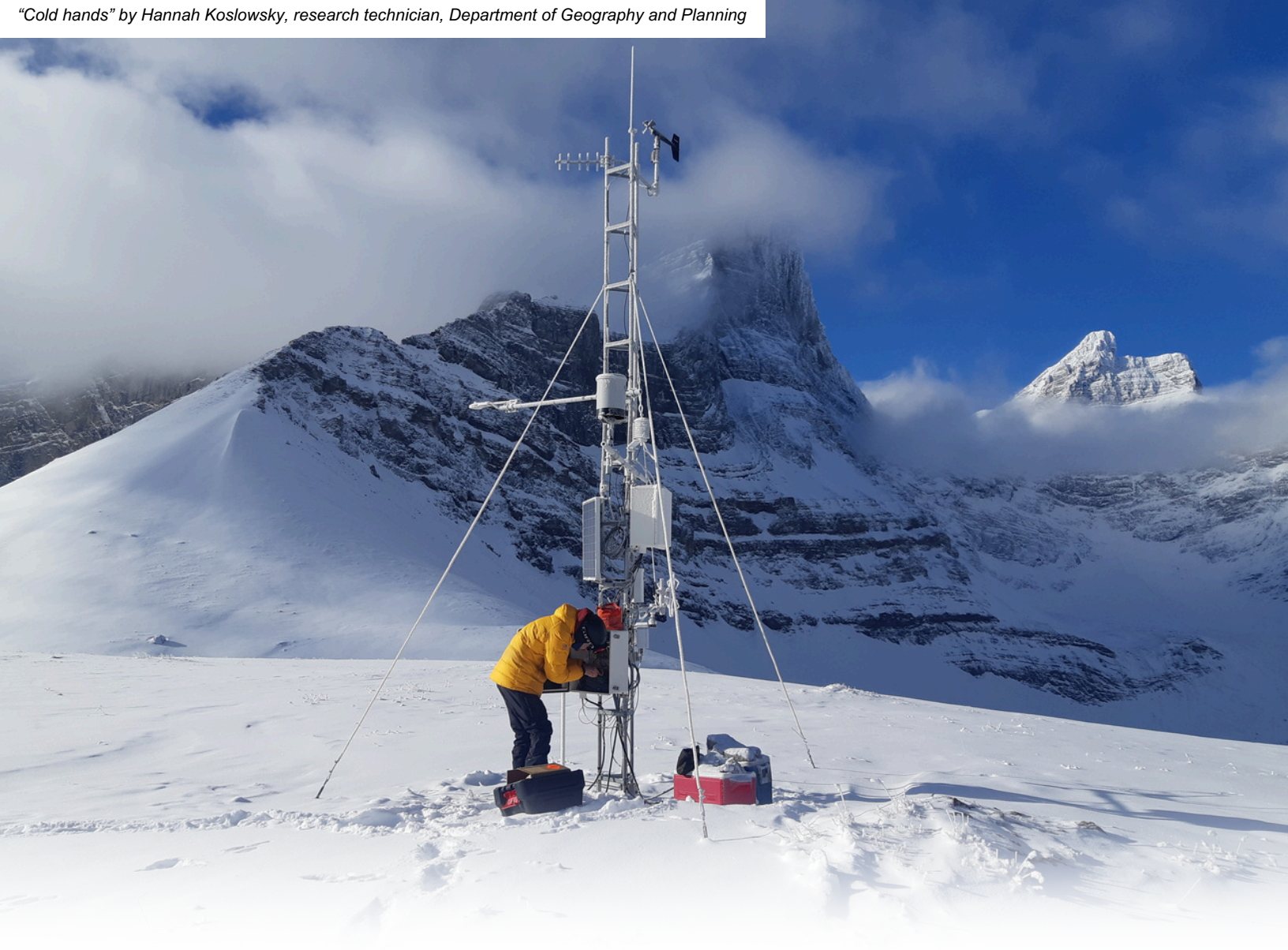
- VIDO was awarded an Indefinite Delivery/Indefinite Quantity (IDIQ) contract by the United States' National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health (NIH), to provide services that will help a wide variety of researchers obtain the critical data needed to advance products, partnerships, and complete studies needed to enter clinical trials. The seven-year IDIQ contract is valued up to **$30 M USD.**

- The Global Institute for Food Security (GIFS) received a funding commitment of **$15 M** from the Government of Saskatchewan.

- USask received roughly **$7.5 M** for crop research from the Saskatchewan's Agriculture Development Fund (ADF) and more than **$2.5 M** in co-funding from industry partners, meant to aid the growth and advancement of the agricultural industry in the province through innovative work solving modern questions in agricultural science.



From left: Baljit Singh, Agriculture Minister David Marit and Dr. Steve Webb, GIFS CEO at the $15 M funding announcement for GIFS on Mar. 11, 2024



“Cold hands” by Hannah Koslowsky, research technician, Department of Geography and Planning

INTELLECTUAL PROPERTY MANAGEMENT

Innovation Mobilization and Partnerships (IMP) supported commercialization of research innovations:

- Assessed 21 new invention disclosures from six colleges/schools.
- Filed 15 patents, contributing to a total of 172 patent families currently active.
- Secured 36 license agreements, which are now part of 117 active licenses under management.

INTERNATIONALIZING THE USASK EXPERIENCE

The International Office (IO) hosted events at all accessibility levels and collaborated with colleagues on and off campus to ensure an internationalization experience for all.

In 2023-24 the IO accomplished the following highlights:

Hosted 53 inbound visiting delegations from over 20 countries including:

- The Head of North America Partnerships for UK Research, and Innovation (UKRI) and the Head of Science, Climate, and Energy – Canadian Prairies, from the British Consulate-General Calgary to highlight our research areas and explore potential collaborations.
- The Science and Higher Education attaché from the Office of the Consulate General of France in Vancouver which established strong connections with the Embassy of France in Canada and opened new doors for funding programs for USask researchers.

Supported eight outbound delegations by USask senior leaders including:

- A co-hosted Research Summit in Germany with our partners at the University of Bonn. Following the summit, fruitful post-event meetings have led to potential collaborations on joint research and grant writing.
- USask's participation in the COP 28 UN Climate Change Conference, where USask representatives participated in panel discussions on sustainable agriculture, crop development, and climate action.
- USask representatives Baljit Singh and Dr. Venkatesh Meda participation in a mission to India, led by the Government of Saskatchewan and Premier Scott Moe including the signing of a Memorandum of Understanding between USask's Centre for Quantum Topology and Its Applications (quanTA) and QPiAI in India.



USask leadership and members from the Saskatchewan Germany Office, Innovation Saskatchewan, and the Embassy of Canada hosted the Saskatchewan-Germany R&D Partnerships Forum as part of the Germany mission at the beginning of May, 2024

- Organized a research roundtable, co-hosted by USask and the National University of Singapore to identify research synergies and accelerate further collaboration.
- Established USask's first formal partnership with Indonesia through an agreement signing with IPB University at the Canada-in-Asia Conference.
- Created new scholarship opportunities for students from Kuwait, the Philippines, and China to study at USask through the signing of new or renewed Scholarship Agreements.
- Presented a Horizon Europe Information Session open to all USask faculty, staff and students. Canada became an associated country of Horizon Europe, the largest research and innovation funding programme in the world, in late 2023 opening new doors for our researchers.
- Supported a student intern to begin the creation of a Standard Operating Procedure for Indigenization in select regions (Oceania, Africa, Central and South America) providing detailed analysis of existing connections and the potential for growth to support Indigenization.



USask leadership, researchers and scholars in Germany

Teaching and Research Partnerships

The IO houses over 300 international agreements with more than 200 entities in over 60 countries (including one with the Government of Saskatchewan on International Education). In 2023/24, there were 27 new and 20 renewed agreements that were signed.

Seven of the 27 new agreements signed were with institutions in Germany and India.

Delegation Support and Government Engagement

The IO supported 53 inbound and eight outbound delegations from 23 countries. Over 65 briefing notes on countries, regions, specific institutions, or research areas were provided to USask senior leaders and/or government in 2023/2024.

To extend the global impact on international education, the IO has participated in more than 100 meetings with provincial, federal, or international government representatives.

STORYTELLING AND AWARDS

STORYTELLING

The RPI team continues to creatively find ways to tell USask's RSAW story to the world. This includes our Images of Research event, discovery digest e-newsletter, social media channels, our Young Innovators series, and much more.

In 2023-24 RPI accomplished the following:

- Launched a series of dedicated Signature Areas of Research web pages, which garnered over 7,000 views in their first six months of existence.
- Added more than 200 Discovery Digest subscribers since May 2023.
- Maintained a 54.7 per cent open rate for Discovery Digest.
- Received 155,000 impressions on Twitter/X posts.
- Doubled the following on USask Research's LinkedIn page (117 per cent growth rate).
- Wrote, lead or partnered with USask communicators to put out over 150 news releases/stories.
- Held ten speaking engagements and workshops for researchers and units regarding research storytelling.
- Collaborated with university partners to host four Ministers and three campus tours post-federal budget.



Students and researchers meet with Minister Francois-Philippe Champagne at one of VIDO's Level 2 laboratories on April 22, 2024

“Polar Bear with Triplets” by Dr. Ryan Brook (PhD), professor, Department of Animal and Poultry Science, College of Agriculture and Bioresources



AWARDS

RPI facilitates several USask faculty applications for external research awards to encourage and build external recognition for breadth and quality of research, scholarly and artistic works (RSAW) created by our faculty.

Since March 2023, working with facilitators and other supporters from colleges and schools, the RPI awards team has supported 25 high-profile nominations for awards and recognitions, including:

- SSHRC Impact Talent
- Royal Society of Canada
- NSERC McDonald
- Governor General Innovation Awards
- Community-Based Research Canada
- CBC Saskatchewan Future 40

Since March 2023 the following awards have been received:

- Two Canadian Academy of Health Science
- One Royal Society of Canada College of New Scholars, Artists and Scientists

SAFEGUARDING OUR RESEARCH

Compliance

Research Grant Support

RASI ensures grants meet the compliance requirements of both funders and USask by providing robust support at the application submission and award stages. In 2023/24, RASI supported the submission of 928 grant applications. In addition, 928 funded research projects were awarded and set up through RASI.

Animal Care

Animal Care and Research Support (ACRS) office has enhanced sustainability and support for animal researchers in response to an increased workload and the growing complexity of Canada Council on Animal Care (CCAC) requirements. Staff changes included the addition of two animal research ethics board coordinators, an assistant manager, a full-time post-approval review technician, and a dedicated animal user training technician.

In 2023-24 ACRS accomplished the following:

- Supported 1,006 active animal users who completed research on 140,000 animals.
- Managed 440 animal use protocol submissions.
- Completed 110 animal user training sessions.
- Trained five senior year veterinary students in laboratory animal medicine with each student spending two-week rotations with ACRS veterinarians.



"The cutest research I do!" by Mihiprabha Rathnayake, PhD student, Department of Veterinary Pathology Poultry Science, College of Agriculture and Bioresources

Compliance

Human Ethics

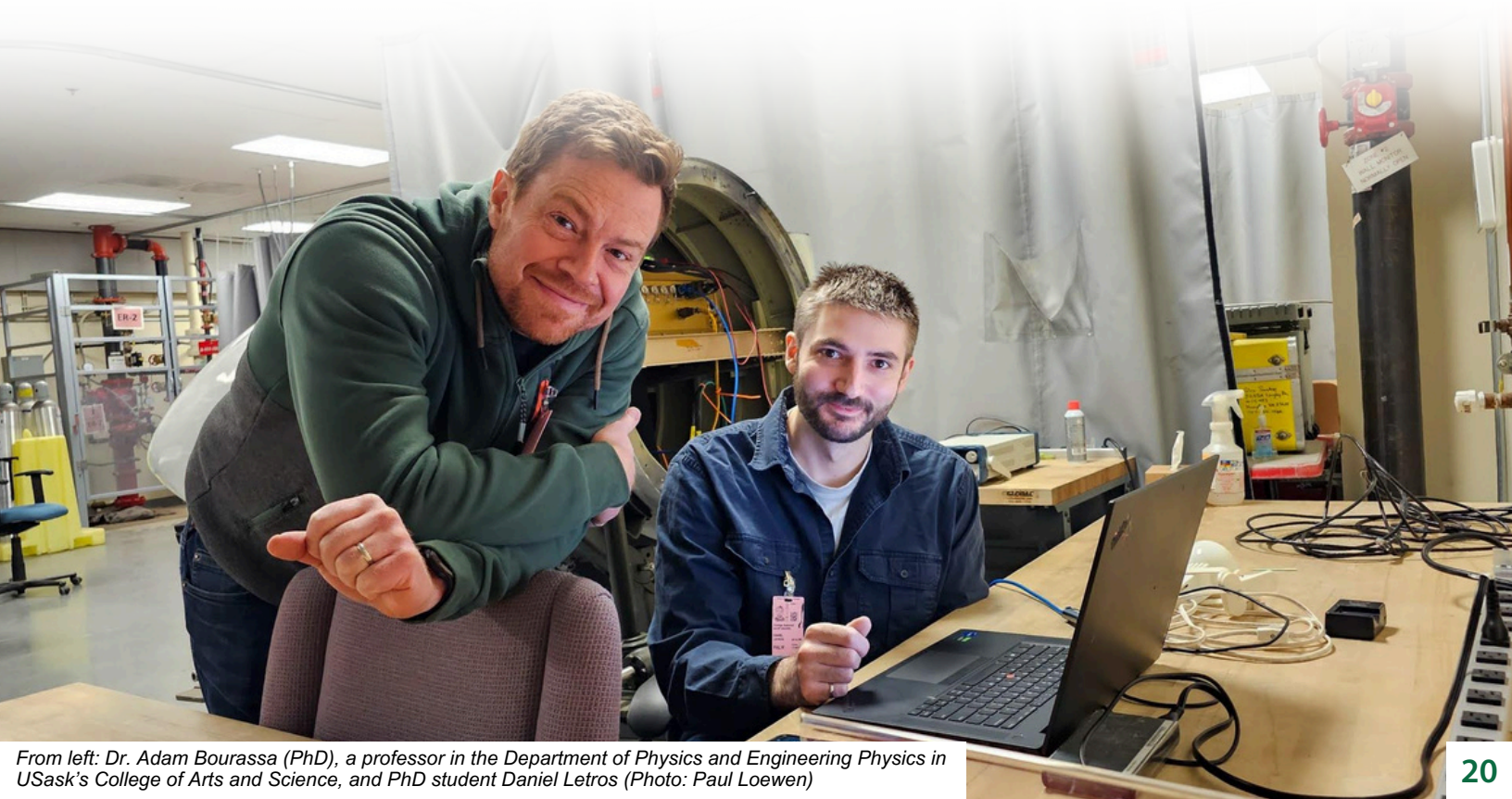
Human Research Ethics Office (REO) continued to see an increase in demand for its services, with approximately **3,500 research applications** (new studies and renewals or modifications to existing studies) submitted to the research ethics board for review and approval. The yearly increase in submitted files demonstrates the laudable productivity of USask researchers.

Timely approval of these files is paramount for researchers and continues to be an opportunity for improvement with the office and the REO. This relies, in part, on alignment of sufficient staffing with the work demand. In 2023-24, three temporary positions were converted to permanent positions and a new director Human Research Ethics, Dr. Susan Jelinski, was hired.

A key accountability for the director is to collaboratively work with staff and faculty to identify and implement process improvement strategies that will shorten application approval times. One such strategy includes the selection and implementation of a new research ethics application submission and data system. It is anticipated that this new technology will streamline and shorten the application process for researchers, as well as support the efficient and transparent administration of submitted files.

Research Security

In response to the National Security Guidelines for Research Partnerships and the Sensitive Technology Research Areas and Affiliations of Concern (STRAC) policy, OVPR launched a research security hub (The Hub) in the fall of 2023. The Hub serves as a centralized place for researchers to obtain information about research security and connect with experts around partnership development and monitoring, information communications and technology, research data management, and intellectual property management. Efforts are focused on education and early-stage discussions with researchers working in sensitive areas, as well as implementation of strong internal processes to address funding agency requirements.



From left: Dr. Adam Bourassa (PhD), a professor in the Department of Physics and Engineering Physics in USask's College of Arts and Science, and PhD student Daniel Letros (Photo: Paul Loewen)

RESEARCH, SCHOLARLY AND ARTISTIC WORK INITATIVES

Opus - Incubating USask Start-ups

The past year marked year two of operations at Opus, a pre-accelerator program for USask founders with research-backed innovations they wish to use as the basis for a startup venture. Opus is designed to provide participants with foundational knowledge to build business acumen, as well as personal connections to mentors, experts, industry, funders, and business service providers.

This year the Opus program expanded to three access levels:

1. The Idea2Explore program provides students and campus community members a chance to explore entrepreneurship with Opus through events, one-on-one idea exploration hours and student ambassador opportunities.

2. The Innovate2Build program is a ten-month intensive cohort-based learning experience providing aspiring academic founders access to all Opus has to offer.

3. Successful graduates move on to the Impact2Market program, which provides ongoing and curated access to mentors and investors as they set and work toward business milestones.



USask leadership and the OVPR's IMP team with delegates at an Opus event

To date, Opus has provided programming to:

- Sixty-one aspiring entrepreneurs in 24 ventures.
- Participants have received over 65 hours of programming and benefited from the advice of 45 mentors and coaches.
- These new ventures have secured more than $840,000 in non-dilutive funding and already have created nine new jobs between the 11 companies continuing in the i2Market program.
- All of this has enabled Opus to attract more than $1.3M in continued operational funding.

Signature Areas of Research

USask's Signature Areas of Research includes Agriculture, Communities and Sustainability, Energy and Mineral Resources for a Sustainable Future, Health and Wellness, Indigenous Peoples, One Health, Quantum Innovation, Synchrotron Sciences and Water. The leads and respective committees of these groups have been convening groups of scholars and students, continuing to refine their vision, plans and hosting events.

RPI launched a comprehensive suite of Signature Areas of Research communication assets this year which was distributed to Signature Area leads, research leadership and USask communicators. In addition to the package, a series of dedicated Signature Areas of Research web pages were launched, which garnered over 7,000 views in their first six months of existence. Each Signature Area has its own URL which includes a video featuring the Signature Area lead and a comprehensive one-page document that outlines the Signature Area to an external audience.

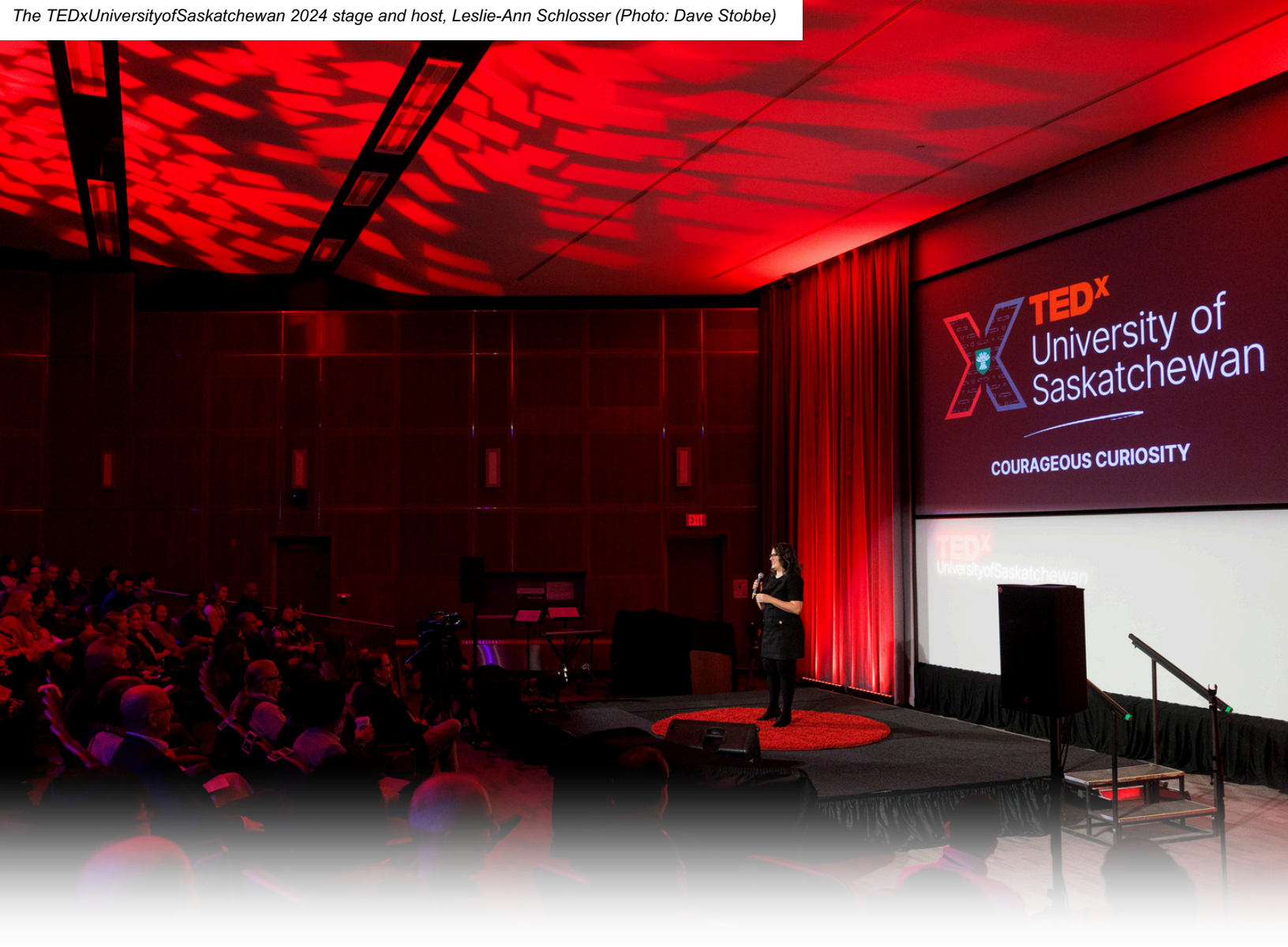
Undergraduate Research

The Undergraduate RSAW Initiative focuses on providing and enhancing research and discovery experiences to undergraduate students through a four-part strategy – course-based experiences, assistantships, knowledge transfer or dissemination activities, and research skill development. Highlights for 2023-24, include:

- Twenty-four skill building workshops were offered to undergraduate students through our co-curricular program SURE: Student Undergraduate Research Experience.
- Nearly 80 students shared their research findings at the 2023 SURE Summer Poster Symposium.
- Over 2,000 students had a course based First Year Research Experience (FYRE).
- USask maximized our annual NSERC USRA allocation of 60. We have awarded a total of 87 Tri-Agency USRAs for the summer of 2024, including 14 NSERC USRAs for Indigenous Student Scholars, nine NSERC USRAs for Black Student Scholars, two SSHRC USRAs, and two CIHR USRAs.



Students showcase at this year's SURE symposium on Aug. 31, 2024



The TEDxUniversityofSaskatchewan 2024 stage and host, Leslie-Ann Schlosser (Photo: Dave Stobbe)

TEDx

In January, RPI hosted a one-day TEDx event – a series of short, carefully prepared talks, demonstrations, and performances on a wide range of subjects – to showcase the amazing ideas of our USask community. The theme was “Courageous Curiosity” in alignment with the university’s mission and brand platform.

A group of ten USask representatives – including faculty members, postdoctoral scholars, students and alumni –were trained to present engaging and motivating talks over the course of an afternoon in-person event. These talks and performances were curated to profile a selection of USask’s leading research ideas and innovations, while also considering diversity of discipline, career-stage and personal identity.

After the event, each speaker’s talk was edited into a single-watch video and shared broadly on the TEDx social media channels.

Of special note is Dr. Michael Levin’s and Dr. Linda Chelico’s talk , which have reached **26,000** and **24,000** views to date, and were selected for profiling to the nearly 41M TEDx YouTube subscribers by the TEDx marketing team. Much appetite was created for future TEDx University of Saskatchewan events and the team is already planning for the 2024/25 event.

Images of Research 10th Anniversary Celebration

For the 10th year in a row, the RPI team has coordinated the 'Images of Research' contest as a chance to celebrate the diversity and beauty of research taking place at USask. In honour of this important anniversary, a celebratory event was hosted at the Remai Modern in April of 2024.

The event brought together USask leadership, members of the research community, and winners from past and present competition years. In addition to celebrating the winning and runner-up images in this year's contest, the event recognized the important role that USask research is having both at home and around the world. Over 100 images were submitted to the 2024 Images of Research contest, which received over 16,000 online views and 2,800 public votes.

Faculty Support

In the summer of 2023, OVPR launched DARE: Discovery, Achievement and Research Excellence. This initiative supports new faculty at USask to grow their research programs and build cross-campus connections. DARE provides practical and tailored resources for new and early career faculty, coordinates interdisciplinary programming to support grant development, and hosts networking and career development events for new and early career faculty. In addition, DARE launched the inaugural DARE Undergrad Training and Mentorship Awards, which funded nine early career researchers to hire an undergraduate student research assistant for the summer of 2024. The competition funded social science, humanities, and fine arts projects, addressing a gap in federally funded undergraduate research assistantship opportunities.

Initially funded through the Horizons Project, the RASI's post-award pilot provided grant management support for the social sciences, humanities and fine arts in the College of Arts & Science. The 20-month pilot developed a new model for supporting faculty in administering their research grants, built a post-award community of practice, and contributed to a 45% increase in grant applications amongst the pilot cohort. RASI will move this project beyond the pilot stage and plans are in place to expand this initiative.



Attendees at the 10th annual Images of Research event at the Remai Modern

Rankings and RSAW Intelligence

The 2023-2024 year saw some exciting rankings results for USask, including three best-ever performances in international rankings, as follows:

Quacquarelli Symonds (QS) 2024 World University Ranking

USask was ranked at 345th in the world, a significant increase of 128 positions from the prior year (473rd). This is USask's best performance in this global ranking.

Quacquarelli Symonds (QS) 2024 Sustainability Rankings

USask was ranked 89th in the world in the sustainability rankings, an increase of two positions from the previous year, and once again USask's best performance in this ranking.

Times Higher Education (THE) 2024 World University Rankings

USask was ranked in the 351-400 tier, a significant improvement and multi-tier jump from ranking in the 501-600 tier the previous year, and once again a best performance for USask in this ranking.

In addition to the above best-ever performances, USask's strongest performance for 2023-2024 was in the THE Impact Rankings. USask ranked 67th in the world in this ranking. This ranking assesses universities' progress toward the United Nations' Sustainable Development Goals (SDGs). As well as an overall ranking, universities are ranked in each of the 17th SDGs. USask applied to be ranked in nine of the SDGs, and performed well in all nine. As follows on page 26.



Minister Mélanie Joly, Minister of Foreign Affairs, visited Canadian Light Source on April 25, 2024

SDG #	Sustainable Development Goal	Global Ranking
OVERALL		67*
2	Zero Hunger	16
3	Good Health and Wellbeing	74
6	Clean Water and Sanitation	101-200
9	Industry, Innovation, and Infrastructure	101-200
10	Reduced Inequalities	95*
11	Sustainable Cities and Communities	20
14	Life Below Water	101-200
16	Peace, Justice, and Strong Institutions	101-200
17	Partnership for the Goals	101-200

As demonstrated in the above chart, USask ranked in the global top 20 in SDG 2 (16th) and SDG 11 (20th), and in the global top 100 in SDG 3 (74th) and SDG 10 (95th).

The following highlights some of the additional work accomplished in 2023-2024:

- Launched the five-pillar strategy guiding rankings work.
- Initiated the rankings dashboard project.
- Collaborated with RPI on communications/new stories for 11 annual rankings media releases.
- Delivered 15 presentations to USask leadership tables and committees.
- Hosted two full days of training and support sessions for SciVal/SCOPUS use for staff and faculty.
- Created custom rankings reports for seven colleges/schools.
- Launched two policy-citation software trials.
- Dr. Dawn Wallin and Jennifer Drennan invited to present on RSAW Intelligence at the 2024 CARA Conference.



UNIVERSITY OF SASKATCHEWAN

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