

Saskatoon Chamber of Commerce April 13, 2016

Good Afternoon

- I am very grateful for the opportunity to address you today. I want to thank the Saskatoon business community, many of whom are our alumni, for the critical support you provide to the U of S—whether it's direct financial support, advice to our colleges and schools, or support for our students in co-op and internship programs.
- The success of the U of S and our city and province are intertwined. When the university
 does well, the business community does well, and when the business community does
 well, the university does well. For this reason, I intend to strengthen the bridges
 between our two communities.
- There are already some strong connections with business that are helping to improve our programs. These include business leaders on advisory councils of colleges, Executive-in-Residence and Entrepreneur-in-Residence positions, donors or volunteers. The strong support of the Saskatoon business community helps ensure our degree programs are designed to meet the needs of the marketplace.
- I look forward to identifying opportunities to further close the gap between the business
 and education sectors so that we're not making decisions about economically important
 programs in isolation, we're developing the next group of thinkers that businesses need.
 We're working together on issues such as empowering Indigenous peoples for
 opportunities in the new economy.
- Just as I meet regularly with the mayor, I would welcome the opportunity to meet at least a couple of times throughout the year with the Chamber executive.
- I am privileged to have the opportunity to lead this great institution at this time, particularly given the exciting opportunities that our new federal government is making available to universities through new programs focused on research and innovation, much-needed campus infrastructure, and Indigenous initiatives.

- As Saskatchewan's Plan for Growth states, "Saskatchewan's future economic success will depend increasingly on knowledge and innovation." Given the economic imperative to innovate so as to stay competitive and diversify, the role of the U of S in our province's economy is more important now than ever before. Even Saskatchewan's traditional industries—agriculture, minerals, and energy—are becoming more knowledge and technology intensive, and will increasingly depend upon our expertise to stay competitive.
- Undoubtedly the U of S underwent a difficult time with the high-profile events of two years ago. But I can assure you that we have turned the corner and put this behind us. We continue to be a thriving and financially stable institution that is one of Canada's top 15 research universities with a strong core of teaching and research programs. We continue to attract top-tier students and faculty, as well as new research and business opportunities that otherwise would not come to Saskatchewan.
- Why has our brand recovered so swiftly? In part, it is because of who we are and what we are known for – Saskatchewan values of integrity, resilience, and a roll-up-thesleeves- and-get-it-done attitude. And it's because the people of this province have a longstanding faith and confidence in us. A recent survey showed that 90 per cent of respondents believe we offer students a high-quality education; 95 per cent believe we are important to Canada; and 89 per cent believe our teaching and research are beneficial to the community.
- The more our reputation grows, the more attractive a destination Saskatoon will become for both people and investment. All great cities need a great university to forge and attract talent, and we are demonstrating our ability to do that.
- People want to come to a city that has a thriving university at its core, particularly a "medical-doctoral" university, that is, a university with both a medical school and master's and PhD programs.
- Thirty years ago I knew that I wanted to be part of this university on the Prairies where the sky seemed to be the limit to what could be achieved.

- When I arrived here I learned of the special place held by this university in the imagination of this city. The U of S is a community builder—a place that helps shape the Saskatoon community and is shaped by it. In addition to our academic programs, we bring the community together through our theatre and music performances, art galleries, and our great Huskie athletics organization.
- We have one of the widest arrays of colleges and disciplines of any university in the country, and this to me is a crucial advantage for our future. Whether we're addressing food security, water security, infectious disease or our energy future, we know that none of these daunting challenges will be solved by a single discipline or a single person, but by many people from many disciplines working together, often with industry, community and government partners. We are poised to do that.
- Our medical college plays a large role in health-care innovation; our College of Agriculture and BioResources leads agriculture innovation and research that has improved the lives of people of this province and throughout the world; our Western College of Veterinary Medicine plays a prominent national and international role in animal care and research; and our school of public policy addresses issues affecting Canadians and the global community. Our great athletes and coaches such as Olympian Diane Jones-Konihowski were trained here, and most recently our women's basketball team has won the national championship. We have a formidable almost 110-year history of which we can all be proud.
- U of S is increasingly seen as a research leader, with two of the country's top science facilities VIDO-InterVac, a world leader in developing vaccines and technologies to fight infectious diseases in humans and animals, and the Canadian Light Source, one of the world's leading synchrotron facilities. The latter is the Swiss army knife of science – it's helping a wide variety of industries from agriculture to mining and has even been used in medicine to identify the biochemical mechanisms that cause delayed brain damage following a stroke.
- Why does research excellence matter?

- Through research and teaching, universities discover and envision new possibilities for Canada's future—we are catalysts for innovation. In fact, without discovery research, there is no innovation.
- UofS research has been an engine for increased economic diversification and revenue for the province.
- For instance, U of S crop research has been the main driver behind Saskatchewan's billion-dollar, pulse crop industry. In this the International Year of the Pulse, you may be aware that pulse production barely registered on the crop production graph in 1971, and look where it was in 2013, thanks in large part to U of S research and in 2016, pulses are even a bigger part of the production pie. Saskatchewan now leads the world in exporting peas, lentils, and chickpeas—staple foods in fast-growing countries such as India, China, Bangladesh, and northern Africa.
- There's an even more powerful example that is less well known. Back in 1970 before the Crop Development Centre was established, the majority of Saskatchewan's productive land was under summer fallow, generating no income at all for producers. But since then, crop diversification from U of S-developed varieties—as well as development of seeding equipment and technologies for precise seed and fertilizer placement have significantly reduced Saskatchewan acreage under summer fallow, increasing seeded acreage by 40 per cent. The results are three-fold: more land being used to produce food, higher returns for farmers, and more crop choices for producers than ever before.
- What has been the economic impact of this public and private sector investment in research and innovation? Estimates are that this decrease in fallow land alone has had an impact on the Saskatchewan economy of \$50 billion since 1970. Just to put that number in perspective, the total provincial contribution to U of S operating costs over the same period is less than one-fifth of that amount (\$10 billion). Research and innovation clearly bring huge benefits to our economy.
- A moment ago I mentioned that we are one of the top 15 research universities in the country. That's not a random number -- we belong to a select group called the U15.

Each member of the U15 has an economic impact that is typically twice that of nonmembers.

- Last year, the U of S commissioned an independent study of the current economic impact of the university on the province and I'd like to share a few interesting findings from that study:
 - With 22,000 students and more than 6,700 employees, the U of S attracts millions of dollars of new investment, research funding, and student spending to the province. Roughly one fifth of visitor spending in the Saskatoon region relates to the U of S.
 - When one adds up the contribution of university salaries, goods and services, capital expenditures, student living expenditures and visitor traveler expenditures, the total economic impact of U of S annually on Saskatchewan's GDP is more than \$1.2B.
 - The per capita impact of the U of S on the provincial economy ranks first or second among Canadian universities, depending on the measure.
 - Our total budget from all sources is \$1B a year, approximately half of which is from the province in grants and research investment. As I've mentioned, our impact on the economy is at least \$1.2B annually. This doesn't count our research or innovation impact which I will talk about later.
 - More than half of the university's revenue comes from sources other than the provincial government, including from industry and other sources, most of which is spent locally on wages, goods and services. Our annual research funding has increased by about 70 per cent in the past decade.
 - Most of our graduates over the past 15 years have remained in Saskatchewan after graduation. We are doing our part, as is the provincial government through its graduate retention program, to keep our graduates in the province.
 - The U of S also plays an important role in attracting international newcomers to Saskatchewan. Since 2000, U of S has awarded degrees to more than 4,500

international students, and it's estimated that almost 60 per cent have remained in Saskatchewan, with about half participating in the labour force.

- More than 62,000 of our 147,000 alumni live in Saskatchewan and are contributing to higher economic productivity, higher earnings and more money being spent locally.
- By expanding our programs, growing our research portfolio, and attracting more students to the province, we are helping Saskatchewan grow, and achieve its goal of 60,000 more citizens by 2020.
- Trained in entrepreneurship and critical thinking, our graduates are creating new jobs in Saskatoon and beyond.
- One example is Skipthedishes, a new online food ordering and delivery service founded in 2013. All five of the company founders are young U of S graduates—in computer science, business and agriculture. With spectacular software, the company now operates in 15 cities across Canada and the U.S., and plans to be in 100 cities by 2019. They employ 250 people already, and plan to grow their Saskatoon corporate office by up to 300 employees in the next three years.
- These young entrepreneurs build on a long tradition of companies spun off from U of S research or started by our alumni, including SED Systems, International Road Dynamics, and Saskatoon Colostrum Company. The latter firm, spun off from our veterinary medicine research, has developed a powdered colostrum supplement containing a high concentration of antibodies that protect young calves from disease in the first few weeks of their life. Employing 35 people in Saskatoon, the company is also developing natural health products for humans. The firm's total sales have grown from \$300,000 in 2000 to \$10 million today.
- The U of S is the source of new knowledge that can be the foundation for new companies and for strengthening existing companies—we want to be sure we are exploiting that potential. To that end, we've recruited a new director of Industry Liaison from Sweden, Johannes Dyring, who, in broad consultation with business and other stakeholders, is revamping our industrial liaison services to ensure they are proactive,

customer-oriented, and entrepreneurial in response to industry needs.

- It's not only our professional colleges whose graduates become business leaders. Our College of Arts and Science has graduated many successful business people over the years. Three prominent examples include former A&W CEO Jeff Mooney, global philanthropist and art dealer Fred Mulder, and Cameco CEO Tim Gitzell.
- These are just a few examples of how we are building a "talent pipeline" that will retain and attract young people, many of whom will be your future employees, business associates and customers. Our well-educated and highly skilled graduates help make life better for everyone who lives here.
- We are creating hubs of innovation built around several of our signature areas of research—for example, food and water security, synchrotron sciences, and what's called "one health"—an integrated approach to human, animal and ecosystem health.
- These hubs are magnets for top talent. For instance, our Global Institute for Water Security, led by an internationally renowned hydrologist from the U.K., now has more than 150 researchers who are working on critical water issues in the Saskatchewan River Basin and are connected with water scientists around the world. This leverages local expertise for global impact. The initial \$30M federal-provincial-UofS investment in this institute has brought in another \$68M in research revenue that will help build a sustainable water future for Saskatchewan and Canada, while training new water scientists and policy-makers.
- Another growing hub is our new Global Institute for Food Security, founded with a \$50M partnership involving PotashCorp, the Saskatchewan government and the U of S. The institute, which builds on research strengths from across our campus, has attracted a top scientist from Australia to lead it and a whole team of scientists from Germany. More than 300 graduate students and post-doctoral fellows will be hired over the next seven years. Stay tuned for announcements later this year on other top flight international recruits.
- Adding to our food security hub is a \$37.2-M Canada First Research Excellence Fund grant—one of only five such grants awarded in the entire country. This research

program will develop breakthrough science and marketable technologies that will enhance Canada's ag sector, while helping to feed a hungry world.

- You may be aware that back in 1951, a U of S team led by Harold Johns developed the Cobalt-60 technology that revolutionized cancer treatment and saved the lives of millions of cancer patients around the world. We've been building on this pioneering nuclear medicine success. We've built Saskatchewan's first cyclotron that will soon be supplying medical isotopes for the new PET-CT scanner at Royal University Hospital. And at the CLS, we've figured out how to produce medical isotopes using high-energy X-rays from a particle accelerator, rather than with a nuclear reactor. This has led to a spin-off company called Canadian Isotope Innovations Corp. which is now seeking private equity and venture capital funding to build the world's first Medical Isotope Factory for Mo-99 that is not a nuclear reactor. Once funding is secured, the factory would be built here in Saskatoon at Innovation Place. The first recipient of these isotopes will be Saskatchewan. There is a huge national and international demand for these isotopes.
- Looking ahead, here are some priorities for me and my team:
- The university has undergone tremendous change in the last two decades, yet we are still operating with a vision, mission and values document from 1993. We anticipate a new document by June.
- We will work with all our post-secondary partners in the province to collectively offer the best education we possibly can to the people of Saskatchewan.
- Fewer than 10 percent of Canada's Indigenous people between the ages of 24 and 64 have a university degree—that's one-third the rate of non-Indigenous Canadians. With one of the highest populations of Indigenous students among Canadian provinces and post-secondary institutions, the U of S is committed to closing that gap.
 - As U of S economic professor Eric Howe has said, "Bridging the Aboriginal education gap is the most significant economic challenge confronting Saskatchewan. It is also our greatest economic opportunity." He has calculated that Bridging the Aboriginal education gap in Saskatchewan would increase the lifetime earnings for our population by \$16.2 billion.

- We put particular emphasis on fostering Aboriginal student success. In the wake of the national forum we held here last year, among many other initiatives we are ensuring that every degree program contains Indigenous knowledge.
- Now that the College of Medicine has come off probation, I am committed to seeing the college fulfil its own mandate of becoming more research-intensive to contribute to healthcare innovation in the province.
- We have the expertise to help solve not just local problems, but global challenges, particularly around food and water security, infectious disease, and the environment, and we will continue to put our best minds to the biggest challenges in partnership with companies, communities, and governments.
- I envision more international partnerships for research, recruitment of students and faculty (in line with the SK Growth Plan to increase number of foreign workers), with all of us benefiting from the intellectual and cultural richness that such diversity brings.
- In closing, I would highlight the fact that the federal government has stressed that to renew Canada's economy, all of us—working together in the private and the public sectors—have to generate fresh ideas and identify new ways of collaborating and accelerating innovation.
- I look forward to building bridges with you that will developing many of Saskatchewan's and Canada's next generation of leaders and foster that renewal.

Thank you