



THANK YOU, GORDON

Gordon Barnhart was interim president and vice-chancellor of the U of S for 519 days. He stepped in at a difficult time, and he steps out leaving the U of S a much stronger place than he found it. In those 17 months, Barnhart worked with the entire campus community on a number of priorities, but his favourite part will always be the people he got to meet—faculty, staff, students, alumni and donors. Read the full story on Page 6.

DAVID STOBBE

Effective and efficient

Campus-wide service design and delivery project progresses

KRIS FOSTER



Wade Epp, director of service delivery and design.

KRIS FOSTER

“The process isn’t a straight line; it is advancing, listening to feedback, changing and advancing again.”

Wade Epp

and student services—with an eye towards delivering efficient and effective service.

Epp said that while the scale of the project has changed in this initial phase—now only focusing on research, human resources and finances—the concept has not.

“We are looking at how we are delivering those services. Are they the right services happening in the right place?” he explained.

“What we’re looking at right

now is how do we make sure the administrative services provide the best service so that faculty can focus on our mission of learning and discovery and aren’t overburdened by admin work,” said Epp. “We also have to ensure that staff have the tools and resources to support the mission.”

To that end, workshops have been held in September and October to review policies and processes that guide work in each function. So far, about 85 functional experts from colleges and administrative units that work within finance, human resources and research have participated in the workshops.

“They are looking at how things work and how those services can be made better,” said Epp. “People want to provide the best service and what we are finding is that sometimes our own policies and current processes get in the way.”

John Cornwell, associate controller, financial compliance and training, has been participating in these workshops and is excited about the possibilities.

“We are standardizing processes—making sure tasks are completed the same way across campus,” said Cornwell, who is responsible for administrative financial training at the U of S. “A good example is how we deal with P-Card reconciliations. We are looking at processes used by units across campus to complete this task and determine which approach is the best that can be standardized.”

Cornwell said that as the workshops seek out efficiencies, he is there “to make sure any changes to policies and processes don’t sabotage the process and that it still makes sense.”

The workshops, Cornwell

See *Policies*, Page 4

WCVM welcomes 50th class

LYNNE GUNVILLE

Ian Niu was nine years old and a budding veterinarian when his family decided to leave Vancouver and return to their home in Taiwan.

"I was a city boy, so my exposure to animals came primarily in the form of pets," Niu said. "I knew I'd have to volunteer at veterinary clinics, and when it came to the large or more exotic animals, I'd have to find a way to work on farms and volunteer at zoos."

After graduating from high school in Taiwan, Niu moved back to Canada where

he attended McGill University and gained more volunteer hours at Vancouver's Mountain View Wildlife Conservation and Breeding Centre during his school breaks.

After completing an undergraduate degree in animal biology, Niu stayed on in Montreal and worked at McGill's Comparative Medicine Animal Resource Centre for several years.

Niu's perseverance paid off when he became one of 80 first-year students at the Western College of Veterinary Medicine (WCVM) in August—the college's 50th class.

He and his classmates received an official welcome to the college and to the veterinary profession on Sept. 18 during the WCVM white coat ceremony in Saskatoon. Representatives from national and provincial veterinary medical associations handed out personalized white lab coats and stethoscopes to the first-year students.

"This year's white coat ceremony was particularly exciting because members of



On Sept. 18, the WCVM welcomed students to the college and profession with a white coat ceremony. This year's ceremony marked the college's 50th class.

PHOTO SUBMITTED



Niu

the class of 2019 are joining the college exactly 50 years after our first students began their veterinary education in 1965," said WCVM Dean Douglas Freeman.

The new students, who will graduate in 2019, come from communities across Western Canada and the northern territories. The regional veterinary college has produced about 3,000 veterinarians—most of whom live and work in western Canadian communities.

Thanks to his experiences in Taiwan and Montreal, Niu

has gained a special interest in the university's signature area of One Health—a global concept that encourages collaboration among health science professionals involved in human, animal and environmental health. Niu was one of about 150 participants who attended a student-focused conference called the One Health Leadership Experience at the U of S in August.

"The concept of humans, animals and the environment all co-existing in a mutually beneficial and healthy status is really appealing," said Niu. "The conference really opened my eyes to the little things that we can ponder and act upon

while making small increments towards creating this ideal."

Although he does not have any concrete plans for the future, Niu is leaning towards a career in laboratory research.

"My concept of veterinary medicine has changed over the years. When I was young, I was motivated just by the idea of working with animals. But now the idea of helping humans and animals simultaneously is an aspect of veterinary medicine that has become extremely attractive to me." ■

Lynne Gunville of Candle Lake, Sask., is a freelance writer and editor whose career includes 25 years of teaching English and communications to adults.

The Women's Mid-Life Health Program Presents

Eating Your Way to Health



Your Gut: The Foundation for Health

Louise Gagne, MD
will be discussing the importance of gut bacteria, the 5R's to health, and the significance of a healthy gut micro-biome in preventing chronic disease.



Surviving Cancer: What Works and What Doesn't

Joe Schnurr, MD
will be discussing nutrition and supplements during chemotherapy and a proactive approach to feeding the body after treatment.

Thursday,
October 22, 2015

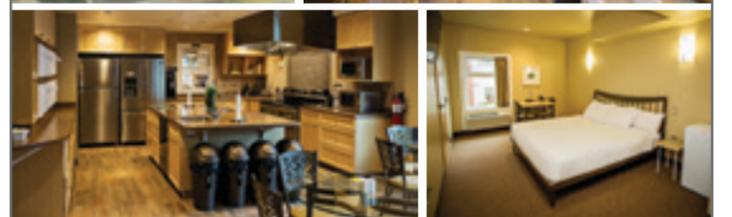
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2015 Alumni Achievement Awards

Twelve individuals have been named recipients of the 2015 U of S Alumni Association's Alumni Achievement Awards. All award winners will be recognized at the annual Honouring our Alumni Awards Gala, held at Marquis Hall on October 22, 2015. For more information about the gala or full citations for award recipients, visit alumni.usask.ca/achieve.



Arnason



Boots



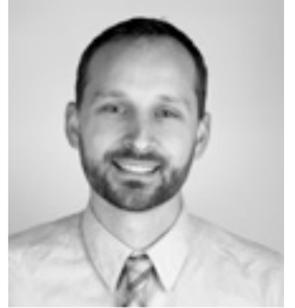
Burton



Fredlund



Kochar



Meili



Pereira



Rempel



Schreiner



Van Luven



Verjovsky



Wong

THIS YEAR'S RECIPIENTS ARE:

Daphne Arnason (BComm'77) for her dedicated service as a volunteer and contributions to business and industry.

Mark Boots (BE'08, BSc'08, PhD'13) for his innovative developments in research and application of technology for social change.

Richard Burton (BE'68,

MSc'71, PhD'75) for his contributions to education and research.

Delwyn Fredlund (BE'62) for his service, philanthropy, and outstanding contributions to research and learning.

Namarta Kochar* (BA'00) for her volunteerism and community service.

Dr. Ryan Meili* (BSc'00, MD'04) for his significant contributions to

public and Aboriginal health, and the medical profession.

Jennifer Pereira (BA'01, LLB'03) for her community leadership and contributions to her profession.

Richard Rempel (BA'58) for his leadership in teaching and learning and his ongoing dedication to telling the story of the university and its people.

Al Schreiner (BE'63) for his community leadership, philanthropy and significant contributions to business and industry.

Lynne Van Luven (BA'68) for her service to the arts, literature and education.

Janet Verjovsky (BA'64) for her leadership and service to teaching and education.

Kwok-Keung Wong (MSc'75) for his significant contributions to business and industry, dedicated public service and philanthropy. ■

** are subject to the same criteria; however, they must be under 35 years of age and have graduated from the U of S no more than 10 years ago.*

The campus safety plan

There are hundreds of moving and interconnected pieces required to keep the U of S campus community safe.

All of those pieces are top of mind for Brian Muchmore, director of Protective Services and Safety Resources.

"Our plans cover all incidents and responses," said Muchmore, adding that all planning addresses the likelihood of specific events, from severe weather or fire, to sexual assault, chemical spills or an active shooter.

"We have a number of tools and resources on campus that work together to keep our campus safe by preparing for, responding to and recovering from an emergency."

A new component of the campus safety plan, Muchmore explained, is the emergency alert system, a comprehensive alert broadcast that provides all members of the campus community pertinent information during an emergency.

Known as Alertus, the system involves beacons and plasma screens across campus, desktop notifications and mobile alerts once an app is downloaded.



Muchmore

"This summer we installed 25 beacons in strategic locations on campus. They send out a very loud signal. About 4,500 desktops can receive alerts and 2,500 people have downloaded the Alertus app," explained Muchmore.

All of these warning systems, he continued, are controlled by one button that can instantly send initial information out in the early moments of a major emergency, which Muchmore defines as "any incident that cannot be handled by a single department or college."

Muchmore, who came to the U of S in 2011 after 21 years in

the Canadian Forces developing plans and training in preparedness and response, said there are many other longstanding campus initiatives that contribute to the campus safety plan.

Safewalk, offered by the University of Saskatchewan Students' Union and Protective Services, offers escorted walks or rides for students, faculty, staff and visitors between locations on and off campus.

"People need to know this exists and it is offered 24 hours a day, seven days a week," said Muchmore. "Last year we did about 300 of these, which is a pretty low number considering how many people are on campus."

The Public Safety Unit is another resource that works to keep the campus safe. This is a group of officers who are specially trained to deal with large-scale events, said Muchmore.

"They attend football games and protests and keep an eye on the crowds. They know what to look for and how to keep people safe."

But in the event of an incident, Muchmore continued, Protective Services offers 24-hour incident reporting

LOCKDOWN DRILLS

In the event of an emergency, knowing what to do is critical, said Brian Muchmore, director of Protective services.

"Protective Services has done lockdown drills in 12 building on campus and will continue to provide this training," said Muchmore.

But if you have not yet received training, Muchmore offered a few key things to remember:

1. Sign up for emergency alerts and download the Alertus app at usask.ca/protectiveservices/usafe.
2. Distance yourself from any violent or dangerous situation.
3. Be aware of the situations; know how to get out, where to hide and if the door locks.
4. Understand where to find a safe place, simply a room that locks.
5. Make your room look uninhabited; lock the doors, turn off the lights, hide and mute your phone.

Muchmore said that during situations that activate the emergency plan, updates will be frequent and in order to get the most up-to-date information, members of the campus community should download Alertus for their mobile phones and desktop computers.

online and in person.

"Having uniform presence on campus 365 days a year is crucial."

Another ongoing initiative is Crime Prevention Through Environmental Design (CPTED), which examines criminal activity in physical and cultural spaces in order to recommend ways to reduce crime.

"We prioritized CPTED in parking lots and are now assessing bike racks. The next phase is to assess major building surrounding the bowl."

The assessments look at things such as assets, threats, surveillance, space, lighting and alarms.

"We take stock and offer suggestions for improvement." ■

NEW TO US



Travis
Wiens

At the bench in the fluid power lab in the College of Engineering, Travis Wiens explains how he is exploring applications for hydraulics in mining, including those that might improve safety, protect the environment and enhance automation.

"I'm talking with people in the mining industry locally to assess their needs," said Wiens, who took his position as an assistant professor in mechanical engineering in 2014. "That includes member companies of the International Minerals Innovation Institute (IMII), as well as other local mining companies and manufacturers."

Before joining the U of S, Wiens worked as a consultant with equipment manufacturers serving the construction, mining and forestry industries. For more than a decade, he applied his expertise to hydraulic component and system design, mechatronic design and dynamic modelling, optimization and signal processing. He has also shared his knowledge as a sessional lecturer, teaching the fourth-year Design of Hydraulic Circuits course.

Wiens is proud to be a native of Saskatchewan, earning his bachelor's, master's and doctoral degrees in mechanical engineering at the U of S. He spent time in China while completing his graduate studies before a two-year postgraduate stint at the University of Auckland in New Zealand. He returned to Saskatoon to join the consulting firm Convergent Motion Control, founded by another U of S mechanical engineering graduate.

Wiens is pursuing funding from the Natural Sciences and Engineering Research Council to back his research. His interests include efficiency, reliability and performance of fluid power and related systems; automation of equipment and processes; improvement of human operator performance and reliability; simulation and acoustic measurement of fluid flows (e.g. tailings ponds); and equipment modelling and simulation.

He is also laying the groundwork to attract leading graduate students and expects to add to his teaching load with graduate-level courses, possibly including a new course of his design.

NEW TO US highlights the work of new faculty members at the University of Saskatchewan. If you are new to campus, or know someone who is, please email ocn@usask.ca



SCIENCECARTOONSPLUS.COM

Policies and processes reviewed

From Page 1

continued, have been open and honest but have dealt with some difficult questions.

"There are difficult discussions because we are looking at dealing with services in an entirely different way. But the tasks don't change, just where it is being performed and who is doing it."

From Cornwell's perspective, having standardized processes is a long overdue step.

"When we have standardized processes, that speaks well for our university and our external auditors can rely

on those processes. I'm really excited to see where this is going. It's changing the culture from a service standard."

Once policies and processes are reviewed and revised as necessary, the next step is to align services with a new model that will provide the best delivery, Epp explained.

"It's one thing to change a concept, but we also have to validate the process, make sure it makes sense. It's not a lights-on-lights-off model, it will be rolled out over time so that we continue to work out the kinks," Epp explained. "Key to success is building it with all the stake-

holders. The process isn't a straight line; it is advancing, listening to feedback, changing and advancing again."

Change in how we do things is sometimes difficult, Epp acknowledged, but this change is necessary.

"Out of focus groups, we heard that some faculty see the processes as such a burden that they refrain from applying for grants. Anecdotally, we have heard of faculty who spend 30-40 per cent of their time on administrative tasks. If we can reduce that, they can spend more time on teaching and research." ■



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On Campus News aims to provide a forum for the sharing of timely news, information and opinions about events and issues of interest to the U of S community.

The views and opinions expressed by writers of letters to the editor and viewpoints do not necessarily reflect those of the U of S or *On Campus News*.

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7	Nov. 20, 2015	Nov. 12, 2015
8	Dec. 4, 2015	Nov. 26, 2015
9	Jan. 15, 2016	Jan. 7, 2016
10	Jan. 29, 2016	Jan. 21, 2016
11	Feb. 12, 2016	Feb. 4, 2016
12	March 4, 2016	Feb 25, 2016
13	March 18, 2016	March 10, 2016
14	April 1, 2016	March 24, 2016
15	April 15, 2016	April 7, 2016
16	April 29, 2016	April 21, 2016
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What lies below

Soils are key to life and still very much a mystery

GLENN CHEATER

In a field in Niger, a woman carries a pail of fertilizer. She stops beside each millet stem poking out of the dusty soil and, using a bottle cap, sprinkles a bit of its precious contents beside each stem.

Half a world away, a tractor costing nearly a half-million dollars and pulling a massive air seeder is laying down canola and fertilizer in an 80-foot-wide strip. The goal is to place each tiny seed a half-inch into the ground and then band a mix of phosphorus and nitrogen fertilizer two inches to one side and two inches deeper than the seed.

The contrast seems so immense, but the two farmers have much in common. Both fret over the cost of their painstakingly applied fertilizer and hope Mother Nature provides sun, rain and the right temperatures at the right time.

And although our Saskatchewan farmer studied plant nutrition and soil chemistry in university, how those nutrients make their way through that soil is as mysterious to him as his West African counterpart. But it is a mystery Derek Peak and other soil scientists are beginning to unravel, thanks in part to new technology.

“There’s no question that in soil chemistry we’re able to measure and analyze in ways we were never able to before,” said Peak, professor of environmental soil chemistry in the College of Agriculture and Bioresources.

“Even when I was a graduate student, we often couldn’t look at a whole soil with the techniques we were using. We would have to ask, ‘What minerals do we think are important?’ or ‘Is it organic matter that is important?’ Then you would extract these different phases and do experiments.

“Now we look at whole intact soils all the time. The advent of synchrotron science has been a major advance for soil chemistry and fertility. The challenge is to disseminate those results.”

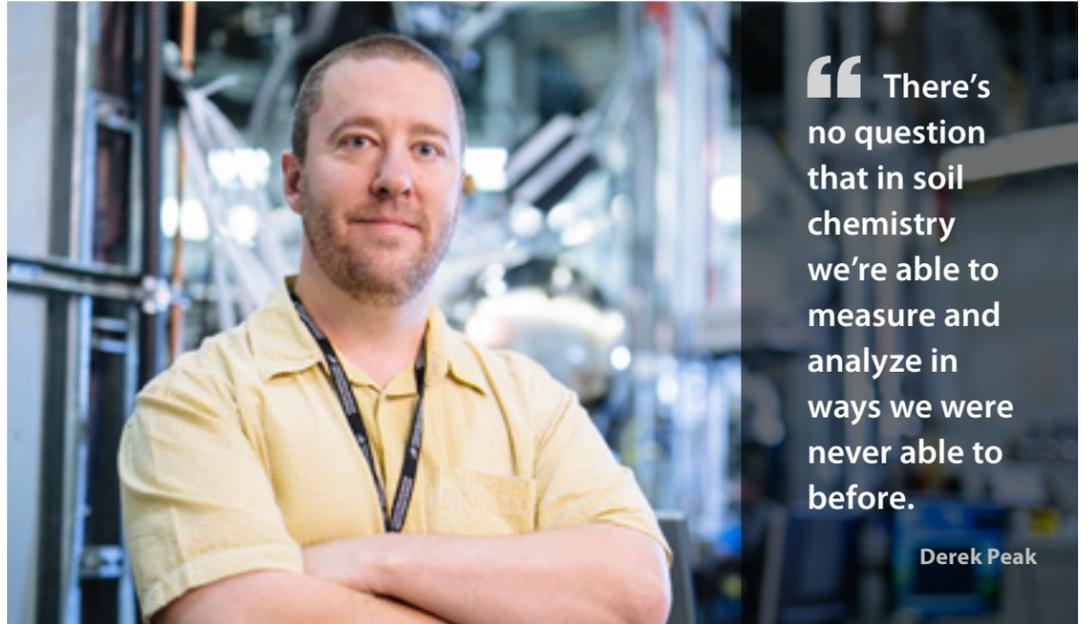
Peak is part of a group of researchers (funded by Canada’s International Development Research Centre) who have used the Canadian Light Source (CLS) synchrotron to study West African soils subjected to fertilizer micro-dosing. He is also part of a team examining how phosphorus applied in a band in Saskatchewan fields becomes available to plants.

It is research that is critical to dealing with the big challenge of our time.

“We’re looking at the world having 10 billion people by 2050, so we need to intensify agriculture,” said Peak. “That’s going to take fertilizer, and just like fossil fuels, fertilizer is a finite resource.

“It’s a really important area of science. We are starting to develop a clear picture of soils and how to make the right decisions so we can make agriculture sustainable.”

Sustainability is critical for



Derek Peak, professor of environmental soil chemistry.

“There’s no question that in soil chemistry we’re able to measure and analyze in ways we were never able to before.”

Derek Peak

DAVID STOBBE

the semi-arid Sahel belt of West Africa, where the population is rapidly expanding but crop yields are not. The region should be ripe for micro-dosing, which can double yields with just a quarter of the usual amount of fertilizer.

But only five to 10 per cent of farmers are using the technique, said Peak.

“One of the concerns is that if you’re only putting on a small amount of fertilizer and yields are doubling, you may be mining the soil, degrading the land, and creating an unsustainable system in the long term.”

Sahel soils have very low levels of carbon—0.2 to 0.3 per cent—and there is no practical

way to build them up. (Leave any stubble on your fields and your neighbours will graze their livestock or collect it as fuel.) Soil testing found micro-dosing was not depleting carbon levels, but the why was not known and so fears of soil mining remained.

But the synchrotron opens up a new window on what is happening below ground. Carbon comes in many forms—including carbohydrates, amino acids, carboxyls, phenols, and ketones—and the CLS can tell you precisely how much of each.

“So we can see how the types of carbon are changing because of agricultural practices,” said Peak. “What we’re really doing is taking a fingerprint of carbon in

the soil.”

The analysis conducted by Peak and his team showed micro-dosing was creating more readily bio-available carbon, which drove the yield increases.

“Micro-dosing isn’t making things worse than normal agricultural practices in that area,” said Peak. “Long term, we’re not going to see major improvements unless we change those agricultural practices, but this could be a gateway, a stepping stone, to allow that to happen. If you can get a little bit of fertilizer into the ground at the right time and double yields, then you improve incomes and food security. Then

See *Synchrotron*, Page 9

GETTING SOCIAL WITH MEDIA

Some of the top tweets, posts and pics from the U of S

f /usask

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huskiefootball One team on a mission. The Huskies take on the #1 ranked Dinos Saturday at McMahon Stadium. Kickoff at 2:00 PM. #SASKvsCALG #yxc #skhuskies

carolkoronkiewicz Oh yes we will be there! Go Huskies!!!!

@stm1936

stm1936

1936 Had a great week recruiting in the North. Now it's down to the South! #ChnookSD #recruitstm #usask #sooktravel

@usask

On the way to visit @UWCRON, Howler stopped for a quick photo op in beautiful #Norway. #howlerontheroad #usask

@CanLightSource

CanadianLightSource
 Tonight's the night! Find us at @NuitBlancheYXE on Avenue F and 20th St.



“That’s been my life. I’ve been in so many situations where I say, ‘Oh, Gordon, you’ve gotten yourself into something now.’ But with hard work, honest effort, a sense of humour and an interest in people, somehow it seems to have worked out so far.

Gordon Barnhart

From student to president

Gordon Barnhart reflects on his time at the U of S

KRIS FOSTER

When the phone rang the night of May 21, 2014, asking for a helping hand, asking him to step in as the interim president of the U of S, Gordon Barnhart paused for a moment.

“My first reaction was to say, ‘No, why me?’” recalled Barnhart. “I had never been a dean or provost. It is a huge challenge and I wondered if I could do it. I was getting close to the end of my career and thought: ‘What happens if this doesn’t go well and I totally blow it?’ That would be a terrible way to end a somewhat successful career.”

That feeling of being in over his head was not new to Barnhart, who said he had the exact same feeling the first time he stepped on campus as an undergraduate back in the ‘60s.

“Coming from the small town of Saltcoats, Saskatchewan, frankly, I was scared,” he said. “That’s been my life. I’ve been in so many situations where I say, ‘Oh, Gordon, you’ve gotten yourself into something now.’ But with hard work, honest effort, a sense of humour and an interest in people, somehow it seems to have worked out so far.”

Barnhart, as everyone knows, said yes and accepted the challenge. “I believe in this place, the university and province,” explained the 10th president and vice-chancellor. “I felt this was a small way to contribute and give back to the university that gave me so much.”

Just 18 hours after receiving the phone call, Barnhart stood in front of University Council to deliver his first president’s report,

“The U of S will always hold a special place in my heart and I will always watch it with great interest.

Gordon Barnhart



and admits he was a bit nervous.

“When I was university secretary, Council was a big event. I would carefully prepare for Council because there was tremendous amount of debate and question, which is good. But you need lots of preparation. I didn’t have enough time.”

He arrived and was introduced to a standing-room-only crowd that greeted him with warm, sustained applause.

“I said thank you and I remember telling Council that I hoped they would still feel as warmly a year from now, and here’s my report on what I’ve done over the last 18 hours,” Barnhart said with a laugh. “In times when things are particularly tense, I try to use humour. I am who I am and always show that.”

Barnhart also remembers

there not being a shortage of questions. One in particular still stands out: What are you going to do about the perp walk?

“I had heard about this perp walk, and my immediate reaction was that it’s dead. In all of the decisions I’ve made, that is still one of the most important ones because it set a tone that we would treat people with dignity and respect.”

That was his first day on the job. His last day, fittingly enough, is on October 22 when he will once again report to Council.

But in between the bookends of Council—519 days in total as interim president—Barnhart said he “has grown to appreciate this university in so many new ways. I’ve gotten familiar with so many areas and departments and I’ve discovered new interests.”

Every day Barnhart made a point of visiting a new place on campus and meeting new people, something he calls management by walking around.

“I would go to centres and departments that I never knew existed. I can’t believe the things we are doing here. I remember when I met Dr. Ivar Mendez and learned about his incredible work on the brain—implanting stem cells into the brain that can help those with Parkinson’s disease. Isn’t this amazing that in Saskatoon we have this happening?”

Barnhart did not just visit faculty and researchers; he searched out staff from all across campus. He thought it was important to talk with the people—like electricians, plumbers, welders, and heating

and cooling technicians—who keep the university running.

“There are so many good things happening here,” said Barnhart. “It is complex and requires a complex mix of individuals and groups, from supports, to research to teaching, to keep it going. One is not more important than the other because Dr. Mendez, for example, couldn’t do his work without a good computer system, electrical system or plumbing.”

Visits from Barnhart certainly helped restore some of the calm to a campus that had been through a rough period, and he admits that a big part of his mandate from the Board of Governors was to help the university turn the page and move forward.

He and Ernie Barber, interim provost and vice-president academic, did just that on Sept. 9, 2014 when they presented eight priorities for the year ahead (see sidebar).

“Thankfully Ernie agreed to step in,” said Barnhart. “We presented those priorities that mapped out problems. They presented change, but change through consultation and input.”

More than a year later, Barnhart sees that presentation in the Health Science Theatre as a turning point.

“We established calm without complacency. We’ve been working hard on bringing necessary change. We have our books in order financially through some very tough years of cutbacks and increased revenue. The picture is now \$37 million better.”

Another highlight for Barnhart is the childcare situation

on campus, an area that has needed to be addressed for a long time.

“This is so important because more students now have children and if they can’t find daycare they might not be able to attend.”

Over the past year, with the development of a new building next to Souris Hall, the number of childcare spaces have almost doubled from 110 to 200, Barnhart explained, adding that so many have been working on this initiative for a long time.

“We are also looking at refitting the Williams Building to add more spots. The space we have for our little ones needs to be top notch and in a relatively short period of time we can go from 110 to more than 200 spots.”

But without a doubt, Barnhart said his favourite part of the job was all the people he met, whether colleagues on campus or alumni and donors from around the world. “I’m a people person and I really felt encouraged meeting and working with people whether here on campus or in Weyburn or Beijing. I grew very fond of our donors and helping them contribute to the university financially based upon their belief in the university.”

Indeed, during his time as interim president and vice-chancellor of the U of S, Barnhart showed that hard work, honest effort, humour and an interest in people has seen him through every challenge he faced.

“It’s been good; I’ve really enjoyed it. I have a few more days left. I’m doing some travelling and I am saying thank you and good-bye to everyone I’ve met as interim president. The U of S will always hold a special place in my heart and I will always watch it with great interest.”

Barhart’s term as interim president ends on October 23. ■



Barnhart at the 2015 Graduation Powwow celebrating graduating Aboriginal students from the U of S and from high schools across the province.



Barnhart tours the specimen display room with Rudolf Wu, director of the School of Biological Sciences at the University of Hong Kong.



During a president’s tour, Barnhart visited the University of Hong Kong (HKU) campus which was celebrating the class of 2014.



U of S Chancellor Blaine Favel congratulates Barnhart at his installation on June 23, 2014.



The 10th president addresses the crowd at orientation in September 2014.

Setting priorities at the University of Saskatchewan

Setting aside TransformUS, Interim President Gordon Barnhart and Interim Provost Ernie Barber presented eight university-wide priorities on September 9, 2014 to replace the program prioritization initiative.

“We arrived on these priorities through broad consultation with all members of the campus community,” said Barnhart. “These areas were highlighted as critical to the teaching and research mission of our university.”

The priorities are:

- | | | |
|---|---|--|
| <ol style="list-style-type: none"> 1. Advance the reorganization and strengthening of graduate studies and support for graduate students. 2. Focus on the creation of interdisciplinary and cross-college academic programming. 3. Complete the reorganization and revitalization of centrally | <ol style="list-style-type: none"> 4. Accelerate the delivery on the commitment to Aboriginal achievement. 5. Continue the capital project for the transformation of the library collections, facilities, capital and services. | <ol style="list-style-type: none"> 6. Continue restructuring of the College of Medicine. 7. Deliver on the promise of inter-professional health education and interdisciplinary health research. 8. Align administrative services culture to support and facilitate the academic mission. |
|---|---|--|



COUNCIL AT 20

A 20th anniversary gala was held September 25 for University Council. Close to 200 people—including past Council chairs, Council members, faculty, staff and students—attended the celebration at Marquis Hall. Dwayne Brenna, professor of drama, and University Secretary Beth Williamson (pictured left), emceed the event and the U of S Jazz Ensemble provided entertainment for the dance that followed dinner and the formal program.





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Yes, and...

Students start improv group

LESLEY PORTER



Jeremy Bastian (left) and Conor Lazarou started the Usask Improv student group.

LESLEY PORTER

A team of talented students is giving Wayne Brady, master improviser, a run for his money.

“A lot of people don’t know improv besides *Whose Line Is It Anyway?*” said Jeremy Bastian, president of Usask Improv and a student in the Edwards School of Business. “You can’t really explain it too much until you see it.”

Usask Improv started as an off-campus group two years ago. Bastian and Conor Lazarou, the troupe’s artistic director, were fans of improv since high school, and would host informal improv nights at their residence home in College Quarter. Enthusiasm for

the group picked up, and this past spring Bastian went through the process of ratifying the group, making it an official campus club.

The team held tryouts in September, and now the group of approximately 20 members practices twice per week and holds monthly free shows that are open to the public.

In true form, the team uses no scripts and they take audience suggestions for stories, characters and dialogues. While most improv is synonymous with the short-form, slapstick scenes—like those on *Whose Line Is It Anyway?*—the team is

also experimenting with more long-form scenes, which can last up to an hour.

“All the real good moments in improv come out of committing to the scene and finding the scene together,” said Lazarou, a student in the Department of Computer Science. “The audience likes the jokes, but we find they really like the truer moments on stage.”

Bastian agreed. “A scene is funny not because it just pushes the joke,” he added, “it’s funny because it’s real and it’s in the moment.”

To hit that improvisational sweet spot, the team employs various games that help with listening, communication and thinking on the spot. Here, they offer us a few tips on how to be a good improviser.

Follow the “Yes, and...” principle

This key rule is at the core of improv practice and essentially

governs how a scene will play out, said Bastian. “If someone gives you an idea, you always agree to it, but then build on it.”

Always be accepting

Blocking suggestions (or, essentially rejecting the first rule) will run a scene into the ground, said Lazarou. “If your partner says, ‘hey, look at this cool chainsaw I just found,’ don’t say, ‘that’s not a chainsaw, you’re holding a duck!’ If you block what they say, a scene can’t go anywhere.”

Have a problem to solve

Without some sort of dilemma, the scene falls flat, said Bastian. It can be as simple as losing a dog, or as complicated as a bad relationship with a family member. Whatever the case, ensure you wrap up all the loose ends in the allotted time.

Stay in the moment

Many new improvisers make the mistake of trying to plan

ahead or anticipate what their partners might say. “You’re too busy thinking and the scene’s already moved ahead of you,” said Lazarou.

Bastian admitted he did this the first time he tried improv. “None of the scenes I had in my head were executed,” he said.

Be wary of audience participation

Another big part of improv is audience participation, but it can be tricky. “There’s always one person in the audience that suggests really crude things,” said Bastian. To avoid such a situation, they ask the entire audience for suggestions so they can pick topics that are not so offensive.

Trust in your partner

It is a critical element to improv practice. “Make your scene partner look good,” said Lazarou, “and they’ll make you look good.” ■

Synchrotron opens opportunities

From Page 5

farmers have the opportunity and means to employ more advanced agronomic practices.”

Agronomic practices have been advancing by leaps and bounds in the West, but here, too, the CLS—and some plywood—are providing important new insights.

In this case, it is the phosphorus cycle in soil. Using the synchrotron to look at the “whole soil” would provide a wealth of knowledge. However, you can hardly take a device as big as a football field out to a farm.

So instead, Peak’s research team, in collaboration with the soil fertility program of departmental colleague Jeff Schoenau,

took shovels out to the field along with half-sheets of plywood, studded with nails.

“We used flags to mark where fertilizer was placed in the field and at different times of the growing season, we would dig a soil pit across the band, pound the plywood into the side of the soil pit, and then take the entire monolith of soil back to the lab.”

Those clumps of soil clinging to the nails allowed the researchers to measure pH, adsorption, mineralization, soluble and fixed P, leaching potential, and other factors—and know what was happening where.

It is complex research, but with a clear bottom line. Banding fertilizer is the smart

choice both environmentally and in terms of nutrient-use efficiency, but it also has to be the best economic choice for farmers, said Peak. The hope is whole soil research will lead to improvements in banding technology that promote both efficiency and profitability.

Peak is quick to note the magic of the synchrotron is only part of the equation. Technological advances in other areas are also allowing research that was

impossible even a few years ago, he notes.

“Molecular biology and genomic techniques have given us an enormous wealth of information about the biota that make up the soil—the things that make soil alive. Modern techniques have really changed soil science.”

For the farmers growing millet or canola, the focus is all on what happens above the ground. But Peak is hopeful

modern soil science will give people a new appreciation of what happens below their feet.

“I just find soils so fascinating—I guess that’s why I’m a soil scientist—but they really are the critical zone for how the Earth functions. They are the skin of the planet where all the important stuff happens that sustains life.” ■

Glenn Cheater is the owner of High Bluff Media in Winnipeg and Edmonton.

Usask Improv will show off their skills when they hit the stage for their first performance on Oct. 24 at 7:30 pm in Murray 299.

Celebrate
CAMPUS SUSTAINABILITY WEEK
OCTOBER 13 – 16, 2015

Join the Office of Sustainability in celebrating everything sustainability-related that the University of Saskatchewan has to offer.

Take in a workshop, attend a documentary film screening, or just browse the North Concourse to see who is getting involved in sustainability around campus.

For a calendar of events and descriptions, visit sustainability.usask.ca.



Coming Events

■ Conferences

Assistive Technology and Disability 2015 Conference

Disability Services for Students is presenting the 2nd annual Assistive Technology and Disability conference at the U of S from Oct. 22-23 at the Graduate Students Common. Assistive technology specialists, service providers and service users will come together to learn about advances in assistive technologies from low to high tech solutions and their applications for education, work life and personal use. Sessions on the new provincial disability strategy and post secondary practices will also be presented. This conference is free to attend and open to everyone, but registration is required. For session information and registration, visit <http://students.usask.ca/events/atc.php>

Law, Public Administration, and Challenge to Democracy: A Conference in Honour of Allan E. Blakeney

This national conference is being held to honour the life and memory of the Honourable Allan E. Blakeney. As a politician, public administrator, lawyer and professor, Blakeney cared passionately about improving all aspects of Canadian democracy. As such, the overall theme of the conference is challenges facing democracy in Canada at the start of the 21st century. The conference is free of charge and will be held at Law 150 on Nov. 6, 1 – 5 pm, and Nov. 7, 8:30 am – 5 pm, with a reception hosted by the Broadbent Institute to follow. For more information or to register, email Blakeneyconference@usask.ca.

■ Seminars/Lectures

Veterinary Microbiology / Veterinary Pathology Seminar Series

Oct. 14, 12:30 pm, Room 2115 WCVM, Undergrad Summer Student Presentations will take place. Mary Timonin,

Department of Veterinary Microbiology, presents: "From poop to plasmids: Antimicrobial drug resistant Escherichia coli from Sable Island horses" and Angela Oh, Department of Veterinary Microbiology, presents: "In vitro performance evaluation of a novel self-sampling device for application in vaginal microbiome profiling"

Philosophy in the Community

Oct. 9, from 7 – 8:30 pm at The Refinery (609 Dufferin Ave., basement of Emmanuel Anglican Church), Charles Smith, assistant professor of political science, St. Thomas More College, will deliver: Is Liberal Democracy Working for You? This talk will take up a variety of issues in political theory, applying them to our current context as we face a federal election.

Know GMO

Oct. 11, 7 pm – 9 pm, Neatby Timlin Theatre. Do you know GMO? Where obesity collides with world hunger and credible information seems to be drowned out in the noise, the debate around what we eat and how it's grown continues to escalate. This presentation by Robert Saik, professional agrologist and CEO of the Agri-Trend Group of Companies, goes around the world for a firsthand look at the people, the ethics and the science behind the myths and the mystery of our food. This is a free National Biotech Week event.

Breakthroughs in Water Security - Distinguished Lecture Series

Each Wednesday, from Oct. 14 to Nov. 18, the Global Institute for Water Security will present weekly lecture series featuring water research experts from around the world. The series, taking place in the Neatby-Timlin Theatre from 3:30 – 4:30 pm, is open to the public and topics are catered to a varied audience. Livestreams of each lecture are available. Please visit usask.ca/water for more information and for the speaker line-up. *Note there is no lecture on November 11*

One Health Imaging Symposium

Oct. 16, 8:30 am – 4 pm at Marquis Hall.

Gairdner Foundation Lecture

Oct. 20, 4 pm, 1150 E Wing Health Sciences building, Jeffrey Ravetch, head Leonard Wagner Laboratory of Molecular Genetics and Immunology, Rockefeller University, will present "For good or ill: taming the power of antibodies." Anti-bodies work to defend against bacteria and viruses, but they can also trigger diseases such as arthritis and lupus. Ravetch discovered how antibodies can trigger different outcomes by binding to molecules (called Fc receptors) to change their activity.

Structural Equation Modeling with Relatively Small Data Sets

Oct. 22, 4 – 5 pm in Arts 153, Professor Peter Grant, Department of Psychology, will give a talk entitled, "Structural Equation Modeling with Relatively Small Data Sets: Lessons Learned Analyzing Messy Survey Data". Members of the university community and the general public are welcome to attend this presentation, which is part of the Department of Psychology's monthly colloquium series.

Eating your Way to Health!

Oct. 22, at 7 pm, at McClure United Church (4025 Taylor Street East), Dr. Louise Gagne and Dr. Joe Schnurr will discuss the significance of gut health in preventing disease and also nutrition and supplements during/after chemotherapy. This event is free to attend. Read more at www.menopausecentre.org.

Vaccinology and Immunotherapeutics Program, School of Public Health seminars

Oct. 22, at 12:30 pm at VIDO-InterVac, Zhubing Li will present "Mutual Interaction between Proprotein Convertase Subtilisin/Kexin Type 9 and Hepatitis C Virus."

Integrated River Management System for Saskatoon: Challenges and Opportunities

Oct. 26, 10:30 – 11:30 am in Agriculture 2E17, Paul van Pul, a land surveyor

and author of several publications in hydrology and in the history of hydraulic structures, will address the question whether and how to enhance the "river experience" in Saskatoon. Several proposals up till now have been stand-alone projects emanating from a particular group of stakeholders, yet Integrated River Management Approach has been lacking. Saskatoon as a prairie city ought to consider the South Saskatchewan River as an opportunity for its urban wellbeing.

Public Engagement, Social Media and Health Policy: Exploring Opportunities and Challenges in the Stem Cell Sector

Oct. 27, 11 am – 12:30 pm in the Prairie Room, Diefenbaker Building, Amy Zarzeczny, assistant professor, Johnson-Shoyama Graduate School of Public Policy, will present "Public Engagement, Social Media and Health Policy: Exploring Opportunities and Challenges in the Stem Cell Sector." There is much to be learned about influence in virtual networks and social media's potential as a vehicle for public engagement, particularly in areas of controversy such as emerging areas of science and biomedical research.

■ Courses/Workshops

Edwards School of Business Executive Education

For information call 306-966-8686, email execed@edwards.usask.ca or visit edwards.usask.ca/execed

- Oct. 14 – Feb 27, The Masters Certificate in Project Management – Regina
- Oct. 15 – Apr. 9, The Masters Certificate in Project Management – Saskatoon
- Dec. 7 – 11, Certified Coaching Training – Saskatoon

Library Researcher Series

The Library Researcher Series provides workshops on interdisciplinary topics of relevance to the research of graduate students and faculty. All sessions are free and registration is not necessary. For more information visit libguides.usask.ca/LibraryResearcherSeries

- Oct. 14, 3:30 – 4:30 pm, Murray Library, room 145, RefWorks
- Oct. 20, noon – 1 pm, Murray Library, room 145, WestLaw... More Than Just for Lawyers
- Oct. 21, 12:30 – 1:30 pm, Murray Library, room 145, Indigenous Studies Research Tools: Academic Hunting and Gathering in the Digital Age, and Oct. 27, noon – 1 pm Murray Library, room 161
- Oct. 28, 3:30 – 4:30 pm, Murray Library, room 102 Comprehensive Lit Review – Part A
- Nov. 3, noon – 1 pm, Murray Library, room 145, Zotero
- Nov. 4, 3:30 – 4:30 pm, Murray Library, room 161, Comprehensive Lit Review – Part B
- Nov. 17, noon – 1 pm, Murray Library, Rm. 145, Mendeley
- Nov. 18, 11:30 am – 12:30 pm, Murray Library, room 145, Finding and Using Data
- Nov. 24, noon – 1 pm, Murray Library, room 145, EndNote Desktop
- Nov. 25, 11:30 am – 12:30 pm, Murray Library, room 145, RefWorks

Languages

For more information, visit learnlanguages.usask.ca or call 306-966-4355 or 5539

- Multilingual Conversational Language Classes from Sept. 21 – Dec. 2:
- French levels 1 to 7: \$215 (GST exempt)
- Spanish levels 1 to 7: \$225.75 (GST included)
- Japanese levels 1 to 4: \$225.75 (GST included)
- Japanese for the Traveller \$252 (manual and GST included)

- German levels 1 to 3: \$225.75 (GST included)
- Italian levels 1 & 2 \$225.75 (GST included)
- Portuguese level 1 \$225.75 (GST included)
- Cree level 1: \$236.25 (materials and GST included)

Textbooks and workbooks are extra unless otherwise indicated.

- Spanish Weekender Oct. 9 – 11; ideal for the traveller who has little or no Spanish-speaking skills, 20 hours over 2.5 days, cost: \$315.00 (manual, Saturday and Sunday lunch and GST included).

■ Community Arts

Explore your creativity and develop skills in drawing, painting, sculpture, photography, glass, jewelry making, fiber art, graphic design, art history and more. These courses help you gain confidence as you develop your portfolio. Classes are taught by professional artists. Take classes for general interest or work toward a certificate. For more information, visit ccde.usask.ca/art. Register online or call 306-966-5539

■ The Arts

A Call for Justice - Fighting for Japanese Canadian Redress (1977-1988)

A Call for Justice tells a story of human rights and the enduring perseverance of the Japanese Canadian community who suffered so much from 1942-1949. In honour of the 25th anniversary of the signing of the Redress Agreement with the Government of Canada in 1988, the Nikkei National Museum is presenting the first traveling exhibit celebrating the emotional struggle to achieve an apology and acknowledgement for these unjust treatments. This exhibit, on display at Diefenbaker Canada Centre until Oct. 12, will examine the 10-year fight using historic photographs, artifacts, poetry, personal statements, art and video.

■ Miscellany

School of Public Health Poster Fair

Oct. 23, noon to 3:30 pm, Health Sciences D-wing atrium, the School of Public Health will host its annual poster fair showcasing its thesis students' research and the MPH student practicum projects. Visitors are welcome.

University Club

For more information about upcoming events, visit usask.ca/uclub. To make a reservation call 306-966-7775

Thanksgiving Family Dinner

Oct. 11, 5 pm, bring the whole family for all of your Thanksgiving favorites.

Dinner Theatre with Greystone Theatre

Oct. 15, cocktails 5:30 pm dinner at the University Club and, then Picasso at the Lapin Agile at Emrys Jones Theatre at 7:45 pm.

Pre-Game Tailgate Parties

Join us for Huskie game nights Oct. 16 and 23 from 4:30 – 7:30 pm for fun tailgate food and drinks before the game.

Annual General Meeting

Oct. 28, noon, Window Room, University Club Annual General Meeting.

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Coming Events

Next OCN: **Friday, Oct. 23**
Deadline: **Thursday, Oct. 15**

Email ocn@usask.ca

Canine care on campus

LESLEY PORTER

Since 2013, you have likely seen one or more therapy dogs on campus, bringing puppy peace to stressed students during exam season. One of the handlers, Colleen Dell, professor in the Department of Sociology and School of Public Health, and Research Chair in Substance Abuse, looks at the use of pet therapy and its effect on patient recovery and mental health.

So while you may have seen, or even petted, the dogs, how well do you really know them?

We sat down and spoke with Dell's three therapy dogs—Anna-Belle, Kisbey and Subie—and learned about a typical day at the “pawfice.”



Colleen Dell (the human) with (from left) Subie, Anna-Belle and Kisbey

SUBMITTED

■ How did you three become therapy dogs?

ANNA-BELLE: Our human, Colleen, did some research a few years ago with horses and young girls in residential treatment for addictions. She saw how they benefitted from having an animal in their life and wondered if other animals, like dogs, could also help.

SUBIE: There's a lot of research that shows how having a pet can lower anxiety and even blood pressure. Colleen keeps using this word, oxytocin. She said it's a chemical your brain releases when you pet an animal. It's what makes you feel all warm and fuzzy, which is how we pretty well feel all of the time already.

■ What training is required to become a therapy dog?

KISBEY: First and foremost, we have to be accepting of strang-

ers. This includes people and other dogs or animals!

AB: There were also some training activities that demonstrate how well-behaved we are, including leash behaviour and walking through a crowd without being distracted.

S: And of course, listening to certain commands, such as sit or stay.

AB: Once we have demonstrated our talent and good behavior for the St. John Ambulance folks, we become certified therapy dogs. Subie and I passed the test in March 2013, and Kisbey joined our team six months later.

■ What work do you do on campus?

AB: Well, we know midterms can be a ruff time for students with the exams they are writing. Plus all those term papers we always get blamed for eating.

K: Humans always say they can

feel the stress in the air. And actually, as a dog, we really can smell it!

S: It sort of smells like bacon.

K: Anyway, our goal is to bring a bit of joy to students' day so they can conquer whatever challenges they might be facing.

AB: And there are some students who are just lonely or depressed, perhaps because they've moved to Saskatoon and are feeling lost in a new city. We want to make them feel better, too.

■ Do you work anywhere else?

AB: So glad you asked. We each have locations around the city that we visit regularly, in addition to campus visits. I visit the Brightwater Senior Living in Stonebridge monthly. I really love visiting the residents and staff there. Just like on the uni-

versity, staff can get stressed too!

S: I visit the Calder Addictions Treatment Centre as well as the Métis Addictions Council of Saskatchewan.

K: I get a lot of love at the Lighthouse Supported Living and the Regional Psychiatric Centre.

AB: And all three of us take turns visiting the Sherbrooke Community Centre veteran's village, thanks to some important research funding from Veterans Affairs Canada.

■ What are the qualities of a good therapy dog?

S: The number one quality of being a good therapy dog is that we have to like people. That means

really, really enjoying what we do!

K: That also depends on who you're working with, too. While we all get along with just about everyone, Subie has passed special tests that allow him to work more closely with young children.

■ After a long day making people smile, what's your favourite way to unwind?

K: I love to play Frisbee with Colleen.

S: A spoonful of peanut butter and a nice nap.

AB: Some quality time on my skateboard followed by a hearty belly rub. ■

The therapy dogs return to campus on Oct. 29 at noon in the Leslie and Irene Dubé Health Sciences library.



■ STEM SUCCESS

Colleges from across campus participated in the second international STEMfest (Festival of Science Technology, Engineering and Mathematics) last week at Praeland Park. More than 10,000 visitors attended the exhibitions and events from September 28 to October 1.

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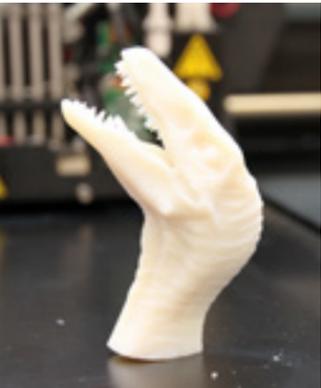
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Share your knowledge at ocn@usask.ca



Thinking in 3-D

Bob Wilson has a fancy piece of technology in his office.

A technician in the College of Engineering Rapid Prototyping Shop, Wilson operates the university's only professional 3-D printer. The college purchased the Objet Connex500 in 2006, when 3-D printing was still somewhat of a pipe dream. But technology has come a long way since then, explained Wilson, meaning the printer needed significant upgrades last year.



"The machine can now work with more materials, including printing in two materials at once," Wilson said.

Using photopolymer, a material that changes its state when exposed to ultraviolet light, Wilson can print objects ranging from transparent to opaque (or, a combination of both). Depending on the object, it can be made as a hard, rigid plastic or a more pliable, gel-like mold. Wilson has created a variety of small objects, ranging from chess pieces and musical instruments to working wrenches and dinosaur heads, in a variety of colours and textures.

The printer, though large, is remarkably meticulous and can achieve intricate details of up to half a millimeter, Wilson explained, a level of detail that is crucial when printing human and animal part prototypes used in health science research.

Most recently, Wilson worked with Dr. Ivar Mendez in the College of Medicine to create replica human brain hemispheres. Mendez uses the prototypes in his research on Parkinson's disease in the Department of Surgery.

