



TOTALLY TOXIC

Mark Wickstrom, Paul Jones and Karsten Liber (l to r), put their heads together to create Poisons and Pollutants, a new 200-level class to expose students to the field of toxicology earlier in their academic careers. The class, to be offered for the first time this coming fall, will cover everything toxic: history, major events and the future of the field. Please see story on Page 5.

KRIS FOSTER

Tuition up overall average of 4.5%

Revenue going to colleges, schools through TABBS

COLLEEN MACPHERSON

Students at the University of Saskatchewan will see their tuition fees rise by an overall average of 4.5 per cent for the 2014-15 academic year and for the first time, tuition revenue will be allocated directly to the colleges and schools where they are enrolled for improvements to programs and services.

The U of S Board of Governors approved the new tuition rates March 6. While the average increase for all students is 4.5 per cent, undergraduates will see increases between zero and 5.5 per cent next year, depending on the program. Tuition for standard graduate programs will go up an average of four per cent, again depending on the program. Three professional graduate programs will see tuition increases of 10-20 per cent. (Please see chart of typical tuition increases by program and related stories on Page 2.)

With the phase in of the

university's new Transparent Activity-Based Budget System (TABBS), tuition revenue will be used by the college or school to support students on a number of fronts, explained Brett Fairbairn, provost and vice-president academic. While the change to TABBS "won't create more revenue for the university, it's making transparent how tuition is tied to the activity in the colleges and schools and how it helps support that activity."

In addition to financing program delivery, tuition dollars will go to financial aid for students, advising and career counselling, new faculty positions and new program options, he said. "It's revenue that will enable colleges to do things that are good for students and good for communities. The fees that students pay are associated with the value and the quality of the experience they get."



Fairbairn

The university continues to set its tuition fees based on the principles of comparability, affordability and accessibility, and quality, Fairbairn continued, not on the need to balance the budget.

Tuition revenue is one input into the budgeting process, which involves considering all revenue sources, "projecting

“It's revenue that will enable colleges to do things that are good for students and good for communities. The fees that students pay are associated with the value and the quality of the experience they get.”

Brett Fairbairn

those into the future and planning our expenditures. We don't plan the expenditures first and then go back and ask what we need from tuition fees.”

He added efforts to tighten expenditures through workforce planning, program prioritization, reducing utility costs and other initiatives rather than increasing revenue through tuition are key to the budget process but “may or may not register with students.”

Adhering to the tuition-setting principles means considering myriad factors, not all of which are strictly financial. On the comparability front,

information is collected from the other 14 members of the U15, Canada's largest research universities and the U of S comparator group. “And despite Statistics Canada's rather odd way of calculating things, we know that program by program, our fees are below the median in the U15.”

In comparing quality of programs, Fairbairn said the first consideration is whether other programs are accredited, “the minimum bar.” Student outcomes are also factored in “but there's also the quality

See *Many*, Page 2

Many factors go into setting tuition

From Page 1

of the student experience. Sometimes the differences are about services related to the program rather than the core academic program. There are programs across the country that are offering services to students that we don't and one of the reasons they are able to do so is because of their revenue from fees."

Ensuring tuition is affordable and not a barrier to access involves analysis of a wide range of information and trends across the country, said the provost.

"For example, we know that

students in Saskatchewan have comparatively high debt loads when they graduate but they pay off that debt faster than students in other provinces. We're thinking that has something to do with the provincial government's system of grants and loan forgiveness, the Graduate Retention Program."

Another consideration is that U of S graduates move into a healthy local job market "but it cuts both ways. Institutions that have higher fees than we do are also likely in areas that have much higher unemployment and they may have some lower living costs."

Adding to the complexity in setting tuition are "things

that aren't directly financial in nature." Fairbairn cited distributed learning as one example. "It's an academically driven initiative but it's about access," about helping students learn where they live and about easing their transition to university. "Similarly, we're very interested in credit transfer (and) in recognizing prior learning. These are all access issues too."

Tuition fees make up about 23 per cent of the university's total annual revenue, a figure Fairbairn does not expect to vary much, but that will depend on the government grant; it will be announced in the provincial budget March 19.

"Whenever the (tuition) fee increase is higher than the grant increase, that percentage shifts slightly but because the grant is so much larger—almost 70 per cent of our operating funds—it has only shifted marginally in the past number of years."

Fairbairn said aside from significant tuition hikes to address particular program circumstances, "I think that universities should increase tuition fees by a moderate amount every year rather than by a large amount in any one year. I would rather we saw increases of three, three and three (per cent) than zero, zero and 10. We think that's easier for students."

And going even further, he said taking a multi-year approach to setting tuition would take the guesswork out of the equation for students. As the university leaders become more comfortable with the current

Typical tuition increase by program

Degree Program	Tuition only		
	2013-14	2014-15	Change
Arts & Science	\$5,408	\$5,633	4.15%
Agriculture & Bioresources	\$5,424	\$5,658	4.31%
Business	\$6,900	\$7,182	4.09%
Education	\$5,430	\$5,640	3.87%
Engineering	\$7,291	\$7,658	5.03%
Kinesiology	\$5,403	\$5,619	4.00%
Law	\$11,400	\$12,015	5.39%
Nursing	\$5,784	\$6,078	5.08%
Nutrition	\$5,929	\$6,161	3.90%
Pharmacy	\$8,458	\$8,800	4.04%
Dentistry	\$32,960	\$32,960	0.00%
Medicine	\$14,930	\$15,530	4.02%
Veterinary Medicine	\$7,872	\$8,266	5.01%
Graduate Studies	\$3,585	\$3,729	4.02%

Detailed information about 2014-15 tuition and student fees can be found at

usask.ca/tuition

USSU calls for long-term tuition strategy

In response to the March 10 announcement of 2014-15 tuition rates, the University of Saskatchewan Students' Union (USSU) is calling for a long-term strategy for tuition setting.

"If the University can project budget shortfalls as part of TransformUS, surely they can project tuition costs for students," said Jordan Sherbino, the USSU vice-president of academic affairs in a media release. "It would be beneficial for students to know the cost of their education when they are

thinking about attending the U of S."

Sherbino added the USSU would also like to see tuition increases kept in line with the provincial Consumer Price Index (CPI), another step in ensuring students know what they will be paying when they enroll. The increases announced for the next academic year are more than double the CPI, he said.

"The USSU wants to avoid a situation where less wealthy students must base their career choices on what they can afford," said Sherbino. ■

tuition-setting process and principles, "we're also getting more comfortable with having the conversation" about multi-year tuition commitments.

Locking in a key revenue source for several years presents

some risks, particularly when public funding is under pressure, he said, "but I can appreciate where it would be nice for students if we went the extra step and just projected tuition forward." ■

TABBS model good for students

The introduction of a new budgeting system, and the flow of tuition revenue directly to the colleges and schools where students are enrolled means "we suddenly have our fate in our own hands," said Peter Stoicheff, dean of the College of Arts and Science.

The Transparent, Activity-Based Budget System (TABBS) provides financial incentive to create new programs, combine existing programs in an interdisciplinary way or embark on other curricular innovations in order to attract students and their tuition, he said. "In my opinion, the TABBS model will be very good for students."

Traditionally, the college received a "historically determined amount of money that stayed relatively constant and wasn't really tied to what we were doing," he said. "If enrolments went way up, we wouldn't necessarily have seen that reflected" which is something that changes with the phase in of TABBS.

While the college priorities of Aboriginal student success, curriculum renewal and

increasing support for graduate students remain constant, the dean said tuition revenue would also allow for the strategic placement of faculty positions in areas of new or high demand in direct response to the academic interest of students.

"With the TABBS model, we can determine where we want to put faculty in the programs we want to grow. We can also plan regarding the results of TransformUS more effectively in the new funding model." ■



Stoicheff



General Academic Assembly (GAA)

The president's state of the university address

President Ilene Busch-Vishniac, chair of the GAA, invites you to attend the annual meeting of the GAA, where she will give her report on the state of the university. This event is open to all faculty, staff and students.

WEDNESDAY, APRIL 9
NOON
CONVOCAATION HALL

Members of the GAA include the president as chair, members of faculty, elected students, deans, executive directors of schools, vice-presidents, the university secretary and the registrar.

For more information, visit usask.ca/secretariat

NEXT DEADLINE
Thursday, March 20, 2014

Rover ready for competition

✍ KATE BLAU

About 15 members of the University of Saskatchewan Space Design Team (USST) will be packing their bags and heading to Utah this May. The team is competing in the University Rover Challenge, organized by the Mars Society at its Mars Desert Research Station near Hanksville, Utah.

They join 30 other teams from six countries across four continents, a record level of participation for the challenge, which is in its seventh year. The team officially registered in the competition in November, but has been working on their rover design since mid-September.

"We're on target," said USST President Justin Gerein. "We're working on completing the frame now."

The USST must design their rover to successfully traverse challenging, Mars-like terrain, provide astronaut assistance, perform equipment maintenance and collect and analyze samples. The Utah event includes four sub-category challenges to test each of these capabilities. As USST Vice-President Operations Ryan Chester explained, in each of the challenges the team will be marked out of 100, and must deliver a presentation worth 100 points, for a total score out of 500.

USST members have been working—tucked away in the back of the Hardy Lab in the Engineering Building—to create both a computer and three-dimensional model as part of the

overall development process. As well, they have completed much of the software and electrical system for the rover they will take to Utah. They are focused now on completing the mechanical systems, including the robotic arm, chassis and suspension, and must be ready to create a video of the functioning rover by April 25. This must be submitted in advance as part of the competition requirements. The video helps ensure teams are in a position to compete successfully prior to making the trip to Utah.

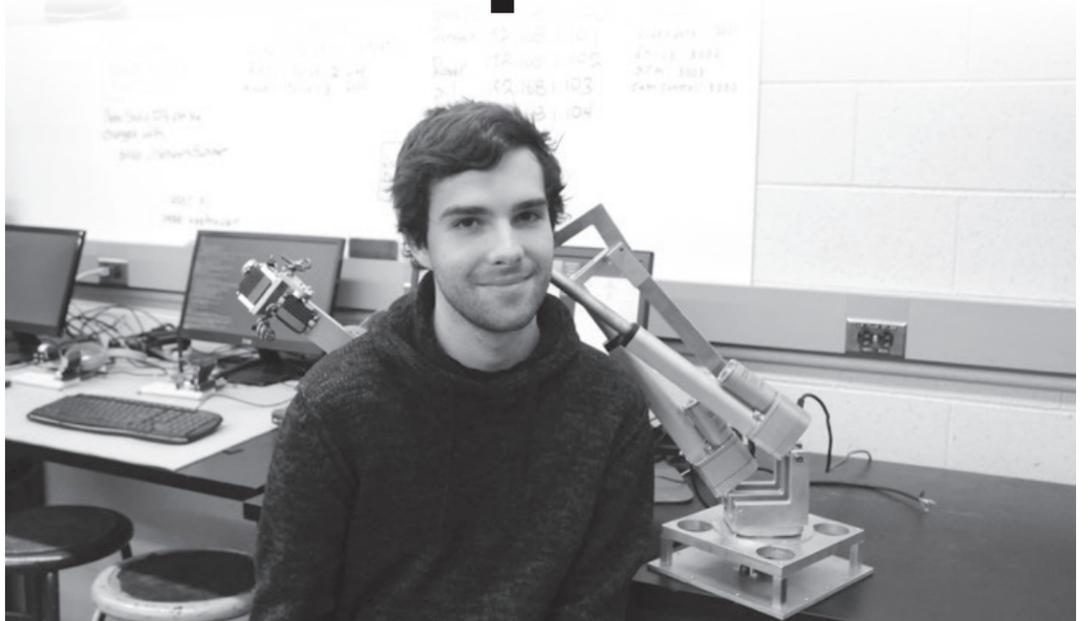
With the competition in May fast approaching, the level of excitement among the team is rising. For Gerein and Chester, what they are most looking forward to is seeing the finished product.

"This is the first time building a complete system for the team in four years. The last one was the battery-powered climber the team took to the space elevator competition in Japan," Gerein explained.

"We're also really excited to be getting back to a competition," Chester added.

While the majority of the 30 USST students hail from the College of Engineering, team members come from many quarters of campus including the Edwards School of Business, computer science and biology. This mix generates a broad range of knowledge and perspectives across the team membership.

"We're a pretty diverse



Kyle Epp, a mechanical engineering student and USST team member, gets a hug from the robotic arm he designed. The arm, a critical component of the rover, will perform equipment maintenance and gather and analyze soil samples.

KATE BLAU

group," said Chester. This comes in handy given the range of requirements in design and function needed in this particular competition. Adding to that challenge is the strict requirement that the rover not exceed 50 kilograms in mass.

Formed in 2005, the USST is dedicated to developing new space technology by working on projects and participating in competitions related to the space industry. The group's activities over the years have led to achievements that include third place

among 12 teams at a Canadian satellite design challenge in 2012, and three consecutive first-place finishes, from 2005-07, at the space elevator games. ■

Kate Blau is the communications officer for the College of Engineering.

FROM THE ARCHIVES

Hockey history



PATRICK HAYES, U OF S ARCHIVES

A-1036

The above image is of the first U of S intercollegiate (1911-12) hockey team. The following is an excerpt from the 1912 Yearbook.

"OF THE FOUR universal Canadian outdoor sports, the one of which a western University is able to take full advantage is hockey. The academic year, and the skating season are almost concurrent, and The University of Saskatchewan has not been slow to realize this fact. The number of Canadian born students was very small during the first year so that the number of hockey players was not large. The policy of the first athletic Executive was to make a small beginning and gradually replace the team as hockey players entered the University. Scrub teams were made up to play on the Fourth Avenue rink. While Stanley Cup hockey was not indulged in, yet there was created amongst the men a strong hockey spirit. Emmanuel College formed an open air rink on which the more fortunate Canadians assisted their fellow students from the Old Country by giving many exhibitions of first steps and by indicating the use of a hockey stick. The following season, 1910-11, is not soon to be forgotten by those in the University who took an interest in hockey. The team was strengthened by the addition of three new players, and was thought to be sufficiently strong to take a place in the City League. The septette, however, was hardly capable of keeping up the pace, nevertheless Varsity earned the name of being clean players, capable of taking defeat like true sports and of returning with the proverbial smile. In this season the first Inter-University hockey match was played. The game with the University of Alberta, played in the Auditorium rink, Saskatoon, is still a subject for meditation on the part of Varsity hockey fans." ■

JSGS student essays shine

The list of the 15 finalists in a national essay contest aimed at improving the public service reads like roll call at the Johnson-Shoyama Graduate School of Public Policy (JSGS), a definite point of pride for the school's executive director.

Michael Atkinson said the fact seven of the 15 Blueprint 2020 finalists hail from the JSGS "speaks volumes to the quality of our graduate students. We've found that our students enjoy competitions where they are able to use their academic knowledge in a practical, applied setting."

Blueprint2020 was launched last year as a vision for the Public Service of Canada to help it adapt to rapid change in the world. Part of the initiative was an essay competition that asked master's students how best to ensure Canada has a world-class public service. There were 89 submissions in all from students at 11 universities

across the country.

The JSGS students who were selected as finalists are Chris Blackmore, Katie Geoghegan, Ryan Gray, Rayelle Johnston, Tracey Morgans, William Robinson and Amanada Vindevoghel Cundall. Their papers, which cover topics like crowdsourcing, investing in access to information, workplace culture and mental wellness in the public services, are posted on The Institute of Public Administration of Canada website where visitors can vote for a public choice award.

A list of the top five papers, selected by a panel of federal public servants and academics, will be announced in April, as will the overall winner.

"Regardless of the outcome, I'm very pleased that seven of our students have placed in the final stages of the competition," said Atkinson. ■

NEW TO US



Kristin
Musselman

"I've known I wanted to be a neurological physical therapist since high school," said Kristin Musselman, who joined the faculty of the U of S School of Physical Therapy in July 2013.

When she was a teen, Musselman's grandfather suffered a stroke. "The physical therapist came to our house to see him once he'd been discharged from rehab," she said. "I was around and got to watch what was happening and how she was working with him. That got me interested."

Musselman grew up near Ottawa and completed her undergraduate degree at Queen's University. While her initial interest was stroke patients, she changed her focus to post-spinal-injury rehab when she pursued graduate studies at the University of Alberta. With a PhD in hand, she secured a postdoctoral fellowship at Johns Hopkins School of Medicine in Maryland.

Musselman specializes in people who have had incomplete spinal injuries, meaning their spinal cord has been damaged but not severed.

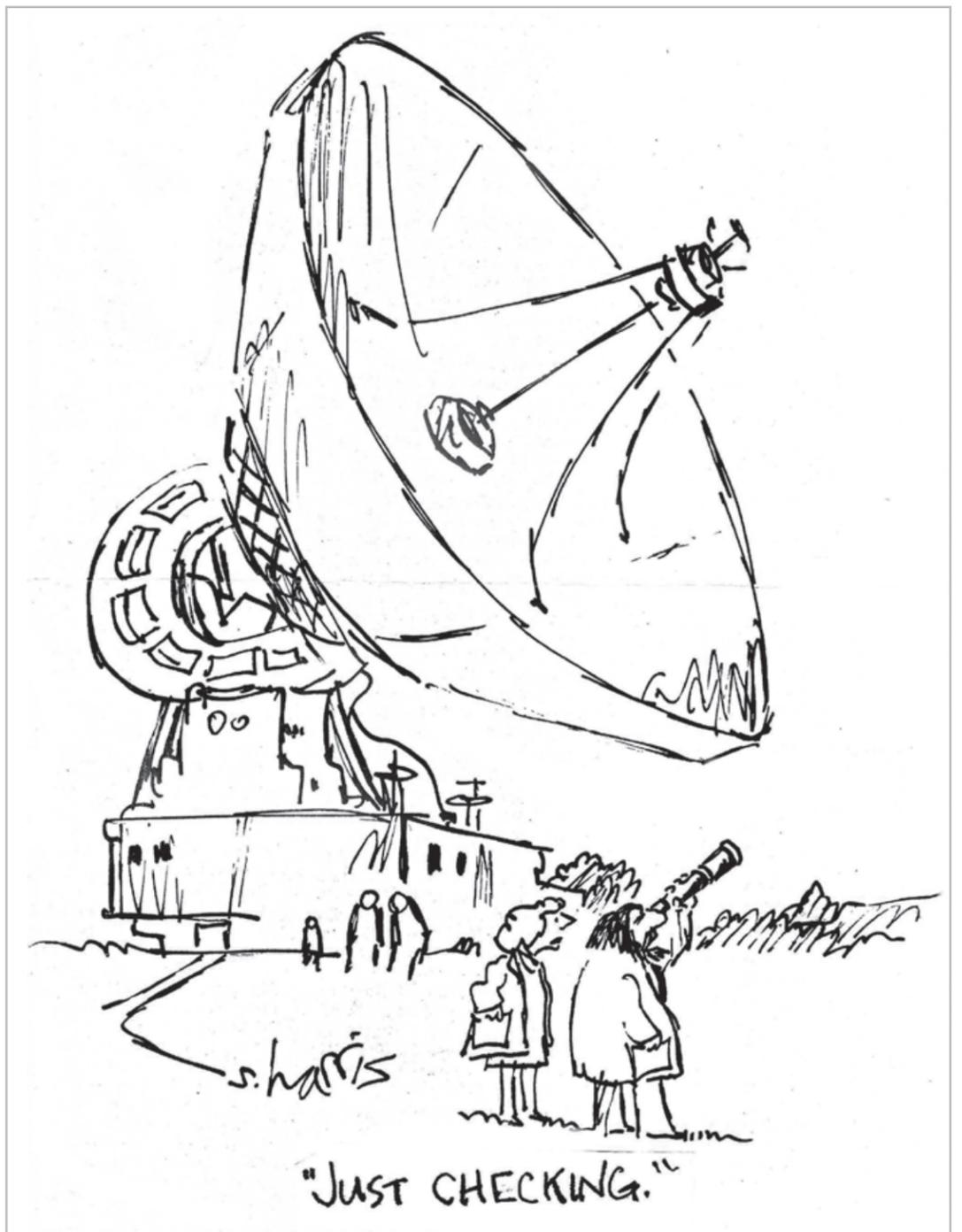
"Prior to the 1990s, whether you had a complete spinal cord injury or an incomplete injury, typically they didn't expect you to do a lot of walking." That changed when it was discovered people could learn to take steps using treadmills with some of their weight supported.

"When you walk, you need two things," Musselman said. "It's not just being able to take steps and thrust your body forward. Just as important is the ability to maintain stability. If you can't keep your balance, you're not going to be able to walk."

Balance is complex, involving sensation from the soles of the feet, muscle strength and proprioception - the sense of where the various parts of the body are in relation to each other. Musselman wants to find out if it is possible for patients to re-learn balance through therapy.

"It's a very exciting area of research." ■

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



SCIENCECARTOONSPUS.COM

U of S well represented on Sask. Book Awards short list

The University of Saskatchewan is once again well represented on the short list for the 2014 Saskatchewan Book Awards.

Dwayne Brenna from the Department of Drama had his book *Stealing Home* nominated in two categories for this year's awards - for the University of Regina Book of the Year prize and for the City of Saskatoon and Public Library Saskatoon Book Award.

PhD student Mari-Lou Rowley's book of poetry entitled *Unus Mundus* also received a nomination for book of the year and the Saskatoon book award as well as for the Saskatchewan Arts Board Poetry Award.

A third nominee for the Saskatoon book award category is *Mantis Dreams: The Journal of Dr. Dexter Ripley* by PhD student Adam Pottle.

Making the list in multiple categories for non-fiction writing is *Decolonizing Education: Nourishing the Learning Spirit* by Marie Battiste, professor of educational foundations. Her book is nominated for the University of Regina Faculty of Education and Champion College Award for Publishing in Education, the Rasmussen,



Brenna

Rasmussen and Charowsky Aboriginal Peoples' Writing Award and the First Nations University of Canada Aboriginal Peoples' Publishing Award.

Also appearing on the shortlist for the publishing in education award is *The Literary History of Saskatchewan: Volume 1, Beginnings* by English professor emeritus David Carpenter.

The Catholicisms of Coutances: Varieties of Religion in early Modern France 1305-1789 by Michael Hayden, professor emeritus in the Department of History, is shortlisted in the University of Saskatchewan College of Arts and Science and Library



Battiste

Non-Fiction Award category.

Clearing The Plains: Disease, Politics of Starvation, and the Loss of Aboriginal Life by Jim Daschuk of the Saskatchewan Population Health and Evaluation Research Unit is shortlisted for four writing awards - for non-fiction, for first book, for the Drs. Morris and Jacqui Shumiatcher Regina Book Award and for the University of Regina Arts and Luther Award for Scholarly Writing. It is also shortlisted for the publishing in education award and the Ministry of Parks, Culture and Sport Publishing Award.

The 2014 Saskatchewan Book Awards will be announced in Regina April 26. ■

Send letters and viewpoints to

ocn@usask.ca

ON CAMPUS NEWS

On Campus News is published 18 times per year by University of Saskatchewan Marketing and Communications. It is distributed to all U of S faculty, staff, graduate students and members of governing bodies, as well as to others in the university community, related organizations, some Saskatchewan government officials and news media.

Subscriptions are available for \$22 per year. Story and photo ideas are welcome. Advertising rates are available online or on request.

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*.

Editor: Colleen MacPherson

Writers: Kris Foster, Michael Robin

Designers: Brian Kachur, Pierre Wilkinson

Editorial Advisory Board: Patrick Hayes, Sharon Scott, David York, John Rigby, Sandra Ribeiro, Fiona Haynes, Steve Jimbo



ISSN: 1195-7654 PUBLICATIONS MAIL AGREEMENT NO. 40065156

Return undeliverable Canadian addresses to:

UNIVERSITY OF SASKATCHEWAN
MARKETING AND COMMUNICATIONS
501-121 RESEARCH DRIVE SASKATOON, SK S7N 1K2
Email: communications@usask.ca

Exploring the world of poison

No science background needed for new course

KRIS FOSTER



From left to right, Karsten Liber, Paul Jones and Mark Wickstrom

A new entry-level course called Poisons and Pollutants aims to raise awareness and enrollment in the U of S toxicology program.

"We've had an undergraduate program in toxicology for 12 years, the only one in western Canada," said Mark Wickstrom, chair of the Toxicology Undergraduate Program. "But when students leave high school, toxicology isn't exactly top of mind."

"They maybe have seen toxicology on TV, like on CSI, but that gives them only a narrow perspective on what toxicology is," added Karsten Liber, director of the Toxicology Centre, explaining that toxicology is people poisoning people and people poisoning the environment, and is thus a very broad field with wide appeal.

"Toxicology addresses real world concerns, but prior to this course, students haven't been exposed to this (subject) until third or fourth year," said Liber. "When students discover this area of study, they often say 'I

wish I knew about this sooner."

To change that, Liber, Wickstrom and lead instructor Paul Jones, developed Poisons and Pollutants, a 200-level course that will be offered this coming fall. The course, explained Liber, only requires 18 university-level credit units in order to enroll and will give students a taste of toxicology earlier in their academic careers.

The curriculum has also been designed so that a science background is not required, said Liber, in the hopes that this will draw wider interest from students with diverse backgrounds.

"In the real world, we are surrounded by poisons: radiation, food poisoning, industrial chemicals and pesticides, drugs, air pollution," said Wickstrom, an associate professor in the Toxicology Centre and the Department of Veterinary Biomedical Sciences who studies wildlife toxicology. "Toxicology is a broad-based, interdisciplinary science with many career paths,

in large part because people are increasingly concerned about their health and the health of the environment."

The classes are intended to give students a historical overview of toxicology, with each class covering a different subject area. "Every class is a different stand-alone lecture," explained Jones. "They are meant to tell the story of toxicology from the beginning, tracking its transformation, and highlighting major poisoning and pollution events."

No small task, said Wickstrom, adding, "If prostitution is the oldest profession, then toxicology is the oldest science... It existed the moment someone asked: 'Can I eat this mushroom or berry?' Determining what was safe to eat was a trial and error experiment."

With topics ranging from animal toxins and how to make a better poison, to recreational drugs and nuclear power safety, Jones will soon be recruiting

“ Toxicology is a broad-based, interdisciplinary science with many career paths, in large part because people are increasingly concerned about their health and the health of the environment.

Mark Wickstrom

different toxicology program faculty experts to lead each lecture.

"We want to give faculty an opportunity to talk about something that really excites them," said Jones, whose own research increasingly focuses on examining human impact on ecosystems in Northern Canada. "As we pieced together the course outline, we could easily identify one person who is the best to lead a certain topic."

The team effort, explained Liber, is necessary because launching a brand new course is a lot of work for one person, and "none of us are experts on every-

thing. This way students learn from the very best in each area."

Only time will tell how the class will be received, said Liber, but the one thing the group is sure of is that there will always be a need for toxicologists.

"The last lecture covers what toxicologists do and the future of toxicology," Liber said. "In the world we live in, sadly enough, there will always be poisons and pollutants, so we will always have jobs. Air quality, water quality, food safety, spills and pills — society will always need to respond to and reduce the risks from contaminants, whether man-made or natural." ■

Protective Services now on Twitter

Protective Services at the University of Saskatchewan now has an official Twitter account.

"We encourage students, staff, faculty and others to follow us," said Brian Muchmore, director of Protective Services. "Our tweets will offer advice on how to prevent thefts on campus, and attempt to connect individuals who have misplaced or lost items with our Lost and Found Department."

Muchmore said the Twitter account - @USaskPS - will also be used to keep members of the

campus community updated on some of the resources Protective Services has to offer, including RAD (self-defense for women), Safewalk, USafe and VTRA (Violence Threat Risk Assessment). Tweets will also provide updates on traffic conditions on campus and officer activity as well as emergency alerts.

The account can also be used to ask questions but it will not be monitored 24 hours a day so crime and emergencies should be reported to 306-966-5555, he added. ■

Around the Bowl

University architect and associate vice-president of facilities **Colin Tennent** has been elected to the Royal Architectural Institute of Canada's College of Fellows. The honour recognizes professional eminence and distinctive service to the profession of architecture, and is the highest award conferred by the institute.

Mark Roman has been appointed chief information officer and associate vice-president of information and communication technology beginning March 1 and without a term.



Tennent

Phil Woods has been re-appointed associate dean of research, innovation and global initiatives in the College of Nursing for the term July 1 this year to June 30, 2019.

David Hill's term as dean of the College of Pharmacy and Nutrition has been extended to July 31.



Woods



Hill

Mark & Barb Wouters

221-9975
wouters@woutersrealty.com



Excellent market knowledge, years of experience and quality service is what you can expect from Mark & Barb.

RE/MAX
MARK WOUTERS REALTY INC.
Saskatoon's #1 Team.

21 MAPLE ROAD STRAWBERRY HILLS

WOW! Quality Rocy built 1953 sq ft fully developed walkout bungalow with in floor heat, situated only 10KM East of the city on an elevated, hilly, heavily wooded 10 acre parcel offering great views. Possibly one of the best lots close to the city. Sunroom and house offer over-sized windows which overlook the beautiful setting. Maple kitchen, oak hardwood flooring, 2 gas fireplaces & 24' x 24' workshop. Stunning home and landscaping. EXCLUSIVE \$799,900



102 Swan Cr

Well built, maintained and immaculate 3+2 bedroom 1951 sq ft bungalow next to schools and park in Lakeridge. Cathedral ceilings in living room, hardwood floors in dining room and hallways. Sunroom off eating nook with south & east exposure. Excellent basement development, heated garage, and corner lot with room for RV parking. Low maintenance exterior with concrete curbing in front. \$524,900



More pictures and info www.woutersrealty.com

Lessons from the past

Cunfer seeks insight into low-energy farming

✍ MICHAEL ROBIN

A comparison of Old and New World farm history may have lessons to help guide modern agriculture in the face of climate change, according to U of S historian Geoff Cunfer.

“Our question is what strategies have farmers used over time and in different places to be able to sustain farming for centuries, and in what ways has that changed in the last 50 or 60 years?” he said.

Cunfer and colleague Fridolin Krausmann from the University of Klagenfurt compared centuries-old farming practices in Austria with those of Austrian immigrants who came to Kansas in the American Midwest in the late 1800s.

By raising both crops and livestock, Austrian farmers had achieved a state of equilibrium, Cunfer explained. Every year, farmers would spread manure from their livestock on the soil to replace nutrients used by the crops. The livestock would in turn provide meat, milk, and power to cultivate the land.

The system wasn't perfect —farmers typically had to keep more livestock than necessary for other purposes because they needed the extra manure. Still, for the most part they fed themselves, paid a portion to the landlords and the church, and in good years, had a little extra to trade in the town market. It was a system that sustained high populations in Austria for hundreds of years, providing plentiful labour on little land.

When the North American plains opened to settlement, some Austrians emigrated, drawn by



Historian Geoff Cunfer

DAVID STOBBE

the promise of building a new life on land they owned themselves. Cunfer and Krausmann looked at several families that settled in Kansas and plumbed the records on both sides of the Atlantic to see how things developed.

At first, production was meager as the American immigrant farmers opened the virgin grassland to the plow. Here, land was plentiful; labour scarce. But as the new farms became established, they produced prodigious amounts of grain, enough for their own needs and for export.

Cunfer explained that it was thought the American farmers, with low labour inputs and plentiful land, were simply more efficient than their European counterparts. But it turns out the New World farmers had

an advantage: they were tilling virgin soils that had been accumulating nutrients for millennia.

“What I think we've revealed and quantified to a certain extent is that these immigrant farmers, these American and Canadian farmers, were drawing on this ecological account that was stockpiled by nature over 10,000 years,” Cunfer said. “They were basically mining nitrogen out of the soil.”

This reservoir of soil fertility kept American yields high for more than 50 years. By the 1930s, crop yields started declining dramatically. Most important was the drop in nitrogen, a key soil nutrient.

“Farmers were facing a soil fertility crisis by the mid 20th century,” Cunfer said.

Although nitrogen is the

most abundant gas in the earth's atmosphere, there are few ways to get it out of the air and into the soil other than applying manure or growing pulse crops like beans and peas.

The answer came with the invention in the early 20th century of the Haber-Bosch process that produces ammonia, a compound used in today's fertilizers, from natural gas and nitrogen in the air. Combined with gas and diesel-powered farm equipment, farms on both sides of the Atlantic again increased their production.

“It was revolutionary,” Cunfer said. “For the first time farmers were no longer mandated by nature to constantly pull and recycle nitrogen from their own land. Now they could import it from

outside. Wheat yields doubled and then doubled again.”

The transition to fossil fuel inputs has followed the same pattern around the world and it has allowed farmers to feed a larger world population than ever before. A side effect of this was that some marginal land went out of production and reverted back to nature.

“One thing that was surprising was that with this transition to high-input agriculture, there's usually a reduction in crop land,” Cunfer said. “In the U.S. it's something in the range of 15 per cent; in Austria it's about 18-20 per cent.”

On the other side of the ecological balance sheet, concentrating large numbers of livestock in small areas have made manure, once an essential commodity, into a liability. Also, use of fossil fuels is contributing to climate change.

“I think what a lot of people are anticipating is that another transition will be necessary going in the other direction, as fossil fuels become more scarce, more expensive, and maybe limited because of the carbon concerns.”

Cunfer and his colleagues are looking at farm systems around the world for possible answers. Of particular interest is Cuba, where farmers have had to “go back to essentially what is an organic system” after the dissolution of the Soviet Union in the late 1980s cut off supplies of fuel and synthetic fertilizer.

“The question is, are there strategies from the past that allow sustainable, productive farming with lower energy?” ■



■ BUSINESS IN THE FRONT
STUDY IN THE BACK

Upgrade your undergrad while you work.

Get a better career without giving up the things that matter most. With evening and weekend classes, we make it easier to strike a comfortable balance between education, work and home life.

edwardsMBA.ca



EDWARDS
SCHOOL OF BUSINESS
UNIVERSITY OF SASKATCHEWAN

MBA

Mapping human movement

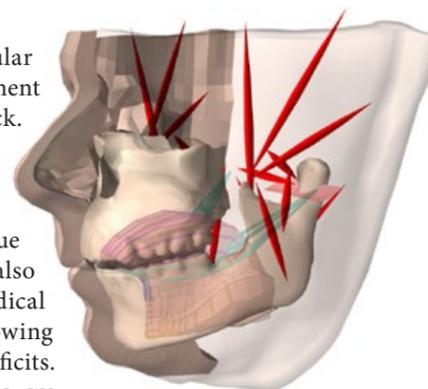
COLLEEN MACPHERSON



Ian Stavness, assistant professor of computer science, is setting up a Computational Synthesis Lab to image body movements. Above right is a head model image Stavness created.

movement problems.

Stavness' particular area of interest is movement issues in the head and neck. "From an engineering perspective, this is a very complex area of the body with a lot of soft tissue and muscle. There are also some very compelling medical problems like swallowing disorders and speech deficits. With swallowing problems, we can do video fluoroscopy and CT scans but again, they're static so we use simulations or animations to fill in the blanks."



The facility under development in the Thorvaldson Building, called the Laboratory for Computational Synthesis of Humans and Objects or Computational Synthesis Lab for short, will include hardware and software that can be used to model body movement based on data collected about individual patients. Stavness has funding for the project from a number of sources including the province and the Canada Foundation for Innovation, and expects the facility will be operating within a year.

And thinking it all sounds like something straight out of a

sci-fi movie is not far wrong.

"We do take a lot of cutting-edge techniques from video games and movie special effects but for us, the bar is much higher. The people who make games and movies want them to look good; we have to make sure what we produce is sufficiently accurate that we can give them to a doctor."

Interest in the area of movement science is growing, Stavness said, and the community of researchers is well connected. "All of the software we develop is completely open source and we share data and software internationally. We're really trying to make progress on these goals without reinventing the wheel." ■

There is no doubt the hip bone's connected to the leg bone and so on, but figuring out how the human body actually functions mechanically, how its myriad moving parts move, is the challenge Ian Stavness has taken on.

Stavness, an assistant professor of computer science, is working with colleagues in medicine and kinesiology to build a facility at the U of S that will produce digital representations of human bodies including

computer simulations and 3D visual displays. The goal is to develop biomedical applications to help with the detection, diagnosis and treatment of movement disorders.

"There are a lot of very advanced imaging techniques available now but in an MRI, for example, you have to be very still," explained Stavness who earned a degree in electrical engineering from the U of S before completing advanced degrees in computer and bioen-

gineering at UBC and Stanford. "An MRI gives you a nice 3D image but it doesn't show the moving whole. We want to make those static pictures move."

Using computers, cameras and sensors combined with extremely accurate measurements from conventional imaging techniques, Stavness is able to generate simulations or animations of the moving human body. "With these, we can make predictions about how movement is generated" and what causes



COLLEEN MACPHERSON

OUT OF HIBERNATION

A bright sunny day and a few inches of fresh snow are almost irresistible to most youngsters, including those from the Campus Child Care Centre in the Education Building. This group discovered a kid-sized snow pile outside the University Services Building. As one of their care givers noted, after such a long, dark, cold winter, these little ones are happy to be out of hibernation.

You are invited
TO ATTEND THE 17TH ANNUAL

Breaking the Silence Conference



featuring
Elvira Kurt
Comedian Extraordinaire

Speaking Out:
Performing Solidarity

March 21-23, 2014

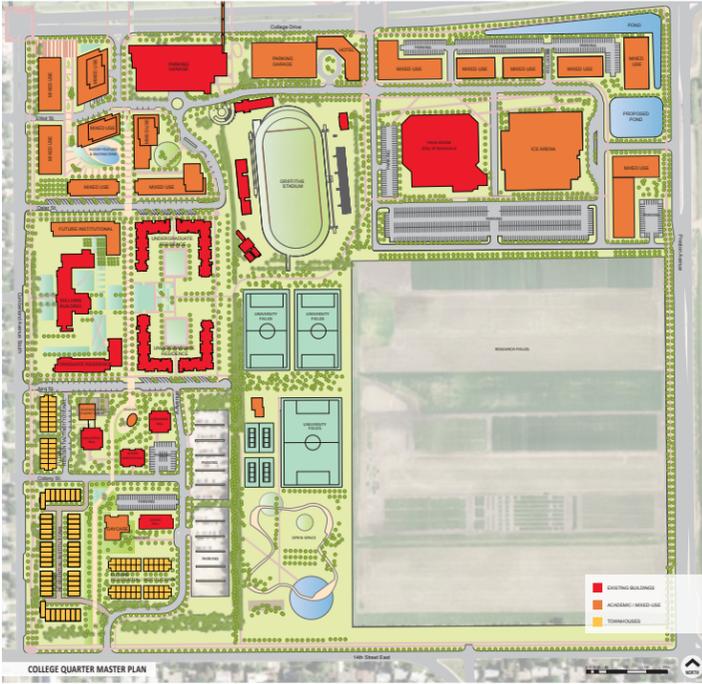
Sponsored by the College of Education
University of Saskatchewan

PROGRAM AND REGISTRATION INFORMATION:

UNIVERSITY OF SASKATCHEWAN | education.usask.ca/breaking-the-silence

Recreation space plan takes shape

KRIS FOSTER



College Quarter master plan.

Plans to identify recreation spaces for future development throughout the College Quarter site are underway.

“The intent was to revisit the College Quarter master plan and try to add more detail on recreational opportunities at the site,” said James Cook, manager of business opportunities in Corporate Administration. “We have talked to all key stakeholders—Huskies and kinesiology students, neighbouring communities, Campus Rec and the City of Saskatoon—to get that input.”

Consultation with these groups, as well as with the entire campus community, included an open house “ideas fair” in late February, face-to-face meetings and an online survey that runs until March 24.



Cook

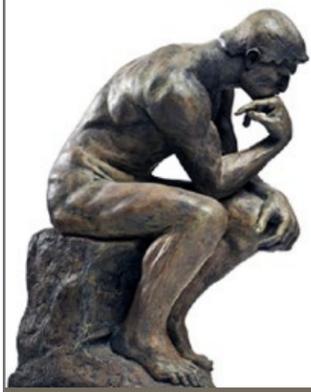
“We wanted to get as many ideas on what kind of recreational spaces and services would be useful in this development plan,” Cook explained. “We have received a lot of interesting ideas like modern playground equipment for neigh-

bourhood children, skiing and skating loops, outdoor fitness circuits with adult equipment stations, and informal green spaces that are available for yoga, quiet contemplation or Frisbee.”

In addition to all these suggestions, another key consideration for developing recreation spaces is the replacement of playing fields that “have been lost to development that has already happened. We are trying to find the right locations, number, and mix of grass and artificial fields.”

Consultants at Brook McIlroy, the architecture, urban design and landscape firm that developed the original College Quarter master plan, are building the recreation plan based on all feedback received and will suggest the right mix and placement of formal and informal recreational spaces as well as placement of pedestrian and bicycling pathways.

“This draft plan will be ready to present to our stakeholders hopefully in May for further feedback,” said Cook. “Once we have a plan established, we will set priorities for development of these rec spaces and determine funding sources. Those sources could include funding through other College Quarter development or possibly community fundraising initiatives.” ■



DEFEND ACADEMIC FREEDOM IN A TIME OF CRISIS!

Thursday March 27, 2014
2:00 - 4:30 p.m.

Room 241 Arts, Neatby-Timlin Lecture Theatre

Master of Ceremonies: Dr. Richard Julien, Department of Religion and Culture

Corporate Universities and the Bottom Line

2:00 p.m.

Dr. Gaye Tuchman

Professor Emerita of Sociology, University of Connecticut

3:00 p.m.

Panel Discussion: TransformUS as a Solution to a Crisis? What Crisis?

Chair: Dr. Howard Woodhouse, Department of Educational Foundations

Dr. Claire Card, Department of Large Animal Clinical Sciences

Dr. Franz-Viktor Kuhlmann, Department of Mathematics and Statistics

Izabela Vlahu, Vice-President Academic, Graduate Students' Association

4:30 pm

Wine and Cheese Reception, University Club, Fireside Room

All Sessions are Free and Open to the Public

Sponsored by the University of Saskatchewan Faculty Association

Co-sponsored by Aboriginal Business Students' Society, Aboriginal Students' Centre, ASPA, CUPE 1975, CUPE 3287 Sessional Lecturers, Education Students' Society, Graduate Students' Association, Indigenous Students' Council, ITEP Students' Society, SUNTEP Students' Society, USSU



The recreation plan online survey can be completed at surveymonkey.com/s/RecPlan until March 24.

Temperatures to shift 2 up, 1 down

COLLEEN MACPHERSON

A slight adjustment in building temperatures at the University of Saskatchewan is expected to reap financial and environmental benefits, but not make people uncomfortable in their classes or offices.

It was announced Feb. 27, to coincide with International Polar Bear Day, that indoor temperatures across campus will be raised two degrees in the spring and summer, to a target of 24 degrees C, and lowered one degree to a target of 21 degrees C in fall and winter. “And like all good energy management programs, there’s an environmental benefit and an economic benefit too,” said Kathryn Theede, energy and emissions officer in the Office of Sustainability.

Those benefits are expected to amount to about \$200,000

See *Savings*, Page 9

Connecting with students right where they live

LANA HAIGHT

It's Saturday morning and the aroma of fresh coffee combines with homemade scones at Graduate House.

"I wouldn't want to use the word 'bribe,' but my wife is a trained pastry chef," enthuses faculty-in-residence Martin Gaal.

"I offer goodies and a classroom for people to come and work on their research. If they want me to read their stuff, I can give them some feedback."

Gaal's mandate as faculty in residence is to enhance the academic atmosphere of Graduate House. He and his wife, Deanna, along with their newborn daughter, live in the University of Saskatchewan's newest residence building, which is part of the College Quarter development.

Gaal, who has a PhD in politics and international relations from University of Kent, is also a sessional lecturer in the Department of Political Studies. Originally from British Columbia, Gaal worked and studied in South Korea, China, Taiwan and Belgium before moving to Saskatoon three



Martin Gaal in the lobby of Graduate House.

KRIS FOSTER

years ago.

When the opportunity came to live in residence, he jumped at the chance.

"I've always been really involved in student initiatives," he said.

The Gaals lived in a combined graduate and undergraduate building last year. When Graduate House opened this fall, they were among the first to move in. The needs of graduate students are signifi-

cantly different than those of undergraduate students.

"Grad students can be very insular because they are so focused and there is a lot of pressure to get stuff done. Because of that, there is an unfortunate tendency to shut out the world and start hyper-focusing on what they are doing," Gaal said.

This can be counterproductive, resulting in struggles academically and personally. It's important to draw students out of their suites and encourage them to build into the Graduate House community, he said. Social gather-

ings have included potlucks, games nights and watching early morning Olympic hockey games. As the year progresses, Gaal is seeing students interacting more and more.

"Having the grad students all in one place gives them the space to meet people who are like minded. Even if you are studying something different, you are still in the same place in life."

Gaal has built strong connections with the international students who call Grad House home. Because Saskatchewan students often return to their home towns on weekends, Gaal has the opportunity to be with students from around the world during their off hours.

But he isn't just a social convener. During his Saturday morning "office hours" in the lounge, he often acts as a sounding board for students. He challenges them to take the "Aunt Bessie" test: explain their research to him in less than five minutes in a way that he can understand even if it's not in his field of study. When students can do that, they are ready to defend their work, he said.

Gaal also organizes speakers to come to Graduate House. Anything "quirky" is how he describes the kinds of topics he offers the students – street art and robots are two examples – and he encourages others on campus to contact him with suggested talks. ■

Lana Haight is a Saskatoon freelance writer.

Savings expected in dollars, carbon emissions

From Page 7

annually in utility costs and a 2,000-tonne reduction in annual carbon emissions attributable to the U of S.

Theede said the new temperature initiative – referred to as two up, one down – builds on the university's Climate Action Plan that was instituted in 2012 and all procedures related to the change are expected to be in place by May when the central heating plant switches buildings from heating to cooling. Most campus spaces are currently maintained at 22-23 degrees C year round, which is within the industry standard for thermal comfort, the point at which about 80 per cent of people are happy.

"We're working toward getting everyone into this range," added Heather Trueman, sustainability initiatives liaison.

One of the first steps in making the change is to ensure thermostats are properly calibrated to read temperature accurately, said Theede. But even with accurate thermostats, campus is an extraordinarily complex



Theede

environment to heat and cool consistently given the varying ages of infrastructure and the sizes of rooms. A lecture theatre, for example, is cool when empty but can heat quickly when it is filled with 200 people.

"The change would be so much easier if we were dealing with only one building," she said, "so we need to use the target temperatures as rules of thumb. There are parts of campus that are hard to heat and cool, and the facilities division deals with those on a case-by-case basis. We're also faced with areas of special need like research,

animal care and technology so there has to be some variation."

Calculating the savings in both dollars and emissions is also a bit of an art, said Trueman. Because there are so many variables, the sustainability office relies on industry calculations to estimate savings, and even then, the expectations are conservative.

When last calculated in 2009-10, U of S carbon emissions were pegged at 165,000 tonnes per year with 58 per cent of that total attributed to electricity, 34 per cent to natural gas and the remainder to transportation, waste and agriculture. The savings estimate of 2,000 tonnes is a very small percentage of actuals, said Trueman, "but to be absolutely accurate we would have to be able to hold everything constant, including the weather. We have to rely on industry wisdom about what percentage we can save with each degree of temperature change."

"We have to trust in the logic," continued Theede. "If we reduce demand, our greenhouse gases will go down and we'll save money." ■

University of Saskatchewan
Discover More
with **St. Thomas More College**

Over 200 Arts & Science class options open to all U of S students!

"I appreciate STM's community atmosphere and the smaller class sizes that provide students with an engaging learning environment."
Gabriela, STMSU President

Open January 2014 - New 20,000 sq. ft. addition with over 350 new student spaces incorporating advanced classroom technology.

ST. THOMAS MORE COLLEGE
UNIVERSITY OF SASKATCHEWAN
discovermore.ca

Coming Events

■ Seminars/Lectures

Vaccinology and Immunotherapeutics Seminar

- March 20, 12:30 pm, VIDO-InterVac lecture theatre, Rahwa Osman, PhD student, presents The role of interferon gamma in a primary Bovine Herpes Virus-1 (BHV-1) infection

Jesse Caldwell Lecture

- March 21, 7:30 pm Room 132 Archaeology Building, the Saskatchewan Archaeological Society presents Canadian archaeologist and flint-knapper Tim Rast who will deliver the Jesse Caldwell Memorial Lecture. Rast will also conduct flintknapping and hafting workshops March 22 and 23, also in Room 132 Archeology. To register, contact the society at 306-664-4124 or saskarchsoc@sasktel.net

Digital Humanities Toolbox

- March 21, 3-5 pm, Arts 140, Geoff Cunfer from the Dept. of History presents A Hands-On Introduction to Historical GIS. This session will provide an example of historical GIS drawn from research about prairie land use change during the 20th century. No previous GIS experience is necessary. For information visit etrus.usask.ca.

Veterinary Microbiology Seminars

Fridays at 12:30pm, VIDO Lecture Theatre

- March 21, Lisanework Ayalew, PhD graduate student, presents The role of polypeptide VIII of Bovine adenovirus 3 in virus replication; and Teresia Maina, PhD graduate student, presents: Elucidation of the role of *Mycoplasma bovis* in modulating Bovine Alveolar Macrophage (BAM) effector functions
- March 28, Massroor Tipu, MSc graduate student, presents Improvement of vaccine against inclusion body hepatitis in chickens through development of a new in-ovo vaccine and Hong-su Park, PhD graduate student, presents Investigation of inflammasome-mediated interleukin-1 beta secretion in porcine alveolar macrophages infected with influenza A virus

Water Leaders of Tomorrow

- March 21, 2-7 pm, Diefenbaker Canada Centre, the Global Institute for Water Security and the Canadian Water Resources Association are hosting a Water Leaders of Tomorrow lecture series and poster competition with lectures running from 2-4:30 pm followed by the poster competition. For information, visit usask.ca/water

Division of Science Seminar

- March 14, 2 pm, Room 159 Thorvaldson, James R. Bolton, author, professor and researcher in the field of photochemistry, presents How Light Can Purify and Disinfect Contaminated Waters

Classical, Medieval, and Renaissance Studies Colloquium

- March 20, 4:30 pm, Shannon Library, St. Thomas More College, Romuald Lakowski of MacEwan University in Edmonton presents Utopian Warfare and the Mongols: On Medieval Travel Literature and Thomas More's *Utopia*

Literature Matters

- March 26, 7:30-9:30 pm, Social Hall, Grace-Westminster United Church, Professor Richard Harris presents "Whaddaya know?" And how do you know it? And how do you remember it? Proverbs in life and in literature - and in the mind

Academic Freedom Event

- March 27, 2-4:30 pm, Neatby-Timlin Theatre, the U of S Faculty Association presents Defend Academic Freedom in a Time of Crisis, which includes a lecture by Gaye Tuchman professor emerita of sociology, University of Connecticut, entitled Corporate Universities and the Bottom Line. A panel discussion entitled

TransformUS as a Solution to a Crisis? What Crisis? will take place at 3:20 pm.

Spinks Lecture

- March 21, 3:45 pm, Room 107 Physics, James Liao, Ralph M. Parsons Foundation Professor and Department Chair, Chemical and Biomolecular Engineering, University of California at Los Angeles, presents the J.W.T. Spinks Lecture entitled Exploring Biotechnology for Sustainability

Johnson-Shoyama Lectures

- March 25, noon-1:30 pm, Prairie Room, Diefenbaker Building, Ken Ludwig, executive director, organizational effectiveness, Public Service Commission, and Reg Urbanowski, special advisor to the deputy minister, Ministry of Advanced Education, present The Power of Meaning in Organizations
- April 9, Ramada Hotel, Regina, John Manley, president and CEO of the Canadian Council of Chief executives and former deputy prime minister, presents the 2014 Tansley Lecture entitled Public-Private Collaboration: The Key to Overcoming Some of our Toughest Challenges

■ Conferences

Breaking the Silence

The 17th annual Breaking the Silence Conference takes place March 21-23. Elvira Kurt, the Toronto-based comedian, will open the conference at the Broadway Theatre on March 21. The conference then returns to campus on March 22 for a full day of panel discussions, breakout sessions, slam poetry and films. Full conference and registration information is at usask.ca/education/breaking-the-silence

Academic Research Day

The Dept. of Psychiatry is holding a Psychiatry Update: Addictions and Mental Health event March 28 in the Rependa Theatre, Saskatoon City Hospital. Among the presenters are Dr. Robert Milin, head, Division of Addictions and Mental Health at the University of Ottawa; Dr. Tony George with the Centre for Addition and Mental Health and the Division of Brain and Therapeutics at the University of Toronto; and Detective Inspector Jerome Engele and Sergeant Dean Hoover of the Saskatoon Police Service. More information and the registration form are available on the department website.

■ Courses/Workshops

Gwenna Moss Centre for Teaching Effectiveness

For details visit usask.ca/gmcte/events or call 306-966-2231

- March 20 and 21, Mental Health First Aid two-day workshop, fee: \$200 (includes the registration fee and lunch on both days). For information, contact laura.mcnaughton@usask.ca or 306-966-5809
- March 26, 9-noon, Land Agreements with Robert Innes
- March 26, 1-4 pm, Honouring Agreements with Colleen Charles and Sylvia McAdam Saysewahum
- March 28, 10:30-noon, Community Organizations 101: An Introduction with Lisa Erickson, Station 20 West
- April 8, 1-4 pm, Shared Ground with Colleen Charles and Sylvia McAdam Saysewahum

Continuing Education for Nurses

For more information visit usask.ca/nursing/cedn

- April 11-12, Optimizing Health for Older Adults conference; registration required

Biomarker Development Workshop

- April 10, 8 am-5 pm, Exeter Room, Marquis Hall, a day-long Biomarker Development Workshop will be held to promote information about newly developed techniques in the area of

biomarker development with a focus on nuclear biomarkers, nanoprobe and infectious diseases. This free workshop features speakers from across North America. Open to all faculty, graduate students, postdoctoral fellows, undergraduate students and technicians.

Library Research and Reference

For more information, search by series name on the university homepage.

Library Researcher Series:

Learn some literature searching strategies and research productivity skills. All sessions will be held in the Collaborative Learning Lab, 1st Floor, Murray Library, from 1-2pm. Sessions are free and no registration is required.

- March 25 – Overview of Patent Searching
- April 1 – Research Data Management

Managing Your References Series:

Learn how to get started with some popular citation management tools. Sessions are free and no registration is required.

- March 14 – Mendeley and Zotero – 1:30-2:30 pm, Murray Library, Collaborative Learning Lab
- March 21 – RefWorks – 12:30-1:30 pm, Engineering Building, Delta Lab, Room 2B04
- March 28 – EndNote – 1-2pm - Health Sciences Library Meeting Room

Centre for Continuing and Distance Education

For more information, visit www.ccde.usask.ca or call 306-966-5539

Business and Leadership Programs

- Building an Effective Team, April 3
- Developing Your Presentation Skills, April 7 and 14
- The 5 Choices to Extraordinary Productivity, April 8-9
- Understanding Self and Others Using MBTI Step II, April 24
- Train the Trainer: A Short Course in Adult Learning, April 28-30
- Leading Innovation, Inspiring Creativity in the Workplace, May 1
- Introduction to Group Facilitation, May 9-10
- Technical Writing, June 24

Crucial Conversations for U of S Employees

- March 20 and 27, Room 224/225 Williams Building, fee \$490

Community Music Education

Parenting with Music and Suzuki Early Childhood Spring classes start May 3 and registration is open for summer music camps. For more information, call Nicole Wilton at 306-966-5625 or visit www.ccde.usask.ca/community-music

U of S Language Centre

Multilingual conversational language classes, April 7-June 2:

- French levels 1 to 6: \$205 (GST exempt)
- Italian level 1 and 2: \$215.25 (GST included)
- Spanish levels 1 to 5: \$215.25 (GST included)
- Portuguese level 1: \$215.25 (GST included)
- German level 1: \$215.25 (GST included)
- Japanese levels 1 to 3: \$215.25 (GST included)
- Japanese for the Traveller: \$236.25 (textbook and GST included)
- Cree level 1: \$225.75 (textbook and GST included)

Textbooks and workbooks are extra, except for Japanese for the Traveller and Cree 1. If you have not yet taken multilingual classes, call 306-966-4351 or email reception.uslc@usask.ca for a language assessment.

Part-Time English Classes: Placement testing and registration for the spring term is on now. Call 306-966-4351 or visit ccde.usask.ca/PTESL

- Pronunciation, Thursdays, April 3-June 5
- Spoken English, Tuesdays and Thursdays, April 8-May 29

- Writing & Grammar, Mondays and Wednesdays, April 7-June 2
- Graduate-Level Writing, Mondays and Wednesdays, April 7-June 2
- Reading Skills, Tuesdays, April 8-May 27
- Listening and Note taking Skills, Thursdays, April 10-May 29
- English for the Workplace, Saturdays, April 5-June 7

USCAD Classes

- Watercolour I/II, April 4-6/11-13
- Stained Glass: Focus on Foil work, April 25-27
- Experimental Fiber Art and Design I, March 28-30/April 4-6

Master Gardener Program

- Using Colour in the Garden, April 4, 7-9:30 pm, \$44.95 + GST
- Gardening 101: Spring, April 5, 9-noon, \$44.95 + GST
- Integrated Food Gardening, April 5, 1-4 pm, \$44.95 + GST
- The Allure of Blue Flowers, April 6, 9-noon, \$44.95 + GST
- Landscaping: Learning through Critique, April 6, 1-4 pm, \$44.95 + GST
- Perennials: The Basics, April 11, 7-9:30 pm, \$44.95 + GST
- Garden Fundamentals, April 12 and April 13, 9 am-4 pm, \$99.95 + \$10.50 materials fee
- Gardening Naturally: Reducing Pests without Chemical Products, April 12, 7-10 pm, beginner to advanced, \$44.95 + GST

ICT Training Services

For information or to register, email us at training@usask.ca or visit training.usask.ca.

- Adobe Illustrator – Intro, April 22 and 24, 1:30-4:30 pm, \$125 students; \$150 staff and faculty; \$185 others
- Adobe InDesign – Inter, April 15 and 17, 1:30-4:30 pm, \$125 students; \$150 staff and faculty; \$185 others
- Adobe InDesign – Intro, March 18 and 20 OR May 13 and 15, 1:30-4:30 pm, \$125 students; \$150 staff and faculty; \$185 others
- Adobe Photoshop – Inter, May 20 and 22, 1:30-4:30 pm, \$125 students; \$150 staff and faculty; \$185 others
- Adobe Photoshop – Intro, March 25 and 27 OR May 6 and 8, 1:30-4:30 pm, \$125 students; \$150 staff and faculty; \$185 others
- ArcGIS – Intro, March 18 and 19, 6:30-9:30 pm, \$0 students, staff, faculty; \$185 others
- Blackboard / U of S Course Tools Fundamentals, March 14, 2-3:30 pm, \$0 staff and faculty
- Blackboard / U of S Course Tools Questions/Grades Wkshp, March 21, 2-3:30 pm, \$0 staff and faculty
- Blackboard / U of S Course Tools Instr. Wkshp, March 28 OR April 7, 1:30-4 pm, \$0 staff and faculty
- MS Outlook – Intro, March 19, 1:30-4:30 pm, \$0 students, staff, faculty; \$125 others
- Research Posters - Adobe Illustrator, May 29, 2:30-4 pm, \$0 students; \$50 staff or faculty; \$75 others
- Research Posters - MS PowerPoint, May 27, 2:30-4 pm, \$0 students, staff, faculty; \$75 others
- Faculty Workshops: contact a training@usask.ca or 306-966-4866 for more information on workshops geared to help.
- IT4U – Tech Help for Students: http://it4u.usask.ca

Enroll in many courses from off campus. Go to training.usask.ca for more information.

Edwards School of Business, Executive Education

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

- March 20, Spring Forward: Grandey Leadership Luncheon
- March 24-26, The Project Management Course – Saskatoon
- March 28, Edwards Seminar Series: Unpacking High Performance
- April 2, Edwards Seminar Series: Relationships that work

- April 2-4, What the Non-Financial Manager Needs to Know About Financial and Managerial Accounting - Regina
- April 7-9, The Business Analyst's Course - Regina
- April 29-May 1, Digital Marketing Program: Social Media and E-Marketing Certificate
- May 22-23, Process Mapping and Process Improvement Course - Regina
- May 26-27, Analyzing and Improving Office and Service Operations (Lean Office) Course
- May 28-29, Process Metrics, Management and Controls Course
- May 30-June 6, The Effective Executive Leadership Program – Waskesiu

■ The Arts

Greystone Singers Concert

The University of Saskatchewan Greystone Singers are performing a spring concert March 23, at 3 pm in Knox United Church. Featured works are Pachelbel's *Jauchzet dem Herrn* with double chorus, Norman Dello Joio's *Jubilant Song*, as well as a variety of other choral music including pop song arrangements and spirituals. Tickets are \$15 for adults and \$10 for students and seniors available at McNally Robinson Booksellers, from choir members or at the door.

Amati Concert

The Amati Quartet performs The Beethoven Cycle: Concert No. 2 March 22 at 2 and 7 pm at Third Avenue United Church. For details and tickets visit amati-quartet.usask.ca

Something Old, Something New

The University of Saskatchewan Wind Orchestra presents its spring performance entitled Something Old, Something New, Something Borrowed, Something Blue April 4 at 7:30 pm at Elim Church. The program includes works by Schuman, Boyesen and Mackey, and the world premiere of *Invisible Cities* by Dinuk Wijeratne featuring TorQ. For more information contact darrin.oehlerking@usask.ca or 306-966-1370

The Big Swing

The U of S Jazz Ensemble concert The Big Swing will take place March 30 at 3 pm in Quance Theatre, Education Building. Tickets are \$10 for adults and \$5 for students and seniors. For more information contact dean.mcneill@usask.ca or call 306-966-6169.

A Queen and Her Country

The Diefenbaker Canada Centre is hosting *A Queen and Her Country*, a travelling exhibit from the Canadian Museum of History, until June 8. The exhibition marks the diamond jubilee of Her Majesty Queen Elizabeth II using artifacts and images to recall her many visits to Canada and her connections to major events in the country's history.

Kenderdine Art Gallery

Showing in the Kenderdine Art Gallery is *Rita McKeough: The Lion's Share*, an immersive experience that includes a visual array of materials and the sounds of a lion eating, all within the space of a faux restaurant. The artist describes the installation as a 3D version of a Looney Tunes restaurant in which things have gone terribly awry. The exhibition, curated by Josephine Mills, continues until April 26.

College Art Galleries

The group exhibition *Ecotopia*, circulated by the Kitchener-Waterloo Art Gallery and on view in the College Art Galleries, explores environmental conservation, destruction and the cacophonous blend of architecture and decay in a technological age from the perspective of a number of artists. The show runs until May 7.

On Stage

Greystone Theatre will present *Our Country's Good* March 19-29. Directed by Pamela Haig Bartley, the play, set in New South Wales, Australia in 1789, is a frequently funny exploration of the

transformative potential of theatre and the civilizing power of the arts. Details and tickets available on the Dept. of Drama website.

■ **Miscellany**

Research Day

The 21st annual Live and Health Sciences Research Day takes place March 14 in D Wing atrium, Health Sciences. Keynote speaker is John Gordon, professor in the Division of Respiriology, Critical Care and Sleep Medicine; he will speak at 10:30 am in Room 1130.

Aboriginal Achievement Week

A number of activities, presentations, meals and celebrations will be held March 10-15 to mark Aboriginal Achievement Week at the U of S. Visit students.usask.ca/current/aboriginal/week for details.

CLS Tours

The Canadian Light Source is offering free public tours of the facility most Thursdays at 1:30 pm and at 7 pm on March 20 and April 17. Reservations are

required. An online form is available on the CLS website under the education tab, or email outreach@lightsource.ca, or call 306-657-3644.

Saturday Pet Wellness Clinics

The WCV Veterinary Medical Centre will hold Saturday Pet Wellness Clinics from 8:30 am-4:30 pm March 22, and April 5 and 19 for pet checkups or vaccinations. Call 306-966-7126 to book an appointment or for more details. The centre offers a 10 per cent discount for U of S students and staff.

➤ **SUBMIT**
Coming Events

Next OCN: **Friday, March 28**
 Deadline: **Thursday, March 20**

Email ocn@usask.ca

Council defeats motion of non confidence

Council defeated a motion Feb. 27 that expressed a lack of confidence in TransformUS as a means of making academic decisions. TransformUS is the university's program prioritization process that is unfolding as part of efforts to deal with a projected budget deficit.

The motion was introduced by Len Findlay, professor in the Department of English, in an appeal for collegial action instead of "institutional alignment and financial expediency." He said Council made two mistakes when it approved in principle a process of program prioritization in January 2013 – it consented to an undefined process and showed little curiosity about the extent of the university's "budgetary mess."

Findlay urged Council members to support the motion as a way of reclaiming its independence in making decisions about the university's academic agenda. While Council cannot audit the future, he said, it can "shape it on the basis of academic excellence."

In the long debate that followed, Council members supporting the motion criticized TransformUS and the Robert Dickeson model on which it was based, expressed concern about how academic programs

were evaluated and noted the potential for the loss of faculty positions with any elimination of programs.

Lois Berry, acting dean of nursing, speaking against the motion said that while the process is not perfect, it has resulted in conversations "like no others" about academic programs. Decisions are inevitable, she said, and encouraged colleagues to engage in the process.

Several people shared their experiences at other institutions that implemented across-the-board rather than strategic cuts. The alternatives to TransformUS "are not pretty," said David Hill, dean of pharmacy and nutrition.

Lisa Kalynchuk, a faculty member in the Department of Psychology and co-chair of the TransformUS committee that evaluated academic programs, reminded the meeting that the authority of Council to debate any and all proposed changes to programming has never been in question. But, she continued, the task force did identify programs "that are not working. Don't we owe it to students to fix them, and if we can't fix them, to get rid of them?"

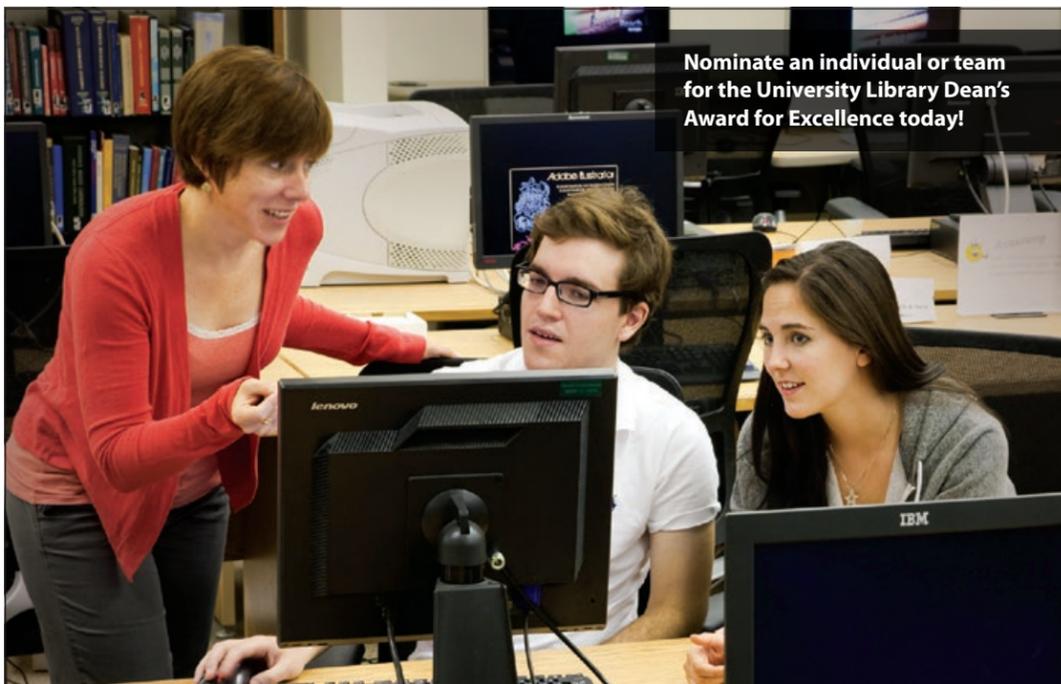
The non-confidence motion was defeated by a large majority, as was an earlier motion calling for a recorded vote. ■



COLLEEN MACPHERSON

SHOW OF SUPPORT

A small crowd gathered March 6 in the Lesya Ukrainka garden outside the Murray Library to raise awareness about and show support for those involved in the political unrest in Ukraine. A number of people spoke while those in the group held flags, placards and candles.



Nominate an individual or team for the University Library Dean's Award for Excellence today!

➤ **University Library Dean's Award for Excellence**

Have you received exceptional service/work from a University Library employee or team?

Awards Information

The Awards Nominate an individual or a team who has demonstrated exemplary service/work toward fulfilling the library's mission.

The Criteria All library employees holding continuing appointments are eligible for nomination.

All members of the University Library community (e.g. library employees, patrons, suppliers, etc.) are invited to submit nominations of for the award.

The nomination form may be submitted by an individual or group.

More information on the award and appropriate nomination forms can be found at library.usask.ca or by contacting the Executive Assistant to the Dean at library.ea@usask.ca or 966-6094.

Completed nomination forms must be marked confidential and submitted to the Library Executive Assistant no later than the last working day in March.

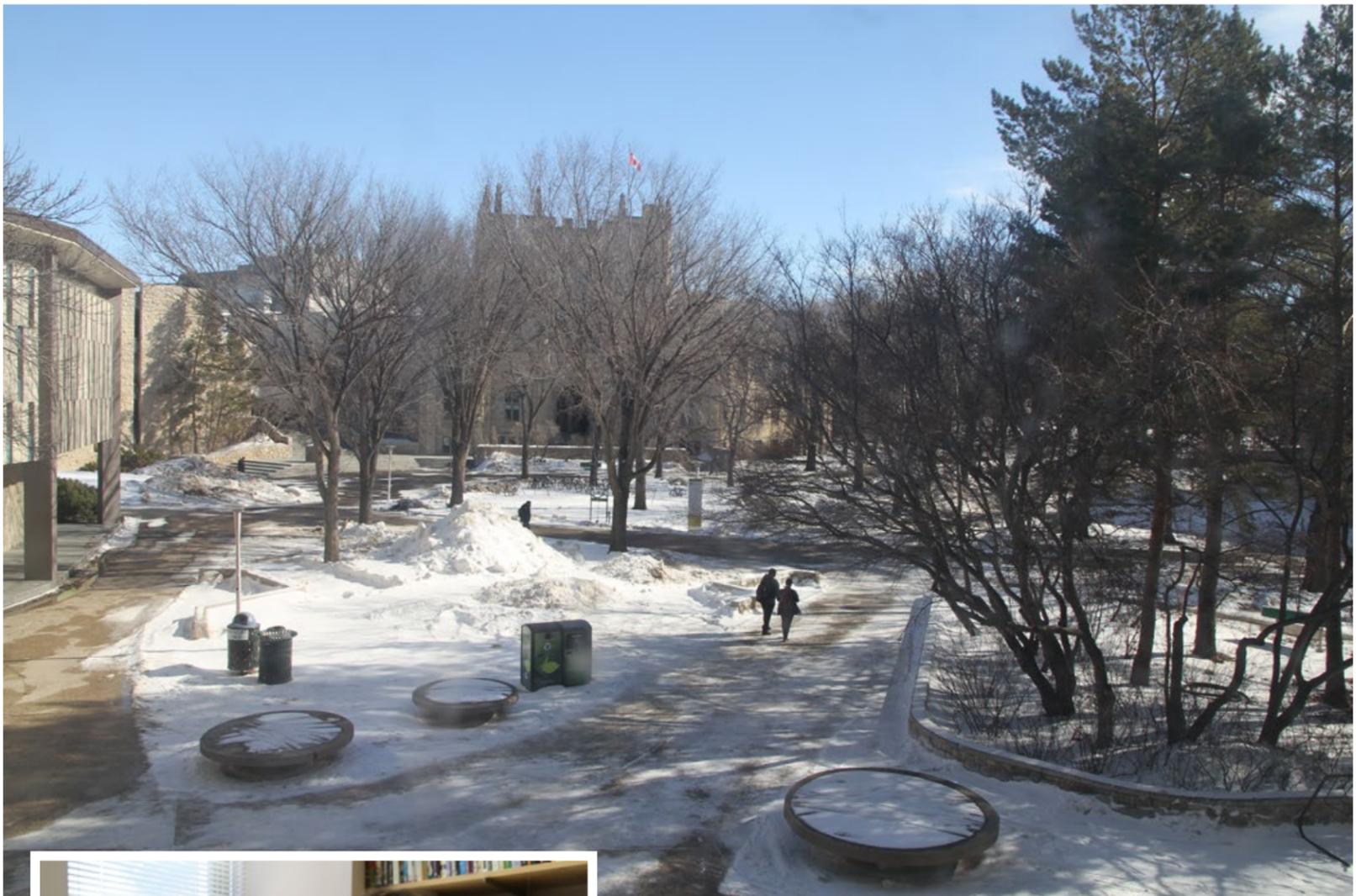
➤ **MORE STORIES AT:**
news.usask.ca

library.usask.ca/info/initiatives/deansaward.php

UNIVERSITY OF SASKATCHEWAN
 University Library

Room with a View

This year's back-page feature explores the view of campus from various office windows, and the people who enjoy them. Do you have an interesting view? Let us know at ocn@usask.ca



KRIS FOSTER



Where the action is

From her office window on the second floor of the Arts Building, Andrea Wasylow-Ducasse overlooks one of the busiest spots on campus. But better than that, she's got a window on her own family history.

Wasylow-Ducasse, executive director of planning and projects in the College of Arts and Science, looks down on the main entrance to her building, a busy place where students and others congregate around what she called "the concrete mushrooms." And it was here, at the mushrooms, that her own parents would meet on dates when they were U of S students. "My family history is here."

While most people would appreciate the views eastward through the trees toward the Geology Building, some might find it a bit of a noisy spot, but not Wasylow-Ducasse. "It's great to hear the hustle and bustle of campus – the voices, the concerts in the Bowl, the rallies. There's always laughing and yelling. This is where the action is."

