Early on the morning of July 22, a stock trailer backed up to the Rayner Dairy Research and Teaching Facility. The trailer door swung open and, under the watchful eye of dairy unit manager Marlene Fehr and her staff, the first dozen of the university’s 70-plus dairy cows stepped tentatively into their new home.

Standing off to the side, carefully observing the animals sniff around (cows have a keen sense of smell) and listening to them vocalize concern about their new environment (cows don’t like change), was Bernard Laarveld, professor of animal and poultry science. Seeing the herd arrive was, he said later, a moment of pure joy. It was also a relief because this is a project that has been a long time coming. It was 10 years ago when Laarveld, as then head of the Department of Animal and Poultry Science, received a delegation of Saskatchewan dairy producers and listened to their proposal for a new dairy facility at the U of S, a research barn that would reflect state-of-the-art industry standards. The producers even agreed to support the idea financially. Each dairy producer in Saskatchewan contributed the equivalent of $25,000 in milk quota – a total of about $4 million – to the operation of the $11.5-million teaching and research barn.

“The foundation of a clear understanding of what it was we wanted and why it is important for producers in this province, and in Canada,” said Laarveld.

Other producer groups came on board. Contributions from the canola and flax sectors “solidified the vision that the (dairy) unit is here to serve all of agriculture,” he said. “We view the crop sector as a client because of the importance of feed research.”

Service sector members like banks followed, as did machinery deals and private donations. Funding for the project was completed with contributions from the university, the College of Agriculture and Bioresources as well as the federal and provincial governments.

The result is a facility that New dairy facility opens Rayner barn serves students, research, ag sectors

A new facility like this really gets the creative juices flowing.

Bernard Laarveld

Rayner barn serves students, research, ag sectors

See Students, Page 2

Dairy unit staff guide cows into the Rayner facility.
Some cows are particularly fond of the grooming brushes.

From Page 1

features cattle housing much superior to the university’s old dairy barn. When all the barn’s systems are in use (the cows are being gradually introduced to the technology to ease the stress), computerized feeders will provide real-time monitoring of on-demand feeding, and milk production data will be collected automatically rather than manually from both the conventional milking parlour and a milk robot system that will soon be operational. Laarveld said the data collection systems open many new research opportunities in a number of areas – nutrition, health, reproduction, fertility, genetics. “And we have enough room to do more research. A new facility like this really gets the creative juices flowing.”

Even the little extras in the barn like the self-activated grooming brushes are of interest to those studying how animals cope with stress, he said. He added some of the younger cows had already learned that if they use the brushes and then lay down right beneath them, no other cows can get a turn. “As Marlene (Fehr) says, cows can be just like a bunch of kids,” said Laarveld with a laugh. Not only is the facility a boon for research but it will mean enhanced experiential learning for U of S students in a number of disciplines. “What we had in the old barn was 1960s technology. In this new facility, we’ll be training our students with today’s equipment for today’s jobs.”

A key feature of the Rayner facility is its attention to public education, said Laarveld. The soon-to-be-completed Feeding World visitor gallery will highlight the role of Saskatchewan agriculture in global food production. It will also explain dairy production, and an overhead walkway will give visitors a bird’s eye view of the facility, milking parlour and milk robot.

Like any new building, the Rayner facility had a few bugs that had to be worked out but overall, the transition for the herd went smoothly. Laarveld said he visited the barn just two days after the animals were moved in and he found the majority of them laying down in the stalls and ruminating, and that is “a good sign.” He gave a lot of credit to the dairy unit staff who, while learning new routines and technology themselves, “are so good at handling our animals. They certainly have a stabilizing effect.”

With plans in the works for an official opening in October, Laarveld has turned his attention to the next phases of the Rayner facility, including networking the dairy operation into research and teaching programs locally, nationally and internationally.

With the opening of the Rayner Dairy Research and Teaching Facility, the university will move to expand its dairy herd to 100 lactating animals.

The herd was maintained at 55 animals for many years but that number was increased to 70 in anticipation of the new facility, explained Bernard Laarveld, professor of animal and poultry science. The herd is closed for biosecurity reasons, meaning no outside animals are allowed; only the calves of existing cows, plans in part of herd. Laarveld said the herd should number 100 lactating cows by the end of the calendar year.

And for those interested in the university’s milk production: the cows are milked three times a day every day with a daily production of about 39 kg each. That means the herd produces about 1.4 million kg of milk a year. The proceeds from the sale of the milk go to support the operating budget.

Then there are the possibilities that come with green technologies like solar heating systems and rainwater recovery. But Laarveld’s primary interest is the bio-energy potential of manure and waste. He understands most people view manure as an unpleasant byproduct of animal operations “but I look at things as opportunities, not as problems.”

Campus Incidents

Report all information about these and other incidents to Campus Safety at 306-966-5555.

Aug. 19-26

TICKETS

• 1 for a learner driving unaccompanied
• 1 for driving an unregistered vehicle
• 1 for using an electronic communication device while driving
• 1 for driving on the left side of a median
• 1 for speeding
• 2 for disobeying a traffic sign

Events of Note

• A window was broken in the Little Stone Schoolhouse on Aug. 21, though there was no evidence to suggest it was malicious. No entry was gained to the building.
• A vehicle was damaged and money removed while it was parked in the Stadium Parkade Aug. 22. There are no suspects.
• A bicycle was stolen from the bike rack in front of Seager Wheeler residence sometime between Aug. 12 and Aug. 23.
• A caretaker in St. Andrew’s College was confronted by a male subject she discovered in the building around 6 pm on Aug. 23. When discovered, he yelled at the caretaker, who could not understand what he was saying. He ran out of the building shortly afterward. The individual is described as male, dark complexion, bald, 5’10”, thin and was seen at the time wearing sunglasses on top his head, dark blue shorts, white t-shirt and a blue backpack.

Oigue Multicultural Centre – August 30, 2013 2

MISSING PERSONS

• Colleen MacPherson

• Patrick Hayes, Sharon Scott, David York, Steve Jimbo

• Andrew Phillips

• Sandra Ribeiro, Fiona Haynes, Steve Jimbo

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

Contact us at: alumnioffice@usask.ca or (306) 966-5186
Described by its designated dean as “neither fish nor fowl,” Open Studies is about to undergo a significant change to ensure the best possible outcome for the students registered under its banner.

Gordon DesBrisay, associate dean of student affairs in the College of Arts and Science, said Open Studies was the academic home last year of about 500 students who fall into two distinct groups: casual students, part-time learners who wish to take classes at the U of S without committing to a degree program; and college students who are required to discontinue (RTD) and are academically at risk. As of July 1, the U of S formally closed Open Studies, its teaching program; the more clients who walk through the door, the greater the variety of cases its students will be exposed to. And it is looking to the U of S community to help.

Dr. Duncan Hockley, director of the VMC, said a discount for services that, prior to July 1, was only available to college staff and students has been extended to include all U of S employees and students. The 10 per cent discount applies to all professional services, he explained, with the exception of drugs and lab tests, but requires a valid student or staff card from the University of Saskatchewan.

The VMC will offer the discount for companion animals—dogs, cats, parrots—and for large animals that are brought to the hospital, he said. And because the centre’s operations include the college’s field service—veterinarians who travel to where the large animals are—“if you have 10 cows on your farm, it (the discount) will be available for that service too.”

Hockley explained the VMC is open to the public and offers 24-hour emergency service. It currently handles more than 17,000 cases per year, about half of which are referrals from across western Canada. “But the more active the hospital is, the more we can invest in new services and equipment. We’re also looking to engage a bit more with the campus community.”

The VMC has more than 120 support staff, more than 60 faculty “and a multitude of interns, residents and students” to deal with patients. It is a busy facility but Hockley pointed out Saskatoon has the highest number of veterinary clinics per capita in Canada “so we have to be competitive in terms of cost and the quality of service we offer.”

Hockley added the VMC “also wants to increase our caseload where we see healthy patients.” There is a growing number of wellness programs being offered to a variety of user groups like owners of puppies, adult and geriatric animals and even those with animals that have weight problems.

Veterinary centre offers staff, student discount

The Western College of Veterinary Medicine’s Veterinary Medical Centre (VMC) is looking to increase its caseload, to support its operations and its teaching program; the more clients who walk through the door, the greater the variety of cases its students will be exposed to. And it is looking to the U of S community to help.

The colleges would accept the students in either the non-degree or provisional category of admission. Either way, casual students would have full access to college support services currently unavailable to them in Open Studies.

For RTD students, continuing full-time study through Open Studies would no longer be an option, DesBrisay explained. Instead, colleges would be responsible for identifying at-risk students “and helping them stay and succeed, or helping them leave with a plan to return. This forces both parties to have a concentrated think about this—the students about whether they really want to stay and the colleges about taking responsibility for the decision to RTD.”

Often, students have a backstory that could be the basis for an appeal of an RTD decision, which is made strictly based on academic needs of RTD students. University Council approved that proposal at its June meeting. “A key message here is that we’re not in any way backing away from part-time students,” said DesBrisay. “It’s our historic mandate to be accessible to the people of Saskatchewan ... and we want to promote the option of part-time study at an institutional level.”

But he described Open Studies as “an unproductive option” for RTD students who, instead of leaving the university for a year, can enroll in Open Studies. The aim is for them to take classes through Open Studies, improve their grades and return to a degree-granting program.

“So we show them the door by RTDing them but suddenly say ‘Or you can go to the basement.’ Nobody wants to hang out in the basement. It’s limbo. We need to help them get outside or help them stay and succeed.”

The proposal, which still requires approval of University Senate in October and the Board of Governors in December, would see Open Studies continue as an admission category for casual students but administratively responsibility for that cohort would devolve to the colleges.

Grades, said DesBrisay: With the elimination of the Open Studies option, efforts must be made to ensure college appeal processes are known and that college staff is proactive in reaching at-risk students.

DesBrisay added that extensive data collected by Open Studies staff show that fewer than one quarter of RTD students manage to raise their academic average enough to be readmitted to a college. But that is not for want of trying on the part of staff, he said.

He spoke highly of Lucille Otero, Open Studies co-ordinator, and Sandra Ritchie, manager of student central support services, whose abilities “left no question that we weren’t trying hard enough. We had a long, hard look at our structures and they weren’t very efficient in terms of serving students.”

As the disestablishment process unfolds, DesBrisay said Open Studies staff and their counterparts in the colleges will work to ensure a smooth transition for all involved.

The change will also mean the dissolution by May 1, 2014 of the Open Studies Faculty Council, a group composed of representatives from all colleges with an interest in Open Studies students. And it will mean the end of DesBrisay’s time as designated dean.

“Yes, I’m the last of a long and distinguished line but I’ve got lots to do in my day job!”

Changes to Open Studies will benefit distinct student cohorts

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Students express concern about budget adjustments, TransformUS

The TransformUS initiative will rank all academic and support service programs based on a methodology developed by American education consultant Robert Dickeson. Through this process, the university will determine where to increase, maintain or reduce investment in future budgets, with some programs earmarked for elimination.

Since the beginning of the operating budget adjustment initiative, students have raised a number of critiques and concerns to university administration. The first was for student representation on the TransformUS task forces. After the issue was brought to a packed University Council meeting, administration consented to one undergraduate and one graduate student on each task force, while giving no substantive argument for limiting student participation. This under representation of a critical stakeholder in the TransformUS process is a major flaw within this initiative.

Many students are concerned with the model chosen for TransformUS. The Dickeson model was developed for private, for-profit American educational institutions, and thus advantages revenue-generating programs over others. What do we lose when we transplant this corporate model to a public institution? We lose a culture where higher education is a social good and university is attended for the development of one’s mind and society. In its place, university becomes a place of vocational training focused on profit. Programs not immediately and directly related to job preparation—most notably the humanities and arts disciplines—are de-valued and de-funded. While the task forces have argued that they have adapted Dickeson’s model to meet the specific needs of the University of Saskatchewan, the criteria for ranking academic programs remain exactly the same as Dickeson’s original criteria.

Students are also concerned about framing of this operating budget adjustment initiative as inevitable while there is a lack of resolve to tackle the root of the problem: too little government funding for post-secondary education. President Ilene Busch-Vishniac has typically responded to questions about the university's efforts to secure sustainable government funding by stating that the University of Saskatchewan belongs to the people of Saskatchewan. TransformUS and other budget adjustment initiatives seem to be reallocating resources towards resource-generating priorities and into administrative and executive salaries, rather than facilitating an inclusive discussion on our collective priorities as an institution and as people of this province.

President points to need for sustainability in a new funding environment

I wish to begin by thanking you for your recent letter regarding students’ voices on the operating budget. It is encouraging seeing our students so actively engaged in a process that is focused on our financial sustainability today and in the future, and more importantly focusing our resources clearly on our students, faculty and the residents of Saskatchewan.

I would like to provide clarity to a few specific comments made in this letter in hopes to open up a dialogue and reduce some of the concern with regards to the process.

As you are aware, the Government of Saskatchewan has asked the university to look for efficiencies in our budget, just as they are looking for efficiencies within their own budget. Reviewing how we use our resources is an important process for us to undertake as an institution funded significantly by taxpayer’s dollars. In terms of government funding in 2013-14, we are one of only two provinces with U15 institutions who saw an increase in funding, the other being Manitoba who received a 2.5 per cent increase. Other provincial governments with U15 institutions reduced funding to post-secondary institutions by one to 6.8 percent.

Research conducted by our office of Institutional Planning and Assessment on provincial operating grant funding per full-time student among our U15 peers, with a focus on western Canadian institutions, shows we are in fact a leader in the amount of funding received per student. We are fortunate to have a healthy relationship with our provincial government. We will always make the strongest case for the importance of higher education, but we simply cannot count on large increases as we have received in the past. Through operating budget adjustments we will make the permanent changes needed to ensure our continued financial sustainability in this new post-secondary education funding environment that is impacting all U15 institutions.

TransformUS is one of the projects we expect to make the most impact in terms of reviewing and reallocating our resources. TransformUS is based on the university’s learnings from past reviews and prioritization initiatives in the last 22 years (including The President’s Committee on Renewal in 1991 and Systematic Program Review in 1999), as well as on exemplary initiatives at other universities. As you have indicated, we are also using the framework of Dickeson’s program prioritization, a proven model in resource allocation that has been applied successfully at public and private universities in the U.S. and abroad. I am confident TransformUS will assist us to prioritize our resources effectively in a way that ensures we are able to sustain and grow our priorities. TransformUS is operating via two task forces, both of which have student representation. There is additional student representation on the Operating Budget Adjustments Steering Committee. By contrast, there is intentionally no administrative representation on the TransformUS task forces. Further, while TransformUS will present a report with recommendations, they do not have authority to make decisions. The report will come through our normal governance processes, where students

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Taking cues from humans

MICHAEL ROBIN

Chris Zhang wants to build machines that can understand human emotion to help people make better decisions. “People have emotions, they react to them and base decisions upon them,” explained Zhang, a professor of mechanical and biomedical engineering. “If machines cannot understand human emotions, communications are compromised.”

Zhang and his team are working to incorporate emotional cues into how people interact with machines. An example is the warning light that comes on when a car is getting low on gas; the light will prompt some drivers to pull in at the next gas station, while others will decide to put it off until later. There is no emotional cue to tell the driver how urgent the warning is. “If you could give it an interface that is emotional, it could help make the human take action at the proper time,” Zhang said.

But to deliver the right response, machines need more and better inputs from the human side of the conversation. To get these inputs, Zhang’s team used cameras and sensors capable of gathering information on blood pressure, heart beat, skin conductivity (think sweaty palms) and eye movement. For example, rolling the eyes could signify fatigue or exasperation, while a wandering gaze might indicate boredom.

These data are analyzed and interpreted by custom-written computer software to predict human emotions. Zhang said the system can accurately predict a person’s emotional state about 90 per cent of the time.

“The work has many potential applications, including physical rehabilitation,” he explained. “One machine in Zhang’s lab has the patient hold the end of a mechanical arm attached to a computer. The person manipulates the mechanical arm to move objects on a computer screen, mimicking a wrist rehabilitation.”

Sensors track the patient’s performance and software infers when they are getting frustrated or fatigued. “If we can understand the emotional state of the patient, we can know this state may significantly distort the functional performance,” Zhang said.

Now that the researchers have a system that can read a patient’s emotions, the next step is to create passive and active feedback systems. Zhang uses the analogy of gym equipment: an exercise bike is passive in that the user must decide to pedal while a treadmill is active – the user must keep moving. The team wants to take this one step further.

“We want both physical and mind,” Zhang said. “This is the novel aspect of our approach.”

For example, as the wrist rehabilitation system monitored emotions, it could cue messages to encourage the patient. The system could also prevent patients from overdoing it if it sensed they were pushing themselves too hard.

Zhang explained that one of the challenges is keeping the sensors unobtrusive and easy to use. “The key to having machines understand human emotion is to have sensors that can non-invasively and non-obtrusively get the signals from the human.”

At home, the system would become a virtual partner. That is, the computer would learn from the patient and help them direct their own rehabilitation.

“My plan is not only management of patient function and performance, but also that emotions become active in rehabilitation. We would have on screen an advisor – like a friend.”

“This whole project is based on the concept of home-based rehabilitation,” Zhang said. “That is very important for Saskatchewan, where many people live far away from cities and major hospital facilities and they prefer to stay at home.”

KIRK SIBBALD

From milk and concrete to state-of-the-art lasers and solar power, the University of Saskatchewan’s Department of Chemistry faculty and alumni have spearheaded scientific progress for the past 100 years. They even have a Nobel Prize to prove it.

The department is launching its centennial year celebrations Sept. 20 and 21 with an array of presentations and an exhibit featuring the Nobel gold medal awarded to alumni and chemist Henry Taube (BSc ’39, MSc ’37). Taube’s Nobel Prize, along with other personal awards and memorabilia, was donated to the U of S in 2011.

Taube is the only U of S graduate—and first Canadian-born chemist—to win a Nobel Prize, which he received in 1983 for research on the basic mechanisms of chemical reactions and, perhaps most notably, electron-transfer reactions. “The significance comes from considering that (Taube) was a guy who grew up in small town Saskatchewan, came to the university, was interested in chemistry and went on to what would be the pinnacle of that kind of career,” said Dave Palmer, head of the department.

In addition to the medal, the Taube exhibit will feature memorabilia, photographs and correspondence. Palmer said the correspondence includes rejection letters Taube received after applying for faculty positions in the early 1940s at numerous universities. There is even rejection letter from the U of S but Palmer explained there was no position available when Taube applied. Taube ended up teaching at Cornell University, the University of Chicago and Stanford University, where he remained until his death in 2005 at the age of 89.

“Do me, it speaks well beyond science,” Palmer said. “It tells people that sort of career trajectory is possible. Much like a drama student looking to win an academy award or a (writer) winning the Pulitzer Prize, there is no reason that can’t be you. He started right here, sat in (the Thorvaldson Building) and achieved greatness.”

Palmer noted the chemistry department has played an integral role in scientific innovations throughout its 100-year history. Its first students were tasked with studying the quality of local milk and well water, while former department head Thorbergur Thorvaldson revolutionized cement manufacturing. Current students and faculty are receiving international attention for their work on everything from fundamental properties of matter to solar energy research.

“This is truly one of the departments that built the university into what it is today, so we are really proud and excited to celebrate that,” he said.

A department reunion will be held Sept. 20 and 21, featuring walking tours and talks by notable alumni. The Taube exhibit will be open Sept. 9–20 in the Murray Library. The Taube Nobel medal will be on view in the afternoon of Sept. 20 with a brief presentation at 3 pm.

For more information, visit the Department of Chemistry’s website and click on ‘alumni’.

Kirk Sibbald is communications officer in the College of Arts and Science
Group calls for ongoing dialogue

From Page 4

Although President Busch-Vishniac has thus far failed to advocate strongly for students and the people of Saskatchewan, she will have many more opportunities to do so. Therefore, we make the following recommendations, as students, and as persons deeply committed to the well-being of the University of Saskatchewan:

1. Provide more time for public debate upstream of decisions over priorities and process. We need to apply local knowledge and develop our own organically and democratically created methodologies for critical prioritization processes.

2. Ensure a diversity of voices at the table when the U of S engages in strategic planning and priority setting. The persons making decisions need to reflect the diversity of the province.

3. Publicly inquire into allegations of “perp walks” for fired employees so we have assurance inhumane practices are not occurring at our institution.

4. President Busch-Vishniac must be more bold and public with challenges to provincial funding allocations. She should trust the support behind her and use the power she has as president to advocate for increased government funding. This must be done to cause the provincial government to pay a political cost for under funding its dominant research institution and one of its greatest engines of economic growth. Make it costly. Step up the pressure.

This letter is submitted in the hope that real and sustained dialogue can develop between students and university administration.

Sincerely,
Hannah Patters, St. Thomas More College 
Arts and Science

Mary Jane Beaudin, University Senate

Dr. Hans Rivett, Graduate Studies 
and Research

Michelle, Arts and Science

Teddi Hutton Parsons, Medicine

Dax Dore, Arts and Science

Hassan Rivet, Knowledge

Amanda Gurtler, Arts and Science

Arjen Mertens, Biology

Gracie Scholz, Arts and Science

Erika Lee, St. Thomas More College 
Arts and Science

Heather Franklin, Law

Irene Smith, Arts and Science

Lyle Hunter, Law

Ali Enlund, Graduate Studies and Research

Paul Eggen, Law

Brian Cotty, Arts and Science

Saskatchewan Tween, Graduate Studies 
and Research

Kathleen Edwards, Arts and Science

Molly Patterson, Agriculture and Bioresources

Michelle, Arts and Science

Savhanna Wilson, Graduate Studies

Christine Young, Arts and Science

Andrea Cessna, Arts and Science

Dan Pagan, Law

Irena Smith, Arts and Science

You are invited to attend and provide feedback at a scheduled town hall meeting.

We look forward to meeting you.

Colleen MacPherson, Editor
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

Tereigh Ewert-Bauer claims she has the best view on campus, and probably the only one that’s right at ground level.

Ewert-Bauer is a member of the educational development team in the Gwenna Moss Centre for Teaching Effectiveness, which is located in the north wing of the Murray Building. Her ground-level window faces northwest, with a great view across the grass to the benches and statue in the new Lesya Ukrainka garden, and the Arts Building beyond. She said she watched a lot of legs going back and forth when the garden was under construction, and now can keep an eye on the occupants of the benches.

“Every time I need a break from my work, I look out my window,” she said, admitting she’s become “the weather maven” of the Gwenna Moss centre and has been known to send out alerts to her colleagues when she sees a storm approaching.

But what makes Ewert-Bauer’s view very special is a gopher that, for the past couple of years, has visited almost every day. He scampers up to the window “but he doesn’t just stand on the grass,” she said. “He comes right up onto the sill, puts his paws on the glass and looks in. I think he’s trying to be a micromanager; he’s making sure I do my work.”