

& arts SCIENCE

UNIVERSITY OF SASKATCHEWAN ■ FALL 2013



**Behind the
Scenes in
Drama**

**Pomeroy
Predicts
Disaster**

**Changing of
the Guard at
USSU**

**What Makes a
City Great?**



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Send us your ideas

The development of effective communication skills is one of the college's top priorities for its students. As such, **Arts&Science** is fortunate to have an excellent resource, one that we are just beginning to tap. We know there are great writers amongst our students and alumni, and also talented artists and illustrators. We want to hear from you! Please send story ideas that might be of interest to Arts & Science students, faculty, staff and alumni. We also welcome your comments and suggestions. Send letters and story ideas to: communications@artsandscience.usask.ca

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Betsy Rosenwald

Editor/designer Betsy Rosenwald moved to Saskatoon from New York City in 1999. Her nose for news and eye for detail led to her current position as a communications officer in the College of Arts & Science. She is also the art editor/designer for the Canadian literary magazine, *Grain*.



Mari-Lou Rowley

Poet and science writer Mari-Lou Rowley's most recent book is *Unus Mundus* (Anvil Press, 2013). Her work has appeared in literary, arts and science-related journals including the *Journal of Humanistic Mathematics* (US) and *Aesthetica Magazine's* (UK) creative works competition. She is a PhD student in interdisciplinary studies at the U of S, and the recipient of a Joseph Armand Bombardier Doctoral Award.



Robert Sandford

Bob Sanford is director of the Western Watersheds Research Collaborative and an associate of the Centre for Hydrology, part of the Global Water Institute at the U of S. In 2013, *Alberta Ventures* magazine recognized Sandford as one of the 50 most influential Albertans. He has published five books on water and his latest, *Saving Lake Winnipeg*, was published in October 2013. Bob lives with his family in Canmore, Alta.



Mara Selanders

Mara Selanders (BA'13) is currently working towards her masters degree in journalism at Carleton University after completing her English degree at the U of S this past spring. She was awarded the U of S Hannon Travel Scholarship, which she used this past summer to travel India. Selanders previously worked as an intern in the College of Arts & Science's Communications, Development & Alumni Relations Office.



Kirk Sibbald

Editor Kirk Sibbald completed a BA ('04) in English at the U of S before receiving an MA in journalism at the University of Western Ontario. After working as editor of the *Lloydminster Source* newspaper, Sibbald returned to Saskatoon and has been a communications officer in the College of Arts & Science since 2008.



Sarah Taggart

Sarah Taggart is a second-year MFA in Writing candidate at the U of S. She is responsible for all things business at local literary magazine and journal of eclectic writing, *Grain*. She is currently working on a novel.

Climate Change Could Alter Face of Forests: Johnstone



Jill Johnstone (submitted)

A COLLEGE OF Arts & Science researcher says climate warming could soon change the face of Canadian forests.

Jill Johnstone, associate professor of biology, is co-author of a recently released paper that contends that a predicted increase in forest fires could reduce the ability of conifers—such as black spruce and jack pine—to regenerate.

The boreal forests in Canada, including those in Saskatchewan, are dominated by serotinous conifers, which produce cones that stay sealed and closed on the top of tree canopies. However, once triggered by the heat of a forest fire, cones open and release seed onto the post-fire forest floor, ensuring the forest's regeneration. Similar adaptations have been found in fire-prone regions of Western Australia and the United States.

▶ online Listen to Jill Johnstone on CBC Radio's *Quirks and Quarks*: <http://tinyurl.com/mfucnp5>

With many climate models predicting an increase in fire activity due to climate warming, the paper's authors argue this may disrupt such processes.

Work conducted by Johnstone and former U of S PhD student Carissa Brown demonstrated fires recurring in the same place after a short period (about 30 years) can severely disrupt the ability of serotinous pine and spruce to regenerate. This is because the cones on young trees are too sparse and close to the ground to survive the second fire.

In such situations, the forest will often evolve and become dominated by new types of vegetation, like aspens or open shrubs.

"The important contribution of this paper is that we have presented a model that allows us to anticipate what parts of the boreal forest are likely to be particularly sensitive to an increase in fire frequency," said Johnstone. "The forests of northern Saskatchewan are certainly in one potential hot-spot of change, and we should anticipate the potential for large changes in types of forest cover in the more fire-prone regions of our province."

The research paper, *The Impacts of Changing Disturbance Regimes on Serotinous Plant Populations and Communities*, appeared in the Oct. 11 issue of *Bioscience*. Johnstone and Brown co-authored the paper alongside Brian Burma (University of Alaska Southeast), Dan Donato (Washington State Department of Natural Resources) and Joseph Fontaine (Murdoch University, Australia).

Social Scientists Receive Grants for Nuclear Research

TWO SOCIAL SCIENCE professors were included in the Sylvia Fedoruk Centre for Nuclear Innovation's first round of successful grant applicants in January 2013. And they followed it up with a second successful application in October.

Scott Bell (geography and planning) and Loleen Berdahl (political studies) are co-investigators on a project that will establish the Nuclear Industry Policy Research Unit (NIPRU) in the Social Sciences Research Laboratories. The project received a grant of \$94,470 from the Fedoruk Centre, along with \$33,573 in in-kind contributions from the Carson Centre for Nuclear and Uranium Innovation, Spatial Initiative.

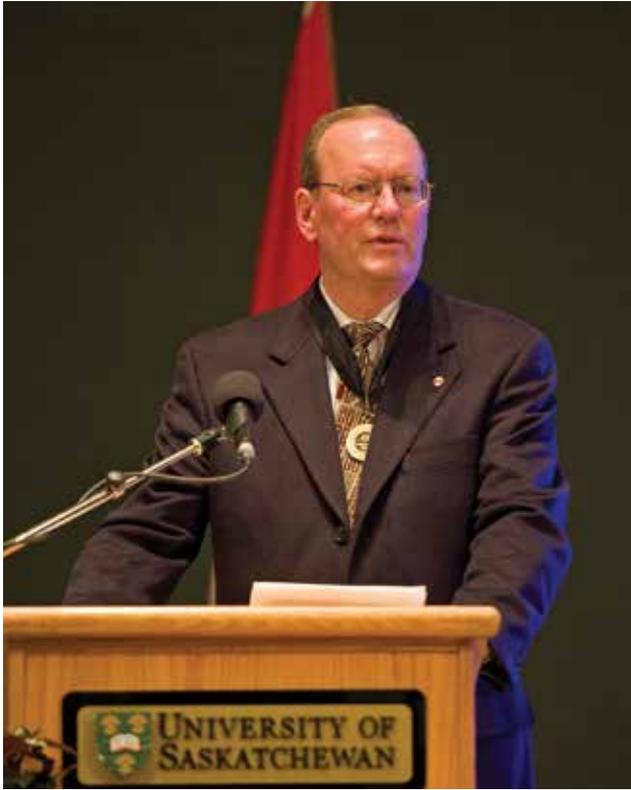
Working alongside the project's two other co-investigators—post-doctoral student Jana Fried and Maureen Bourassa, assistant professor in the Edwards School of Business—Bell and Berdahl will be examining the opinions

and attitudes of business and the public regarding nuclear research and development.

Berdahl, Bell and Bourassa will also be studying ways to enhance communication around nuclear-related issues thanks to a second grant from the Fedoruk Centre, announced in October. Through this project, Evidence and Nuclear Policy in Saskatchewan, the researchers will assess how people understand and consume nuclear-related evidence and how to most effectively communicate policy-relevant evidence.

This project received \$151,512 from the Fedoruk Centre, with another \$83,375 in in-kind contributions from project partners Atomic Energy Canada Ltd. and the Carson Centre for Nuclear and Uranium Innovation, Spatial Initiative.

Miller Honoured with Saskatchewan Order of Merit



📷 Liam Richards

HISTORY PROFESSOR Jim Miller has been recognized with the Saskatchewan Order of Merit for the critical role he has played helping to raise public awareness of treaty rights, residential schools and other important issues in Aboriginal history.

Miller is the Canada Research Chair in Native-Newcomer Relations and author of Canada's first comprehensive historical account of the Aboriginal-Newcomer relationship—*Skyscrapers Hide the Heavens: A History of Indian-White Relations in Canada*, published in 1989. He also authored *Shingwauk's Vision*, the first complete history of Canada's residential school system that has been used for context and reference by Aboriginal political leaders, public servants and lawyers involved in resolving abuse claims.

"Jim's extensive research on Aboriginal history is unique in Canada," said Peter Stoicheff, dean of the College of Arts & Science. "Our college, university, province and country are indebted to Jim for his work, which has shed light on many critical issues in this area."

Miller has worked closely with Saskatchewan's Office of the Treaty Commissioner (OTC) as a frequent adviser and played a key role in developing the OTC's education program entitled *Teaching Treaties in the Classroom*—a curriculum guide designed to help teachers in Saskatchewan explore the topic of treaties with their students.

Bringing his work full circle, Miller's current research program is concerned with the reconciliation process for residential school survivors. He is engaging with Aboriginal communities, churches, former school workers, Aboriginal politicians and others to examine efforts to bring healing and reconciliation over the damaging legacy of residential schools.

Miller is also a Fellow of the Royal Society of Canada and won the 2010 Gold Medal for Research Achievement from the Social Sciences and Humanities Research Council.

An Impressive Donation

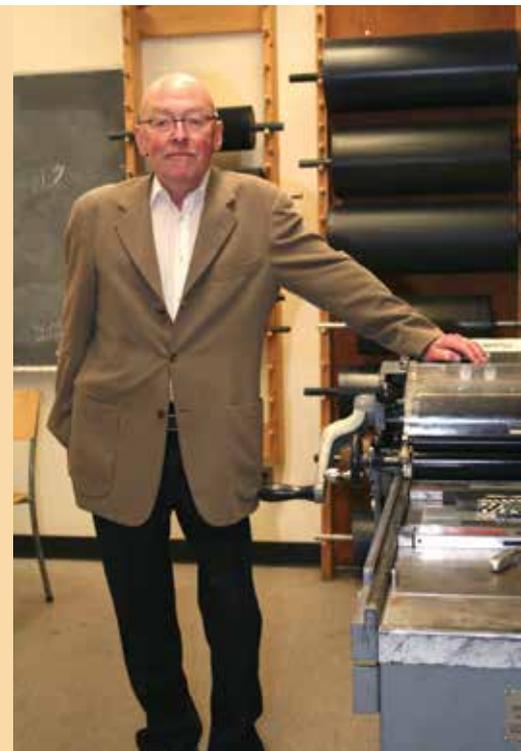
ALUMNUS BRYCE ERICKSON (BA'69, BFA'70) donated a vintage proofing press to the Department of Art and Art History during an event held in the university's printmaking studio on Oct. 11, 2013. Erickson—now a full-time artist after retiring from a career in communications—purchased the Vandercook SP15 press in 1990. He has been using it for his own printmaking since then, but after moving to Watrous in 2011 there was no suitable space for the machine in his new home.

Erickson has been storing the 705-pound press at local print shop the past two years, and recently considered making it available for educational purposes.

"I thought back to how much I enjoyed my experience (in the Department of Art and Art History) so I contacted some folks there. They came down to take a look at it and immediately said, 'Yes, please. We will take it,'" explained Erickson.

"I just can't stop smiling, knowing (the press) has made it to a new home, it's safe, and it will provide great learning opportunities for printmaking students here on campus. It's win-win-win for everyone."

Proofing presses were used primarily for commercial typesetting, but Erickson said they became virtually obsolete—almost overnight—with the advent of desktop publishing. He purchased the press from a reseller in Toronto, but says the vast majority of proofing presses were recycled and melted down.



📷 Betsy Rosenwald

Alumni Receive Provincial Arts Awards



Guy Vanderhaeghe (courtesy of the Pierre Elliott Trudeau Foundation); Ruth Cuthand (Thirza Cuthand)

TWO COLLEGE OF Arts & Science alumni were honoured with Saskatchewan arts awards at the 2013 Lieutenant Governor's Arts Awards banquet on Sept. 25 in Regina.

Guy Vanderhaeghe (BA'71, MA'75) was presented with the province's highest honour in the arts, the Lieutenant Governor's Arts Award for Lifetime Achievement.

Vanderhaeghe, one of the college's inaugural Alumni of Influence, has won numerous awards and prizes for his literary work, including the Governor General's Award for

born artist of Plains Cree and Scottish ancestry is known widely for her works in painting, beading, drawing and photography that explore various aspects of Aboriginal history—ranging from colonialism and racism to stereotyping and residential school abuse.

Her work has been exhibited in galleries across Canada and internationally, and was part of the *Oh, Canada* survey of contemporary Canadian art at the Massachusetts Museum of Contemporary Art earlier this year.

Man Descending, a collection of short stories, and *The Englishman's Boy*. His novel, *The Last Crossing*, was selected for the 2004 edition of CBC's *Canada Reads*. A recipient of the Saskatchewan Order of Merit, Vanderhaeghe was made an Officer of the Order of Canada in 2004.

Ruth Cuthand (BFA'83, MFA'92) received the Lieutenant Governor's Saskatchewan Artist Award. The Prince Albert-

Chemistry Exhibit Highlights Taube's Nobel Prize

THE DEPARTMENT OF Chemistry's centennial celebrations were highlighted by an exhibit featuring the Nobel gold medal awarded to alumnus Henry Taube (BSc'35, MSc'37). Taube's Nobel Prize in Chemistry—along with other personal awards and memorabilia—was bequeathed to the U of S in 2011.

Taube is the only U of S graduate—and first Canadian-born chemist—to have been awarded a Nobel Prize, which he received in 1983 for research that focused on the basic mechanisms of chemical reactions and, most notably, electron-transfer reactions.

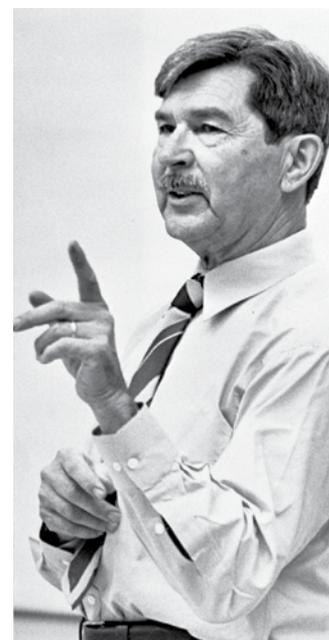
In addition to the Nobel Prize in Chemistry, the Taube exhibit featured an extensive array of the memorabilia, photographs and correspondence his family donated to the U of S. The exhibit was open in the Murray Library from Sept. 9 to 20, although the Nobel medal was only on display during a special ceremony on the afternoon of Sept. 20.

After graduating from the U of S, Taube taught at Cornell University, the University of Chicago and Stanford University, where he remained until his death in 2005. He passed away

at his home on Stanford's campus at the age of 89.

"(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 of Chemistry.

"To me, it speaks well beyond science. 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 a Pulitzer Prize, there is no reason that can't be you. He started right here, sat in (the Thorvaldson Building) and achieved greatness."



Bottom right: Henry Taube (U of S Archives A-8704)



📷 Allan Casey on a street in Stonebridge, one of Saskatoon's new urban developments (Dave Stobbe)

What Makes A City Great?

Allan Casey (BA'86) writes about how we use land and water. His book, *Lakeland: Ballad of a Freshwater Country*, won the 2010 Governor General's Award for non-fiction. A mix of ecology, travel, memoir and natural history, *Lakeland* explores the role of lakes in the lives of Canadians, whose country is home to more than 60 per cent of the world's lakes.

Casey has written for broad range of magazines and newspapers. He shared a 2011 National Magazine Award for environmental reporting that included a story on the future of the South Saskatchewan River and received the inaugural Science Journalism Award from the University of British Columbia Graduate School of Journalism for a story about the challenges facing Lake Winnipeg. A regular contributor to *Canadian Geographic* magazine, he has received expedition research grant support from the Royal Canadian Geographical Society.

"I have been categorized as someone who writes about water, but am just as interested in the 'land' side of the story, if not more so," said Casey. "Human beings are terrestrial animals, and our greatest impact is upon terra firma."

He writes mainly of land that is developed because, he says, that's where the challenges are—with the land that we adapt for our own use, to live, to work or to play. "I don't differentiate between land for resort use, land in the urban sphere, or land for agriculture—or even one country's land from another. ... True sustainable development, when we achieve it, will combine all these spheres into a sensible whole."

Award-winning author, environmental journalist and alumnus Allan Casey takes a critical look at Saskatoon's plan to combat urban sprawl

WHAT MAKES A great city? This is indeed a key question of our times. It's a globalized world where people have a great deal of choice about where they settle. Sprawl is the enemy. Human-scale walkability is the new gold-standard of urbanity. Young people worldwide are looking to opt out of car culture.

So how does a small prairie city like Saskatoon stack up against the new global standard? The short answer: so far, we talk the talk.

When it comes to understanding local development, what you see depends on your time frame. I came to Saskatoon in 1980 to attend the University of Saskatchewan and have lived here off and on ever since. I've always admired the city's formal, elm-lined streets, its stalwart river, its urbane-yet-friendly people, its generous allotment of writers and painters. When people say "the Paris of the prairies," sure it's tongue-in-cheek. But you believe it a little too.

I began consciously comparing Saskatoon's livability to that of other cities sometime around the turn of the new millennium. In December of 1999, my wife and I decided to pull our kids out of school, pack ourselves and a large golden retriever named Shadow into a Chevy Suburban, and drive all the way to Mexico. The idea was to kick off the century with an educational family trip.

Upon our return home a few weeks into 2000, we were struck by how perfectly sized Saskatoon was—big enough to have ethnic diversity and civility, yet small enough to have been spared the urban sprawl that blighted so many cities. Compared to the hundreds of municipalities we'd seen in more than 10,000KM of travel—from dusty pueblos to the massive, air-conditioned metropolises of the American southwest—Saskatoon was right at the sweet spot of human scale in 2000.

We understood even then that Saskatoon's ideal dimensions likely would not last. It was economic booms and too-rapid growth that turned human-scale cities like ours into dysfunctional, automobile-oriented sprawl like, say, Calgary. Inevitably, Saskatoon would face this test too.

Nonetheless, we felt blessed. Our city had been spared long enough for the vocabulary of urban planning to reach the global mainstream. The boom, when it arrived, was never going to turn us into another Calgary, let alone Phoenix or Tucson. Our city would never become spaghetti bowls of cul-de-sacs connected by freeways.

Saskatoon's civic leaders were also thinking about booms and sprawl 15 years ago. Concepts like "density," "appropriate scale" and "sprawl" can be found in planning documents from the mayoral era of Henry Dayday.

"Sprawl is a shiny apple with a rotten core. But we all know that, don't we? It's right in our strategic plan, isn't it?"

The years since have seen plenty more talk, planning and policy-making—all of it designed to counter the looming threat of sprawl. In 2012, the process culminated in the city's new Strategic Plan, which was built on input from more than 10,000 passionate citizens—including me.

Our collective message to civic leadership was unequivocal. Learn from the mistakes of other cities; avoid sprawl.

Promising as the future sounds on paper, the actual City of Saskatoon has continued to sprawl at a galloping rate. I have observed the process in the company of my aforementioned dog, Shadow. Dogs and middle-aged writers need a lot of exercise, so he and I have spent a great deal of time on foot along the outer margins of the city. We have watched one beautiful, semi-wild field after another turn to bland suburbs, industrial zones and crass acreage ghettos: Willow Grove, Silver Spring, Cathedral Bluffs, Marquis Industrial, Hampton Village, Stonebridge, Rosewood, Strawberry Hills.

And yes, the boom has indeed arrived. In purely economic terms, Saskatoon is the talk of the towns, you might say. But as for the enlightened growth we hoped for? Sadly, no. A decade and a half into the 21ST century, we are still repeating the urban blunders of the 20TH.

As I write these words, a new freeway bridge has just opened to the south. Conventional wisdom already demands another new bridge in the north end. More cul-de-sacs are being graded into existence, and many more suburban neighbourhoods are planned. Never mind that we struggle to provide the inhabitants of the newest sprawl neighbourhoods with their share of services—schools, transit and more.

Pre-boom Saskatoon suffers too. The historic, human-scale Victoria Avenue bridge has been ruined by decades

of deferred maintenance and a replacement is nowhere in sight. Existing roads are so poor we citizens face a new tax levy to fix them. A tepid city hall goal of enticing 10,000 people to live downtown by 2025 has so far failed through lack of enticement.

Sprawl is a shiny apple with a rotten core. But we all know that, don't we? It's right in our strategic plan, isn't it?

Well, yes and no. It's true that any fashionable urban-planning concept you might name can be found in our planning pages. But such documents are by nature wide open to interpretation. Moreover, the practical steps needed to bring our strategy to fruition remain for the most part unwritten, pending yet another round of talk and planning.

Keep in mind that the "future" our still-emerging strategy addresses (2012–2022) is a plane that has already taken off. Besides being woefully late on an issue everyone saw coming, our strategy has many practical gaps. Above all is the failure to address our density problem aggressively.

At just 225,000 in population, Saskatoon is identical in area to the moderately dense New York borough of the Bronx, home to 1.4 million people. Yet our plan is to acquire significantly more land than we have now to accommodate just 500,000 people. But don't call it sprawl.

Our current city is 15 km east to west, will certainly soon be 20 km and could go much wider. For comparison, a 20 km ruler laid over London gets you all the way from

Shepherd's Bush to Greenwich. In New York, 20 km spans Brooklyn (2.53 million people), or the length of Manhattan (1.6 million people).

To transport us across this sprawling monster city to work, our new plan promises us faster, smarter buses and speeded up traffic—but somehow also less of those annoying freeways that divide us. Yeah, that might work.

For a look at Saskatoon's future today, just take a drive (you can ride the bus or cycle if you have a lot of time on your hands) through our most recent neighbourhoods—Stonebridge, say, or Hampton Village—and judge the density for yourself. There are nods to density — row housing, walk-up apartments, smaller lots. But despite all our talk and planning, the city we are building for our children will only be marginally denser than now.

Future Saskatoon will have many attributes, some foreseeable and others not. But true world-class, walkable density won't be one of them unless we fight for it. We have not begun in earnest to wrestle the demon called sprawl. And let's face it, the demon is within. The kind of suburbs our parents and grandparents built are still attractive, reassuring places to many, many people. Changing community values must come about street by street, neighbour to neighbour. Politicians can't do this step for us. But to borrow a phrase from one of them: "Courage my friends. 'Tis not too late to build a better world."

Planning Program Named One of Canada's Top 3



Associate Professor and RUP chair Bob Patrick

THE REGIONAL AND URBAN Planning (RUP) program has been named one of the country's Top 3 urban planning programs by *Spacing* magazine.

The University of Saskatchewan's RUP program, founded in 1968 in the College of Arts & Science, is one of the oldest planning programs in Canada. *Spacing* compiled its rankings of urban planning programs by surveying professional city builders across Canada about which programs were producing the best graduates.

The college's RUP program placed third in rankings of the top undergraduate urban planning programs—Ryerson and Dalhousie finished first and second, respectively. RUP graduates also received the country's top ranking for interdisciplinary collaboration, something that doesn't surprise the program chair, Bob Patrick.

"Our students take courses not only from other disciplines in the College of Arts & Science but other colleges too—engineering as well as agriculture and bioresources. RUP students also receive instruction from our professional associates in urban design, planning law and professional practice—important links we maintain with both the public and private sector," explained Patrick. "So our strong core of planning courses, complemented by interdisciplinary course work and combined with the option of a planning practicum, leads to extremely well-rounded graduates who are in high demand with planning firms and city planning departments throughout Canada."

The RUP program is home to about 150 students, and is one of 10 undergraduate planning programs in Canada. It's also one of only seven undergraduate planning programs accredited by the Canadian Institute of Planners. The *Spacing* rankings were released in the magazine's fall 2013 national issue.



Predicting Disaster: The Great Alberta Flood

BY R.W. SANDFORD

THE NEXT TIME John Pomeroy (BSc'83, PhD'88) talks about the looming likelihood of catastrophic flooding, it's safe to assume the powers that be will be listening. Intently.

In an interview with the *Calgary Herald* on May 26, 2013, the Canada Research Chair (Water Resources and Climate Change) and professor of geography was asked how Alberta should respond to concerns from the Insurance Bureau of Canada. The bureau—noting insurance claims relating to storms, wildfire and flooding in Alberta had increased six-fold over the previous 15 years—was urging the province to implement plans that would mitigate future losses. Looking back, Pomeroy's comments are both prophetic and chilling.

"We are fast learning that our roads, bridges and even some of our towns aren't any match for the rainfall and the overflow that results," said Pomeroy. "While Alberta's infrastructure is better able to withstand the threat of increased flooding than that in other western provinces, there are areas like the Cougar Creek subdivision in Canmore that are especially vulnerable."

Fast forward to June 19, when heavy rains began to fall in the Canmore area. As is often the case, Pomeroy was

stationed close to town at the U of S Coldwater Laboratory in the Rocky Mountains. The lab is strategically located at the headwaters of the South Saskatchewan River, allowing Pomeroy and his research team to gauge snowmelt and its subsequent effect on river levels.

Early that afternoon, Pomeroy sent an email to expert hydrologic modeller Kevin Shook (BEng'84, MSc'93, PhD'95), who was at the U of S Centre for Hydrology's lab. He told Shook that up to 155 MM of rain had been forecast in the Rocky Mountain foothills over the next two days. He also noted spring snowmelt this year had been late, that the mountain snowpack at the U of S Marmot Creek Research Basin was above normal for late June, and that river levels were already high. While Alberta Environment had issued a high streamflow advisory, it stopped short of issuing a flood watch.

Seven minutes later, Shook responded. After checking stream gauge data on a website and seeing the Bow River at Banff was already flowing at nearly 145 cubic metres per second, Shook concluded his email by saying, "It'll be interesting."



Nearly five hours after the exchange between Shook and Pomeroy, the Town of Canmore began observing rising waters at Cougar Creek. By 9 PM that evening, the town's fire and rescue squad was deployed to monitor the area.

At midnight, water already was overflowing into the community's streets and homes. What Pomeroy was witnessing was eerily similar to what he had predicted nearly four weeks earlier. "This is way too close to what I said a few weeks ago," he wrote in an email to Shook and several other colleagues, referencing the *Calgary Herald* article.

The chaos, of course, had only just begun.

THURSDAY, JUNE 20

At nearly 2 AM, with the Trans-Canada Highway and Bow Valley Trail in Canmore breached and closed, May Guan (MSC'10)—a hydrology technician with the U of S Centre for Hydrology—joined the RCMP and town staff, knocking on doors in the Cougar Creek subdivision, warning residents to prepare for evacuation.

After returning home at nearly 4 AM, Guan wrote in an email to Pomeroy and others, "...there are some very worried house owners. There's A LOT of bank erosion."

By 6:15 AM, the power was out in many parts of Canmore and the road connecting Benchlands Trail and Eagle Terrace subdivision had been destroyed. Half an hour later, 23 truckers and an RCMP officer were trapped by flood waters on the Trans-Canada highway and had to be rescued by helicopter. Two-and-a-half hours later—almost six hours after a state of emergency had been declared in Canmore—Alberta Environment issued an official flood warning update that upgraded the tributaries of the Bow upstream of Calgary, including Cougar Creek, from the status of flood watch to flood warning.

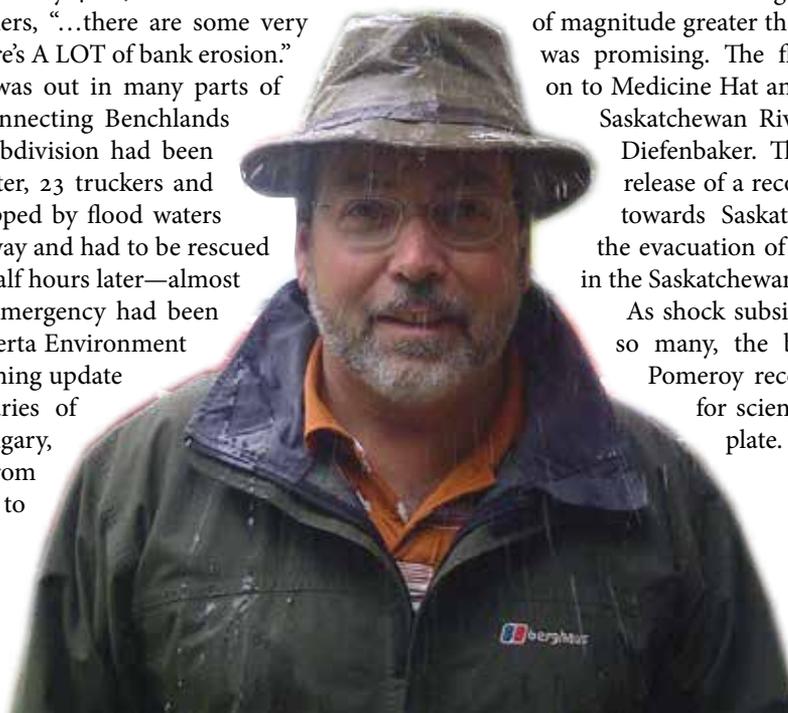
Throughout the evening, a spectacularly swollen pulse of floodwater flowed downstream from Canmore into the unprepared City of Calgary. Twenty neighbourhoods were evacuated and more than 100,000 people were forced from their homes. Twelve other southern Alberta communities also declared states of emergency, and eight communities besides Calgary were under evacuation orders. The flooding was particularly serious in small towns immediately south of Calgary. The flood waters rose so quickly in High River that residents were trapped in cars and in their homes, many of whom needed to be rescued from their roofs. Two-thirds of the community flooded and 5,000 residents were forced from their homes.

FRIDAY, JUNE 21

Some 1,300 Canadian soldiers were sent into flood zones. A clearly shaken Premier Alison Redford announced a billion dollars in emergency disaster relief, but even as media communicated the news to devastated flood victims it was clear that the flood damage was likely an order of magnitude greater than what the Premier was promising. The flood waters carried on to Medicine Hat and entered the South Saskatchewan River, flowing to Lake Diefenbaker. This soon forced the release of a record amount of water towards Saskatoon and prompted the evacuation of Cumberland House in the Saskatchewan River Delta.

As shock subsided into despair for so many, the blame game began.

Pomeroy recognized it was time for science to step up to the plate.





Receding Waters

In countless radio, television and newspaper interviews, Pomeroy drove home the lessons that Canadians should learn from the flood. The first was that current flood prediction systems were inadequate. Flood warnings were not issued in many places until after evacuation orders were issued, which he said should not be attributed to the skill or knowledge of individual forecasters but to systemic problems related to staffing cuts, reliance on outdated forecasting tools and insufficient field monitoring.

Pomeroy recommended that enhanced hydrological modelling be linked to a denser network of mountain meteorological stations and stream gauge stations. There was a need, he said, to monitor more ungauged basins, especially in small mountain creeks prone to flash floods above towns like Canmore. He recommended tighter coordination between federal and provincial agencies charged with forecasting weather and flooding, and said what's truly needed is a national flood prediction program—linking federal and provincial forecasting groups and organized by river basins, as is practiced in the United States.

The second lesson was that the province's flood maps were outdated and irrelevant. Pomeroy urged the Government of Alberta to update flood maps throughout the province using the latest scientific techniques as part of revamping its flood forecasting system and flood compensation program.

The loss of hydrological stability brought about by warmer atmospheric temperatures, said Pomeroy, will mean that adequately protecting people and infrastructure from flooding is going to be expensive. Noting that those driven to the margins of society by this disaster will suffer most, he urged the people of Alberta not to forget or leave behind those who have been impacted by major flooding and its consequences.

Pomeroy's final message was that governments can't be expected to do and pay for everything. Individual home and property owners are going to have to take more responsibility for choosing where to live and for actively protecting their families, property and neighbourhoods. Governments, meanwhile, should make the flood risk associated with specific locations well known, and use this information to appropriately zone future land use. Pomeroy cautioned that extreme weather events are only likely to increase over time, and predicted that anticipated rises in temperatures will result in further amplification of the hydrological cycle and destructive floods and droughts.

"We are changing our climate," said Pomeroy, "and now we have to live with the results."

"This disaster has taught us that not investing in flood damage reduction and prediction is too expensive an option for a century in which rapid climate change and hence hydrological change is anticipated and appears to be occurring. We must provide the very best hydrological science and prediction technologies to government agencies, environmental and engineering consultancies, insurance companies and the public so what we can better anticipate, forecast and mitigate floods and droughts."

▶ online

Find out more about John Pomeroy and the Alberta floods at these URLs:

Calgary Herald, October 8, 2013 editorial:
Pomeroy: Learning From the Floods of 2013, 2012, 2011...
<http://tinyurl.com/p7tdnw3>

Daily Planet, August 14, 2013 (interview with Pomeroy)
Dissecting Disaster Week: Alberta Flooding
<http://www.youtube.com/watch?v=sudlttLVQ0>

☒ Opposite (left to right): John Pomeroy by Marmot Creek (U of S Research Basin) during the flood on June 23; postdoctoral fellow Keith Musselman walking his dog through the floodwaters near the Canmore Hospital; Pomeroy standing in the rain during the flood; above (left to right): street in Canmore during the flood; Associate Professor (Geography and Planning) Cherie Westbrook and Pomeroy standing in the Bow River during the flood on June 21 (Photos courtesy Centre for Hydrology, U of S)



'The Play's The Thing'

BY KIRK SIBBALD (BA'04)

Department of Drama emphasizes creative growth and connectedness amongst faculty, students, staff and alumni

SUDDENLY, CHARLIE PETERS (BFA'13) couldn't move.

His classmates, at the behest of their professor, were holding his shoulders, legs, arms, head and feet, rendering the student both vulnerable and immobile.

"Now, go!" instructed his professor.

Shaking, Peters inhaled deeply and, looking straight ahead, again began reciting the monologue—the one which he had been struggling not to memorize, but bring to life.

Less than half a line in, he broke down. Sobbing uncontrollably, in an almost primal state, Peters kept going. After finishing the first monologue, he moved onto another, with tears now soaking his shirt and the hands of his peers still holding him motionless. And it was in this moment, says Peters, that he truly found himself—not only as an artist, but as a person.

"All of these things about how I just exist as a human being became suddenly clear," he says. "I realized I use all of these physical things to prevent myself from experiencing certain emotions, like moving off-centre or tensing up at certain points. When I wasn't allowed to do that, I had this immediate and profound connection to myself. I wasn't blocking anything, I wasn't hiding anything.

"I thought, even if I never work in theatre again, today has been a huge gift. In any other class, bawling like I did probably would have been a bad thing," he said, laughing. "But in that moment I was thinking, 'I've made the right decision. This is where I am supposed to be.'"

Cultivating Creativity

Since becoming the British Commonwealth's first degree-granting theatre program in 1945, epiphanies such as Peters' are more common than one might think.

Greg Marion has been the Department of Drama's acting head since 2011. Having served in both the music and drama departments at the U of S, Marion says he is continually inspired, though no longer surprised, by the tremendous growth exhibited by drama students from their first year through to graduation.

"The way students develop in this department is just phenomenal," said Marion. "It really is the nature of the beast. Students learn intimate things about themselves as

they're going through our program. And in classes, they are learning intimate things about their classmates, which is something that's really critical to being effective in drama. One has to be able to understand their emotions....To do that people have to look at themselves very intensely, in guided ways."

This growth is facilitated by a classroom experience that is unlike that of most other university programs. Lectures are often replaced by yoga and costume design classes, while improv exercises sometimes substitute for exams and essays.

Many of the classes are also traditionally structured—there is a bachelor of arts (BA) program in theatre history, for example, as well as essays and creative writing assignments required in other courses. However, it's often the non-traditional courses where those involved say a real sense of community is forged.

Julia Jamison (BMusEd'77) has been teaching in the department since 2002, returning home to Saskatchewan and her alma mater after spending 25 years as a professional singer and actor, with various stops worldwide. Like most professors in the department, much of what she teaches students is experiential-based and gleaned from the time she spent working in theatre professionally—such as how to breathe effectively, divine meaning from classical texts, and move in coordination with others on stage.

The classrooms themselves are, predictably perhaps, unlike most others on campus. There are often no desks in sight, and students sometimes spend an hour sprawled on the floor, immersed in various exercises designed to strengthen both the body and mind. Simply put, students in the department emulate what actors do in the professional sphere. And they learn, often early on, that working in the profession involves considerably more effort and insight than many expect.

"Students often hit points in their training trajectory where they become pretty vulnerable, because pride and ego is getting stripped away," says Jamison. "So the way to survive that in the classroom setting is to feel supported and safe. What that tends to nurture is a wonderful sense of community."

PHOTOGRAPHS BY DAVE STOBBE

Opposite page, back row (left to right): *Torien Cafferata, Dwayne Brenna, Angus Ferguson, Carol Greyeyes; middle (l to r): *Robert Grier, Natasha Martina, Carla Orosz, *Kashtin Moen, *Mikael Steponchev, Gregory Marion, Julia Jamison; front (l to r): *Ciara Richardson, *Connor Brousseau (on tricycle), *Jenna Berenbaum (behind Connor), *Jesse Fulcher Gagnon, Pamela Haig Bartley. *Students from cast of *Eurydice*



Anna Seibel as Kate Keller in the 2012 Greystone Theatre production of Arthur Miller's play, *All My Sons*

Dramatic entrances

It's a familiar refrain, and one to which Anna Seibel can attest. Like many students, she found her way into the drama department almost by accident. She always had a certain fondness for acting and participated in some high school drama productions, but says, "it was always kind of on the periphery, never something I really was considering as a serious pursuit."

That began to change when, towards the end of her first year on campus, she auditioned on a whim for a Greystone Theatre production. Like the Greystone Singers, Greystone Theatre auditions are open to all students on campus, regardless of their academic major. Still, Seibel understood that as both a first-year and undeclared student—she was leaning towards an English degree at the time—the chances of these auditions leading anywhere were slim.

Upon finding out she had been cast in the play, Seibel was elated.

"It was right around the time of my 18TH birthday, and my mom still says it was probably the best birthday present I ever received," said Seibel, who will graduate this winter.

Halfway through her second year, Seibel decided drama was more than a fringe interest, and auditioned for acceptance into drama's bachelor of fine arts (BFA) program. It was the department's intimate and collegial environment, she says, that tipped the scales.

"Because of what you're doing and how you're doing it, you build this really unique bond with your professors and peers," said Seibel, who spent this past summer acting in both Shakespeare on the Saskatchewan productions.

"You have your eyes opened to a whole different world of (theatrical) strategies and processes....By the end of the program, I think you come out with a better idea of who you are and what process works best for you."

Professor Dwayne Brenna (BA'77, MA'83) was growing up in the small Saskatchewan town of Naicam when, in Grade 10, he drew the principal's ire for acting up in gym class. As punishment, Brenna was sentenced not to detention, but to act in the upcoming school play.

"It was the best punishment I ever received, because I just fell in love with acting," Brenna said with a laugh. "I went to a high school reunion a few years ago and I saw that principal. I said to him, 'I've got to thank you, because that punishment really charted the future course of my life.'"

Although he ended up getting his bachelor's degree in English from the U of S, Brenna was cast in numerous Greystone Theatre productions during his first two years at university. "It was all drama from there on out," he remembers.

After getting his PhD at England's University of London and acting in Toronto for a few years, he was asked to fill a three-month teaching vacancy in the drama department at U of S. Twenty-six years later, he's still here.

Greystone Theatre a labour of love

At the U of S, there are likely few better examples of the idiom "labour of love" put to practice than Greystone Theatre productions.

Faculty charged with directing each play must put weeks of research into the production before auditions and casting even take place. Once rehearsals start, they run for six weeks—6–10 PM every weekday, and 12–5 PM each Sunday. This is all done for no academic credit, by faculty teaching full course loads and students with many other academic demands and, often, part-time jobs. The only exception is the theatre's final play each year, which only recently



Students and director Dwayne Brenna (second from left) in rehearsal for *Eurydice* by Sarah Ruhl, which opened the Greystone Theatre's 2013/14 season

became a graded academic project for third and fourth-year students in the department's BFA acting stream.

"It's thrilling, because it's really a coalescence of everything we and the students do," says Jamison. "But, definitely, everyone gets pretty exhausted throughout the process."

There is one BA program (theatre history) in the department, and two BFA streams (acting and design). While students aren't required to take part in Greystone Theatre productions—with the aforementioned exception—many end up auditioning for several plays a year simply because, as aspiring actors or designers, there's no more practical way to learn the craft.

Seibel has been cast in prominent roles for many recent plays, and admits achieving balance can be difficult. She hasn't had a part-time job while going to school, but works long hours each summer to save money for the academic year. When a Greystone production is being rehearsed, you can often find her in the hallways of the John Mitchell Building every evening, sneaking away when she's not needed to cram for a geology exam or work on an English essay.

For many, it's a steep but valuable learning curve. Peters says he auditioned for "anything and everything" during his first couple years in the program, and was soon spending nearly every waking moment in the department. It was exhilarating at first, but soon took a toll on his general well-being.

"In my third year, I learned that you can't let theatre become your everything," he remembers. "You have to learn to cherish your friends that aren't in drama, that don't care about it in the same way you do. They remind you how to be a human being as opposed to strictly an actor."

The process, while draining, is also one of intense personal growth. Marion says by the time students graduate, they necessarily develop skills in time management, effective communication, empathy and problem solving. To name but a few.

"Students come out of this department much more confident in who they are, and that serves them well no matter what their vocational stream might end up being," says Marion.

"People who go through our programs often end up being leaders in one way, shape or form in their communities."

The curtain rises

Following weeks of late night rehearsals and research, opening night in the Greystone Theatre is unfailingly characterized by nervous energy and anticipation. As Jamison puts it, "Now it's time to play."

Actors are stretching and calming themselves through deep breathing, lighting and technical personnel are sifting through their notes and directors play the role of general, encouraging and positioning their troops. But it might be the most unheralded individuals that have the most frantic job of anyone.

Beverley Kobelsky (BFA'87, BA'91) has been the department's costume designer and head of wardrobe since 2003. Alongside set and lighting designer Carla Orosz (BFA'04)—who began working in the department in 2010—the duo is charged with bringing vision and imagination to life.

They meet with each play's director long before rehearsals begin, getting a sense of what the time period, plot and characters will require from a visual perspective. Meeting and tweaking plans almost daily, Kobelsky and Orosz then



Beverley Kobelsky at work in the costume shop.

work with students in class to design the costumes, sets and lights.

When opening night finally arrives, weeks of planning and preparation are put to the test. Some plays have upwards of 100 costume changes and sets will often change completely when the lights go out between scenes, meaning the pace and energy backstage is often frantic. At least inwardly.

“We really need to stay composed and allow the actors time to catch their breath,” says Orosz, noting one play, *Peer Gynt*, required 128 costume changes amongst a cast of 28.

Kobelsky said her quickest costume change came last season during *Into The Woods*—and it took place onstage. To pull it off, they worked with technical director Iain Rose to have bright lights temporarily flashed in the audience’s eyes, during which time they hurried on stage and transformed the actress from a witch to elegant medieval princess. All in about five seconds.

“When they did the same costume change in the Broadway production, they used pyrotechnics and smoke, but we can’t do any of that here,” she said. “So we get creative.”

Kobelsky uses everything from Velcro and easily-removable masks, while Orosz often places glow tape on stage and designs collapsible sets to expedite tricky scene changes.

“We’re creating illusion in a safe and affordable way,” said Kobelsky. “Coming up with original ways to put things together is always a lot of fun and when you see the end result, it’s just magical.”

The next act

The Department of Drama is unapologetically unique, but those involved say that without it, the cultural fabric of the city and province would likely lose much of its lustre.

“We have an incredibly vibrant theatre scene for a city and province this size, and graduates from our department are deeply involved in almost every single organization,” said Jamison, referencing the likes of Persephone Theatre, Shakespeare on the Saskatchewan and the Fringe Festival. “There are so many people involved in the (local theatre) community now that, without our department, I think it would continue to throb for a while. But within a few years you would certainly start to see a lot of groups thin out.”

With the university undergoing TransformUS—a comprehensive review of its current academic programs and support services—Marion says he sees this as an opportunity for U of S to emerge as a national leader in the fine arts.

He said the Department of Drama, specifically, aligns directly with many current university priorities. For example, it has invested in an Aboriginal training program and established mutually-beneficial relationships with groups such as the Saskatchewan Native Theatre Company. Experiential learning opportunities are also embedded into everything students do—from their involvement in on-and-off campus plays to an increasing number of communications workshops drama students have held for groups throughout Saskatoon.

“It’s no real secret that, right now, the university is at a crossroads,” said Marion. “And I think it’s imperative to know that a department such as drama is positioned to emerge as a leader through this process just by the very nature of the vocation. We can respond to the instantness of change, because it’s so firmly embedded into everything that we do.”

And the myriad changes to which Marion is referring—last-minute replacements for sick actors, creatively recycling sets to stay under budget, students who enter the department shy and graduate self-confident leaders—tends to foster a distinct sense of family. Alumni regularly keep in touch with faculty and, because they constitute the majority of theatre professionals in the province, also interact regularly with current students involved in off-campus productions.

“We’ve had many students who have gone on to Hollywood or Stratford and done very well,” says Brenna. “But some of my favourite success stories are students who were just able to come out of their cocoon and blossom. It’s that personal growth, and the way that growth nurtures community in the department, that’s so rewarding to watch.”

THE 2013/2014 GREYSTONE THEATRE SEASON

- 】 October 9–19: *Eurydice*, by Sarah Ruhl; directed by Dwayne Brenna
- 】 November 20–30: *Better Living*, by George F. Walker, directed by Natasha Martina
- 】 March 19–29, 2014: *Our Country’s Good*, by Timberlake Wertenbaker, directed by Pamela Haig Bartley
- 】 New in early 2014: A combined first- and second-year studio production, directed by Julia Jamison

Ticket and schedule information:

artsandscience.usask.ca/drama/greystone/
(306) 966-5188
<http://tinyurl.com/kyhhguv>

An Extraordinary Confluence of Talent

BY DEL SURJIK (BFA'84)

Del Surjik, artistic director of Persephone Theatre, began his career in Saskatoon, where he worked for 25th St. Theatre, Persephone Theatre and The Actors' Lab. He also helped establish Shakespeare on the Saskatchewan and the Saskatoon Soaps Improv Troupe. After moving to Vancouver, Surjik embarked on a national career as an actor and designer before becoming artistic director of Pi Theatre. While there, he produced many groundbreaking works in Vancouver's indie theatre scene. He has directed productions everywhere from Vancouver to the National Arts Centre to Birmingham, England. Since taking the helm at Persephone, he has premiered over a dozen new plays while remaking the theatre into a new model for Canadian regional theatre. Surjik is the recipient of many awards, including Vancouver's Jessie Richardson Career Achievement Award.



Tim Matheson

AS I NEAR the 30-year mark of my professional career, it is interesting to reflect upon my time at the Department of Drama and the heyday of the “Hangar Building.”

The varieties of theatre training programs in Canada all inherently have ‘cycles.’ What is unusual about my time at the U of S is that I was part of what could be deemed a ‘super cycle’—an extraordinary confluence of students and teachers, creating a spike of talented professionals that have had a considerable influence on professional theatre in Canada.

The roster of talented artists in the years I attended is too long to enumerate here—ranging from award-winning director Jim Guedo, east coast actor/artistic director Jerry Etienne, acclaimed Montréal actor and educator Chip Chuipka, to bi-coastal artistic director Richard Wolfe, film and TV star Kim Coates and Vancouver production manager David Kerr, to name only a few. For my part, I was involved in the formation of two local institutions, Shakespeare on the Saskatchewan and the Saskatoon Soaps Improv Troupe, as well as several theatre companies in other parts of Canada as I assembled a career built on hundreds of productions.

We didn’t know at the time that something very special was happening in that old hangar building. We only knew the excited heat of challenging each other as we grew into the notion of being artists, in a program designed to produce working professionals. In the late ‘80s when we departed the province to pursue our art elsewhere, I recall colleagues around the country referring to us as “the Saskatoon Mafia,” as there seemed to be evidence of our impact in every corner of the nation’s theatrical activity.

The bridging of two major influences at the department marked my time in academe: that of Tom Kerr and Henry Woolf. As head of the program, Tom brought a teaching staff together that called upon the rigorous training traditions of the British theatre model while also providing the

more contemporary experiments of Grotowski’s European esoterica. Professors “Bingo” Mavor and Jane Casson both shaped me more than I could tell at the time. Henry Woolf arrived with his own unique mix inherited from the last artists trained under the British actor-manager tradition, plus his seminal experiences with famed English film and theatre director Peter Brook. This was a unique and potent combination of influences that framed my artistic process, and the path I continue on to this day.

At Persephone Theatre, audiences are regularly exposed to the skills and talents of local Department of Drama graduates, expatriates and current students. *My Chernobyl*, the opening play of the 2013/2014 season, was completely populated by actors connected to the program, including Elizabeth Nepjuk who made her debut on our stage while still in training, Joshua Beaudry, Darren Zimmer, Alexandria Hartshorn, Blaine Hart and current professor Pamela Haig Bartley. The lighting designer, Ted Roberts, in town from Vancouver, is a former instructor in the program as is our dialect coach Dorothy Ward. Both our costume designer Beverley Kobelsky and props master Ralph Blankenagel are graduates of the program. The in-house talent on staff at our theatre, the rotating cadre of artists that join us on a per-show basis and the Persephone School of Theatre’s faculty all draw heavily on the ranks of theatre practitioners produced by the department.

Every generation has a duty to reach back to the next. Now, in my capacity and responsibility as artistic director of Persephone Theatre and in an era where I am employing more artists than ever in the history of the province, I increasingly look to my alma mater to provide me with the emerging artists by which I fulfill my mandate of developing Saskatchewan talent.



Deconstructing Duets

Psychology professor Janeen Loehr uncovers meaning in a musical moment

BY BETSY ROSENWALD

IT IS OFTEN said that timing is everything, and that has certainly been the case for Janeen Loehr (BA'04), an assistant professor in the Department of Psychology.

Loehr uses musical performance, especially duets, to study how we coordinate our actions with others to achieve a common goal. In fact, a memorable instance of bad timing led her to study interpersonal coordination—anything from synchronized swimming to two people having a conversation—through the use of neuroimaging technology.

It was while playing a piano duet with another student at a high school concert in her hometown of Prince Albert that Loehr remembers first becoming interested in this.

“We started off with a normal tempo and we just got faster and faster until by the end we were playing incredibly fast,” she said. “Something was going wrong. We both knew we were going too fast but we were having trouble adjusting to each other—or we were adjusting very well to each other by getting faster and faster in response to each other’s actions. We were having trouble reining it in.”

Fast forward to the present, Loehr’s research now focuses on uncovering the processes involved in what was happening during those moments on the stage—specifically, how we predict what another person is going to do and adapt our actions accordingly.

“This includes everything from exchanging money with a cashier at Tim Horton’s or helping somebody move furniture to things that involve very tight synchrony like playing sports and music performance where you have to be down to the milliseconds in piano performance,” she said.

After receiving her BA in psychology at the U of S in 2004, Loehr completed a PhD at McGill in 2010 and postdoctoral work in the Netherlands. She returned to Saskatchewan and joined the Department of Psychology in 2012.

In April, Loehr received a \$145,000 grant over five years from the Natural Sciences and Engineering Research Council of Canada (NSERC) to study basic processes underlying interpersonal coordination. Until recently, most psychological research has focused on individuals and their behaviours.

Cognitive neuroscience research has demonstrated there are patterns of brain activity involved in monitoring our actions—specifically, brain activity that helps us to minimize errors and, when we do make mistakes, how to correct them. Using electroencephalography (EEG), which records the brain’s electrical activity, Loehr’s research

analyzes EEG data to see how people coordinate their actions, paying specific attention to errors in synchronization.

“If, for example, you press a piano key and you hear a different pitch than you were expecting, it will elicit a certain pattern of brain activity. The brain activity tells us you’ve recognized that you heard an error happen in your performance,” said Loehr.

She has worked with music students and professional musicians in Montreal and the Netherlands, measuring their EEG brain activity while they play duets.

Loehr designed the experiment to have musicians play specially-written music on digital piano keyboards. While they played the notes, she occasionally altered the pitch that was played using computer software so the musicians heard something wrong.

“It’s pretty fun and the pianists find it weird and interesting,” she said. “In expert duet performance, both people are monitoring each other’s parts, which is something that hadn’t been shown before. If we see a big peak (in the brain wave) when the pitch changes the harmony of the chord, that tells us something about how important that harmony is to the task. We are using harmony as the standard for the shared outcome. When we play a duet together, I have my own goals to meet but we also have a shared goal to produce this certain musical piece or musical harmony.”

Loehr’s research, recently published in the *Journal of Cognitive Neuroscience*, has also shown that while novices and experts won’t necessarily adapt to one another, two experts will mutually adapt.

“If you have a teacher-student situation, we could predict the conditions under which you would see more of a mutual or more of a one-way adaptation and take advantage of that,” she said. “We could discover things that promote mutual adaptation or inhibit it depending what your goal is.”

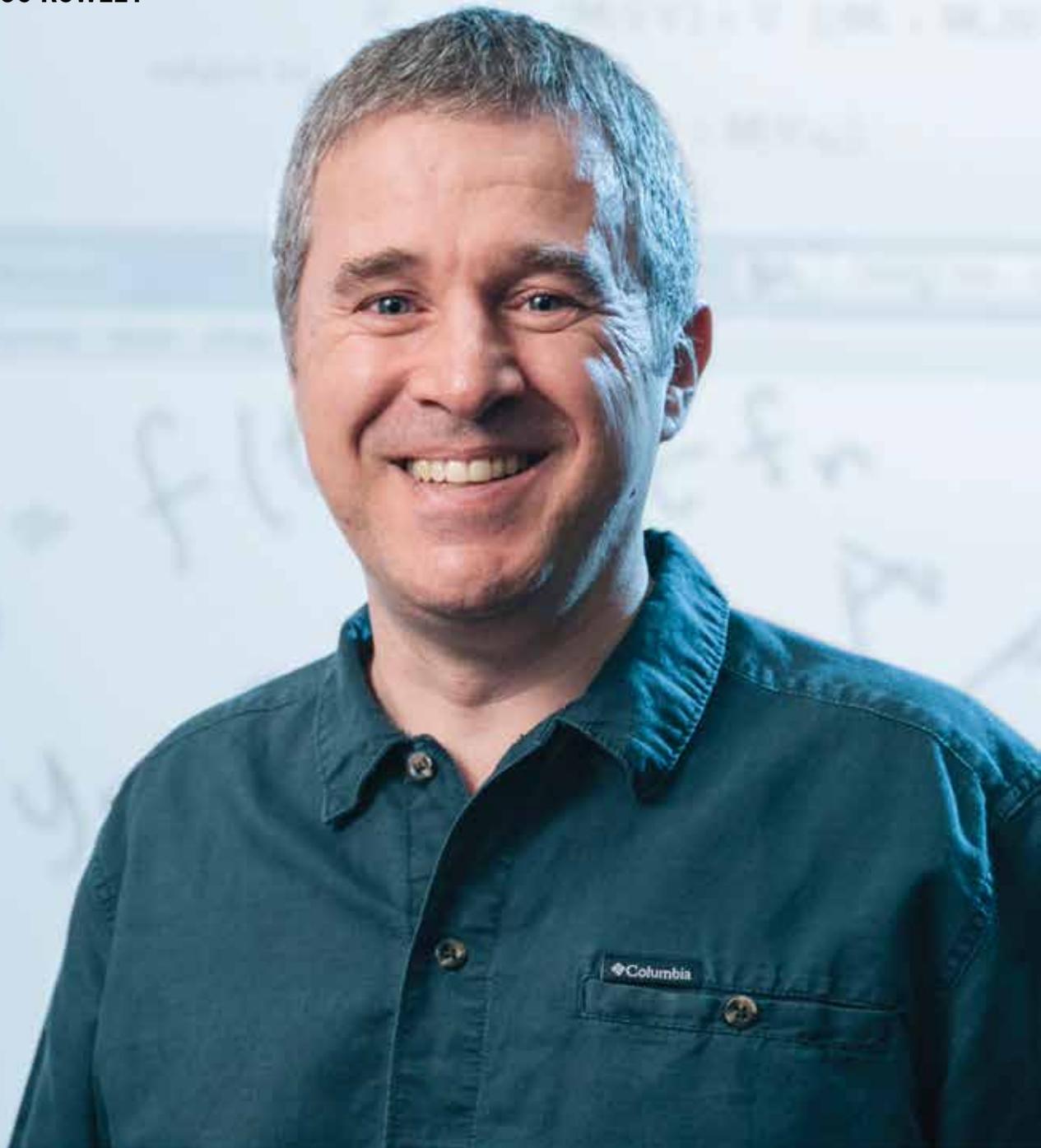
Once the conditions for different patterns of adaptation are understood, Loehr says researchers may start to apply these patterns in real-world situations.

“This work has so many possibilities,” said Loehr. “There is a cool finding out there in the literature that if you synchronize with somebody then you tend to like them more, have a better rapport, are more likely to help them. There are all these pro-social benefits around synchronizing with someone. What we’re wondering is if this knowledge can be used to improve interpersonal relationships in a range of psychological disorders.”

Mathematics with Heart

From heart arrhythmias to clean energy, computer science Professor Raymond Spiteri uses mathematical tools to help solve real-world problems

BY MARI-LOU ROWLEY



SINCE BEFORE NASA'S “giant step for mankind,” computer simulation has been used to test, predict and build. As technology has advanced and computing power increased, it has allowed scientists and engineers to model increasingly complex systems—from space flight to heart activity.

“Simulation reduces the guesswork in solving real-world problems, whether it is determining when the next earthquake is going to hit, or the best route to get out of the building afterwards, or where to drill to get more oil out of the ground,” says Raymond Spiteri. An applied mathematician in computer science, his research includes perfecting the motion of robot arms, investigating better alternatives for producing synthetic gas from lignite (an intermediate material between peat and coal), and helping physicians improve outcomes in heart patients.

“I’m really the middle man in these projects,” he says. “My job is to produce and refine data and optimize the algorithms to achieve the best results for a given problem.”

Spiteri’s interest in heart simulation was triggered by one of his mathematics students who wanted to go into medicine. Heart arrhythmias—abnormalities of the electrical conductivity in the heart—are not only debilitating, they can be fatal. Current treatment includes drug therapy, pacemakers, or catheter ablation, where the surgeon attempts to cauterize the errant conductivity tissue to restore normal heart rhythm.

Unfortunately, all of these treatments involve an element of trial and error—the area of cells destroyed in ablation, for example. Pacemakers, meanwhile, are often placed and configured based on the surgeon’s experience. In other words, medical decisions aren’t always dependent on what is going on with the individual patient.

The grand vision of electrophysiology research is to simulate individual heart activity in real time, beat-for-beat, in order to refine and improve therapy. For numerical analysts like Spiteri, it is poses a challenge that is both imposing and riveting.

“The heart has around 10 billion muscle cells, and each cell can be characterized by a hundred unknown variables,” he says.

That’s where differential equations enter the picture. By combining two different numerical methods, Spiteri devised an algorithm that solves the problem caused by modelling continuous variables in a discrete system—where the rounding off of numbers causes “perturbations” that can increase exponentially.

Current simulations take seven hours for one hour of heart activity using the fastest super computers available. Spiteri’s algorithm improved the cell model subsystem by a factor of three to four, and he is now working to verify new methods that reduce the entire heart simulation by a factor of 10. If successful, this new method could reduce computer simulations dramatically, to 40 minutes for one hour of real-time heart activity. And many in the cardiovascular medical community are taking notice.

“Especially for invasive and expensive therapies, this could improve health care and quality of life significantly.”

— Dr. Angelo Auricchio

“Such simulations can tremendously improve our insight in the individual patient’s pathology, and provide new angles for better diagnosis,” said Dr. Angelo Auricchio, director of the Heart Failure Program and Clinical Electrophysiology Unit at the Fondazione Cardiocentro Ticino in Lugano, Switzerland.

“Moreover, an accurate patient-specific model can also be used to ‘virtually’ test the therapy in order to estimate the patient’s response and how the therapy can be applied in an optimal fashion. Especially for invasive and expensive therapies, this could improve health care and quality of life significantly.”

Allowing surgeons to test treatment methods just prior to performing them on the patient would represent a significant breakthrough. All Spiteri’s team needs now, he says, is enough time on a supercomputer to verify the results. He notes that science, like the algorithms he devises, is often incremental, and it will be a few years before technology catches up with the math.

Spiteri is grateful to NSERC, Carbon Management Canada, the MITACS NCE research internship program, and IBM for in-kind support of the heart simulation research. The computer science professor tells his students that if they like mathematics, this is a way to make a difference.

“People will hire you if you can solve problems, and you have an opportunity to work with experts from many different fields. This is the highly inspirational part of my job.”

A MATHEMATICIAN’S DREAM

Applied mathematician Raymond Spiteri “lives the dream of solving differential equations for a living.”

Although this might sound like a math nightmare to many, simply stated, differential equations involve the evolution of variables over time (continuous variables), and how one evolution affects another. For example, a decrease in predators (hunters) results in an increase in prey (deer).

In computation, these “continuous variables” pose problems because they can produce infinitely long decimal representations, and a computer’s capability to store numbers is finite. For computer simulation, therefore, a problem has to be broken down into discrete blocks in time and evolved step-by-step.

To Wash One's Hands in the Flowing Ganges

A Travelogue by Mara Selanders (BA'13)

Mara Selanders, a recent graduate from the department of English, received a 2013 Hannon Travel Scholarship that allowed her to travel to India. The scholarship—which is awarded to graduating students from the departments of English, Nutrition and Theology—requires applicants to submit a proposal outlining where they would like to travel and why, how they will use the funding and how the travel will benefit them in future endeavours. Selanders spent the summer volunteering at a children's organization called Salaam Baalak Trust, completing a Vipassana meditation course and touring the vast and extraordinarily diverse country. What follows are select excerpts from her travel diary.



June 9, 2013

Just rounding out my first full day in India. I practiced some extremely rudimentary Hindi with the help of my family, ate my first Indian meals on Indian soil (dal and jeera rice—two of my favourites already, but so much better from a home kitchen!), and toured my first major heritage site: Humayan's Tomb. It was breathtaking in itself, but also fantastic to tour it with my friend Harkamal (the son of the family I am staying with). I can read all of the history that I want but it is so much more enriching to hear the stories from the mouth and mind of someone who grew up with them. I am already reaping the benefits from staying with a family. It helps me see and understand firsthand the ways in which India is different, but also allows me to examine those universals of humanity that I see peeking through the chasms of cultural difference: humour (even across language barriers), food, history and the importance of family.



Mara at a Mumbai restaurant and with students at Salaam Baalak Trust

June 16, 2013

I am now well into my time at Salaam Baalak Trust, an organization that works with street children, teaching English to a group of boys who have grown up in the organization. They now work as City Walk Guides within the City Walk Program, which facilitates tours of Delhi to visitors from all over the world! The boys are busy applying to colleges and working their way through summer classes so, in addition to having to speak fluent English for their work as tour guides, they need to be proficient in reading, writing and comprehension. That's where I come in. Holding back

tears has become a daily occurrence for me as I watch these amazing boys master yet another language. Their dedication is inspiring. These are kids who spent their formative years on the streets of Delhi doing what had to be done to stay alive with no guarantee of a next meal or of even surviving until the next morning. Yet here they are, going to college, auditioning for Bollywood movies and being role models not only for the other boys living in the shelter homes but for me as well. My time here is going by way too fast! I can't think of many better ways to spend a month and am already looking forward to coming back.

“Their dedication is inspiring. These are kids who spent their formative years on the streets of Delhi doing what had to be done to stay alive with no guarantee of a next meal or of even surviving until the next morning.”



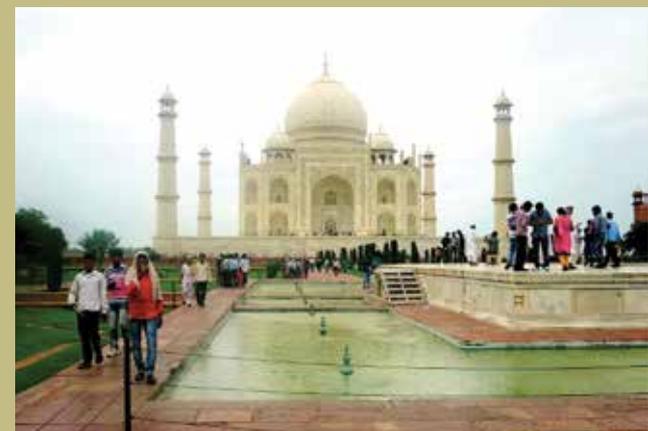
July 22, 2013

It feels incredibly strange to be writing after 10 days of complete silence of mind and body. I have just finished the 10-day Vipassana meditation course and that was the paramount instruction: no communication. That means no reading, writing, speaking, gesturing, you name it. No communication in any way, shape or form. The strangest part? The fact that that was the easiest element of the whole experience! Also surprising is how much I enjoyed the silence. I think it will be many years before I am able to adequately describe Vipassana in words on paper, so I will not attempt it here and now. I will say that I felt challenged beyond anything that I have felt so far. Between moments of true calm, I also felt moments of great stress. The combination of both seems to have taught me to think with parts of myself that aren't necessarily my brain. We were taught the importance of experiencing one's own truth, not merely accepting the truth of another. This experiential learning requires something more than mental analysis. Vipassana meditation is full-body work and also requires that one jump in with both feet. In these ways my time at the meditation centre seems to mimic my experiences in India to date, and of travel in general as something that really needs to be experienced, rather than read about. It remains to be seen how all I have learned will play out in the “real world,” but I look forward to finding out!



August 4, 2013

Today, as I watched my Indian mamaji churn milk into butter, I reflected on all I have seen, done and learned over the past two months (has it really been two months?). India has taught me that there are all kinds of ways to be strong. There is strength in vulnerability, which I had to learn right away, strength in knowledge, which the boys at the Trust reminded me of everyday, and even strength in silent meditation, which breaks you down in order to reassemble and begin anew. I've continually thought back to my travel proposal, written so long ago. I now realize what a limited view of India I had. Sure, I have certainly witnessed gross economic disparity and marginalization of women, along



with noise and other pollution and intensive overcrowding. However, I now realize that I was altogether too focused on examining the contrasts, mostly negative, between India and Canada, rather than focusing on what we could learn from India. I have spent two months here and have met countless people working for change in a variety of ways on a variety of levels—be it through education or meditation, or anything else. I have a feeling that I will return often to the image of my Indian mamaji churning away—it contains within it this implicit message of quiet determination and strength that I was not expecting and yet found in every facet of my journey.

Top, left to right: colourful stairway to Humayun's Tomb, Delhi; observers of the Qutub Minar, Delhi; centre, l to r: cluttered street in the neighbourhood of Paharganj, Delhi; island statue of Thiruvalluvar at Kanyakumari, Tamil Nadu; bottom: Taj Mahal, Agra (photos submitted)

Novel excerpt

The Dryland Diaries

BY DEE HOBSBAWN-SMITH

WHEN CHARLOTTE RETURNED to the house on Temperance Street, she was calm but tired, and her legs ached from the distance she'd trekked, eschewing the street car's unceremonious bump and rattle in favour of the rhythm of her own feet. She pulled off her shoes and stockings and collapsed on her bed. She hadn't found Tessa, although she had gone first to the seedy café several blocks west of Chan Lee's that Tessa had mentioned. It had been a shock to see a woman with bobbed hair sitting in the window banquette, one arm and opened fingers extended languorously along the length of the seatback, and for half a second my grandmother thought she'd found Tessa. But on closer, circumspect inspection, the woman proved to be a younger version of Tessa, blonde, scowling at her watch, her cigarette smouldering, her chunky body wrapped in a turquoise dress so tight that Charlotte wondered how her ribs made room for each breath. Charlotte had ducked away from the café before she was spotted, and backtracked to Chan Lee's, but only Vic sat at the counter, flipping the adjacent stool into the occasional spin as he talked to Chan Lee, who was cutting up chickens at the back counter. She'd waved through the window at her boss when he lifted his cleaver in a sketchy salute, then she'd fled. Even a quick tour through the matinée crowd at the Roxy had turned up empty, so she'd hoofed it home, relieved and disappointed. Maybe she'd never see Tessa again. If not, would she miss her? Reflecting, my grandmother realized that what she really wanted was to share what had happened with someone who knew her, who loved her, and not with a woman who'd taken advantage of her.

It was time to talk to Marina.

Marina was sitting on the porch steps in the back yard, her feet up on a wooden crate that held her gardening tools. She'd sent to an American gardening store earlier in the spring for information on hardy flowers and shrubberies, her fragile English rose bushes and most of her flowering perennials having succumbed to winterkill in previous winters, and a response had arrived by mail, a letter that fluttered in her hands, blowing loose like old rose petals when Charlotte entered the yard. A small envelope fell out of the package as the sheets of paper careened about the yard in the breeze. Charlotte, bending to retrieve the pages, recognized a seed packet. Her throat closed, and she quickly dropped both letter and envelope in Marina's lap, then sat down beside her. Her foster-mother was asleep.

My grandmother knew, just knew, that her body had undergone a profound change, far beyond the rape itself. Far beyond losing her virginity. In that moment, she knew also with startling clarity that she was pregnant. Something had started an inevitable turn toward the sun. And I, reading her journal, find myself remembering the exact moment when I knew with utter certainty that I was carrying a child. And like her, carrying a child who would be born without knowing a father. Sitting in what had been my great-grandmother's home, my heart aches for her daughter, the woman who would become my grandmother, a young woman alone, younger than me, confronting parenthood alone. Then I remember that my great-grandmother had been a single mother too, that her husband Jordan had disappeared as a young man. The multiple layers of irony seem too bitter to be even remotely funny, but I still find myself laughing quietly, wondering how my life will unfold, if Mike will recover, if I will be returned, an unwilling outcast, to the state of single parenthood, a state without borders or boundaries, without citizenship requirements, exacting only the toll of utter responsibility for another human being's life.





DEE HOBSBAWN-SMITH is a student in the MFA in Writing program in the College of Arts & Science. Her creative thesis, a novel excerpted here, is titled *The Dryland Diaries*. Hobsbawn-Smith was the first student in creative writing to be awarded a Saskatchewan Innovation and Opportunity scholarship. The \$10,000 award will support her research for the novel, which explores a Hutterite family in the dryland farms of central Saskatchewan.

The Dryland Diaries examines familial love and obligation, loss and belonging, and the long-term effects of a tragedy stemming from the Hutterite practice of pacifism during WWI. The novel follows several generations of prairie women over a timespan that includes the Great War, the Dirty Thirties, World War II and the Great Flood of 2011.

The Saskatchewan Innovation and Opportunity Scholarship program, launched by the Provincial Government in 2011, awards scholarships to post-secondary students based upon innovation and excellence. Hobsbawn-Smith will be researching water and drought conditions on the prairies during the period in which her novel is set.

Getting this scholarship—one mainly awarded to scientific research—was “longer than long shot,” said Hobsbawn-Smith. “I applied for the scholarship, really, as a voice for fiction writers—and the MFA’s writers in particular—who rely on research to give their fiction bones and breadth... Research matters to fiction writers just as surely as it does to scientists.”

Hobsbawn-Smith’s award-winning journalism, poetry, essays and fiction have been published across Canada and the United States and have aired on the CBC.

After attending culinary school, she earned her Red Seal designation as a chef in 1986. She was chef and co-owner of one of Calgary’s first restaurants to utilize locally-sourced ingredients and translated her food knowledge into a writing career that included eight years as the *Calgary Herald’s* food columnist, *The Curious Cook*.

She has written three best-selling cookbooks. Her recent book, *Foodshed: An Edible Alberta Alphabet* (TouchWood Editions, 2012) won the Gourmand World Cookbooks Awards “Best Food Literature” Award (Canada, English-language) and the High Plains Book Award for Best Culinary Book.

Changing the World One App at a Time

BY ASHLEIGH MATTERN (BA'11)



Alumni Dale Zak and Katrina German have joined forces to develop software for the greater good

WHEN THE EARTHQUAKE hit in Haiti in 2010, one of the first utilities to be restored was cellular service just outside the epicentre. From that point on, critical search and rescue missions were expedited by Ushahidi—an open source mobile application that allows users to crowdsource crisis information via mapped reports.

“People were literally underneath rubble, sending text messages to the map,” said Dale Zak (BSc’03), a U of S graduate who helped develop the Ushahidi app. “They were pulling people out of rubble based on the reports that were coming in to the map.”

Zak realized early in his career as a software developer that making a difference was important to him. The first realization hit when he was volunteering on weekends at a soup kitchen while working as a consultant in Halifax, shortly after graduating from the U of S in 2003.

“That three hours on a Saturday meant more to me than the whole rest of my work week,” he said.

By 2009, he was working three days a week to pay the bills, and volunteering on Thursdays and Fridays for Ushahidi and the Extraordinaries, an online micro-volunteering network for non-profits.

“And again it was back to the soup kitchen, where that Thursday-Friday kind of meant more than the rest of the week, and that’s when I realized that this is what I want to be doing,” he said.

Zak graduated with a computer science degree, and says professor Ralph Deters in particular had a big impact on his career. Zak credits Deters’s ambiguous computing class, which examined mobile computing and the integration of computers into every part of our lives, with launching him on his career trajectory.

He took that class around 2002, well before the mobile boom began with the release of the iPhone in 2007. For his final degree project, Zak worked with Deter to develop software for pocket PCs, the precursors to the smart phone.

Everything he’s done since then has revolved around data collection on a mobile platform.

“Right from the very start, I saw that trend for where things were going, and it was really exciting being at the front end of that as it was happening.”

Today, he’s one of the founders of Whitespace, a non-profit that uses technology to help empower disadvantaged groups. Zak and his partners—Krystian Olszanski and Flavio Ishii—saw a gap between groups in need, the community with the skills, and organizations with resources.

“Because there’s nothing to connect the dots, (disadvantaged groups) just fall through the cracks. And this tends to happen often with groups in need. Either they don’t have the skills or resources to have a solution to their problem.”

Whitespace is hoping to be the glue that binds the skills and resources to the groups in need.

Some of their projects include YXE Votes, a guide for the Saskatoon civic elections held in 2012; a health facilities

map for the U of S College of Medicine; and a project that uses SMS text messaging to provide support services for vulnerable groups.

In 2012, Zak joined forces with fellow Arts & Science graduate Katrina German (BA’00) to launch OneStory, an interviewing app designed to collect stories for future generations. German is a social media strategist, and the duo’s combined expertise has made OneStory an overnight success, now sharing millions of personal stories online each month.

They have also used OneStory for the greater good, developing a crowd-sourced interview project following this summer’s Alberta floods. The project, *YYC is Open*, was done on behalf of the City of Calgary’s Economic Development Board.

“After the floods, one way to help support the city was to support local businesses,” explained German. “So (through this project), people were using the OneStory app and using it to interview individual business people about their experiences with the flood and recovery efforts.

“The videos are also shared on the business’s website and elsewhere to show that they may have went through this disaster, but they survived and are open for business.”

With his work, Zak says he is always asking the question, “Can we use mobile technology as a way to help empower people?”

His inspiration was born, in part, though his experiences in Nairobi. For four months in 2011, Zak and his wife lived in Kenya’s capital city so he could be close to the Ushahidi team and experience the mobile technology movement happening there.

“It became clear that there was this massive innovation happening that I wasn’t seeing here in Canada or in Saskatoon, because we weren’t focusing on problems, we were focusing on ways that we could make money,” he said. “Where there, they were focusing on the problem (first), and then as a result, they were making money.”

This is the kind of mobile development that Zak would like to see more of in Canada. To that end, he’s organized Mobile Tech for Social Change conferences in Halifax and Saskatoon, and hosted Hackathons—intensive computer programming and software workshops—with his other non-profit, Apps 4 Good.

Zak has done a lot so far in his 10-year career: he has taught in Zambia (see video), worked for the UN’s Office for the Coordination of Humanitarian Affairs in Geneva, and presented in places like Madrid and Lithuania.

But, he says, “It feels like we’re just getting started.”



Watch a video of Zak teaching in Zambia:

<http://dalezak.ca/2011/12/to-bongohive-crew.html>

Find out more about OneStory: www.onestory.com

Eccleston Excels on the Sidelines of Huskies Football



Above: Griffiths Stadium (Josh Schaefer Photography); opposite page: Eccleston works the sidelines (Electric Umbrella)

BY SARAH L. TAGGART

GRIFFITHS STADIUM BAKES in the early September sun. Beyond the west stands, parents wander in the dust, burdened with hampers overflowing with everything but laundry. It's move-in day at College Quarter.

Inside the clubhouse, though, it's cool, and laundry's getting done. Andrea Eccleston (BSc'05), Huskies Football team manager, coordinates the ordering, inventory, maintenance and distribution of the team's protective gear, and more than 700 items of sponsored clothing. Eccleston also helps plan many off-field team events. Head Coach Brian Towriss says in an email, "She is the best team manager in Canadian college football."

In the same way a house is its framing, the team couldn't exist without Eccleston.

"I apologize if it doesn't smell good," says Eccleston as we follow the clubhouse reek to the long, high-ceilinged room that houses 92 lockers. Eccleston's relaxed in blue jeans and a Huskies-green T-shirt. Her blonde hair's pulled into an easy ponytail; her eyes sparkle blue under the fluorescents. "Most people don't like the smell in here. I can't smell anything."

This might be because Eccleston started volunteering with the team in 2000, the summer before her first year of university. She got into it by chance: she'd accompany her younger brother, Robbie, on the half-hour drive to Robbie's hockey practice. One day the coach said she might as well get involved. That was the spark.

Eccleston was first equipment manager for Huskies football. When she started going above and beyond, she

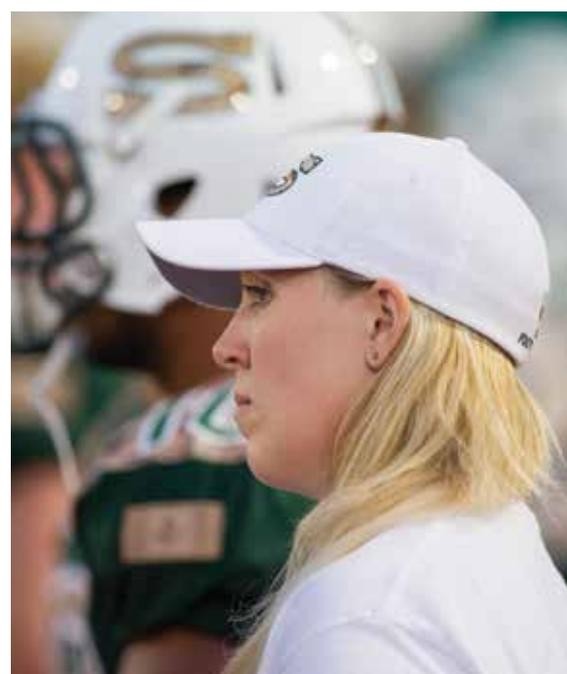
became team manager. Through a bachelor of science at the U of S and a master of arts at Royal Roads University, Eccleston and the team have been inseparable.

For five years, she worked in Alumni Relations at the U of S. Last year, she became the programs and student recruitment coordinator for the College of Arts & Science. Eccleston is the arts and science contact for both the study abroad program and student recruitment, and she works with the interdisciplinary programs—"any of the ones that don't fit in any of the other departments." It might be the perfect job for Eccleston, who wears myriad hats with the ease of a milliner.

Eccleston's life of football doesn't stop there: she also managed the women's and men's Football Canada teams and travelled with them to their world-championship games. In 2011, she went to Austria with the men's team. This summer, she joined the women's team in Finland. In photos the players wear various jerseys, differently decalced helmets, the right cleats—it's all because of Eccleston.

"You do what you have to do to get stuff done," she says, simply. She adds, "There's lots of little things, and little moments. Getting a little note from the guys or seeing someone who's graduated from the program and from university and gone on to different things. Or guys that are playing in the CFL."

Eccleston stands in the still-blazing sun long enough to say goodbye, and then she returns to the clubhouse to work, likely for the rest of the day, until after the sun has fallen, until after everyone else has gone home.



Changing of the Guard

BY KIRK SIBBALD (BA'04)



Arts & Science Aboriginal Students Make USSU History

WITH THE UNIVERSITY of Saskatchewan putting an increasing emphasis on Aboriginal engagement and student recruitment, two College of Arts & Science students have emerged as ideal spokesmen.

A year after sociology student Jared Brown (BA'13) made history as the University of Saskatchewan Students' Union's (USSU) first Aboriginal president, Max FineDay followed suit in 2013. The fourth-year political studies student eked out the victory, by fewer than 150 votes, over his closest competitor when the results were tallied on March 28.

Moving into the president's office was in some ways a natural progression for FineDay, who has been involved in various forms of student governance while at the U of S. He previously sat on the USSU's external affairs committee and was a member of student council for the College of Arts & Science, but says it wasn't until Brown won that he seriously considered putting his name onto the USSU's president's ballot.

"People had been asking me for a number of years (to run for USSU president) and, at first, I would always say it wasn't something I was really interested in. But when I returned from a semester studying abroad in Norway, the support was still there and it was really humbling," he said. "I guess people saw something in me that maybe I didn't see in myself at the time."

With the U of S tabbing Aboriginal engagement as a top priority, and Saskatchewan having one of Canada's most concentrated First Nations populations, Brown's groundbreaking win in 2012 generated significantly more attention than most USSU elections. He was inundated with media requests and often asked to speak at events throughout the community, but says he was happy to oblige.

Kristina Bidwell, associate dean of Aboriginal affairs in the College of Arts & Science, says Brown and FineDay's success signals to stakeholders that Aboriginal culture truly is accepted and valued by the majority of students on campus.

"We often talk about how critical it is for students to see more Aboriginal faculty and staff on campus, but it's equally important to see Aboriginal students successfully stepping into leadership positions on the USSU and other student groups," said Bidwell. "It says to other Aboriginal students that if you come here, your voices will be heard and respected."

FineDay was the first status Indian to be elected USSU president—Brown is Métis—and says his victory spurred those in his home community, the Sweetgrass First Nation, to nickname him Sasakamoose—after Fred Sasakamoose, the first status Indian to play in the NHL.

"It's a feel-good story, and so often we hear doom and gloom Aboriginal news stories about poverty and other

things that aren't necessarily good," says FineDay. "With Jared and me, many people see it as a signal of hope and there has definitely been a lot of attention paid to it."

"It says to other Aboriginal students that if you come here, your voices will be heard and respected."

Brown was able to follow through on several campaign pledges, such as installing artwork in Place Riel and putting in place an internal review of USSU executives. He was also able to secure \$40,000 from the federal Department of Aboriginal Affairs and Development to host an Aboriginal Achievement Week on campus, which Brown considers the highlight of his term.

He was also thrown a political curveball early on, when the university announced it was facing a projected \$44.5 million deficit over the next four years and launched TransformUS, a comprehensive review of all current academic and support services. He reacted quickly and successfully lobbied the university to include students on the various task forces.

"No one saw that coming, so I learned you have to be nimble enough to adapt to these types of things," he said. "As a sociology student, the economics surrounding everything was hard to understand, and I had to get my financial literacy up to speed really quickly so I could contribute to the process."

FineDay's campaign centred around establishing a first-term reading week and adopting an open textbook licensing policy at the U of S, something that would decrease a significant expense for student. He is also passionate about working with senior university leaders to make campus a more welcoming place for Aboriginal students, particularly those new to university. In the College of Arts & Science, for example, he cited the Aboriginal Student Achievement Program (ASAP) as an example of how to help students more comfortably adapt to life on campus.

"We need to see more initiatives like this that understand the struggles that Aboriginal students face," he says. "We need to bring in more language and cultural programs. These are not backburner issues that have no determination on how successful students are. If we want Aboriginal students to be successful, we have to show them that who they are is accepted at this institution."

 **online** FineDay talks about the U of S and his goals as USSU president: alumni.usask.ca/fineday



DEAN PETER STOICHEFF



AS WE EMBARK on another exciting academic year, I would like to welcome all new and returning students to the College of Arts & Science. As the university's largest college—comprising nearly half of its student and faculty population—our college is essential to the success of the entire institution and, by extension, our city and province. With a wide variety of courses and interdisciplinary learning opportunities, we like to tell students that whatever you want to do, “You can get there from here.”

As you read this issue of *Arts & Science* magazine you will see stories about a student exploring India thanks to a unique travel scholarship, read about cutting-edge research being conducted by our faculty and glimpse into our students' futures by learning what alumni are accomplishing.

Alumni of our college are a valuable resource and inspiration to current students. As alumni, you are always welcome to meet students, get reacquainted with former professors and witness the progress of construction on the new Gordon Oakes Student Centre. When was the last time you toured the art galleries or museums,

attended a performance at the Greystone Theatre or cheered on the Huskies? I value the connection we have with our alumni community and would love to meet you.

For those who don't have time to stop by campus, a good way to stay in touch is through our college's Facebook page. Catch up with old friends and make new ones, share your memories and find out about events for you and your family.

Finally, I am pleased to announce the establishment of the Dean's Fund for Excellence. Like the university President's Fund, the Dean's Fund supports college's objectives, such as unique student projects that might not otherwise receive funding. Through your support of the Dean's Fund, you can help a student travel to an educational conference, enter a competition, or help rebuild a community in a developing nation. I look forward to sharing with you student opportunities made possible by the Dean's Fund for Excellence in upcoming editions of *Arts & Science*. If you would like to donate to the Dean's Fund, visit Give.usask.ca/arts and enter “Dean's Fund for Excellence” in the comment section.

Arts & Science Book Club Returns with Ross King

One of the college's newest initiatives is the Arts & Science Book Club, launched in 2012 with author Yann Martel and his much-beloved novel *Life of Pi*. The Book Club got a nod from the Canadian Council for the Advancement of Education when it was awarded their Prix d'Excellence Bronze Award for Best Community Outreach Initiative.

Our 2013 selection was *Leonardo and The Last Supper* by Saskatchewan-born author Ross King. The book paints a fascinating portrait of Leonardo da Vinci and one of his greatest achievements set against a historic backdrop of political intrigue, scientific exploration and artistic virtuosity.

King is the author of six widely acclaimed books on art and history, including *The Judgment of Paris: The Revolutionary Decade That Gave the*

World Impressionism (2006) and *Defiant Spirits: The Modernist Revolution of the Group of Seven* (2010). Two of his books received the Governor General's Literary Award for Non-Fiction.

Both the book and Leonardo himself are a good fit for the College of Arts & Science, says King.

“The book combines scholarship with readability,” he said. “And Leonardo da Vinci himself makes it an attractive proposition because of his broad range of interests, from art to science to set and costume design. Many people have told me...that Leonardo is their ideal dinner guest. I hope my book gives a flavour of what dinner chez Leonardo might have been like.”

In addition to student events, the Book Club hosted two public events in early November featuring King, and

he was guest speaker in the 2013 My Writing Life lecture series, sponsored by the MFA in Writing Program and the Department of English.

“I always welcome the opportunity to meet people, especially when it's on a university campus, where there's an enthusiasm for learning,” he said. “Much of a writer's life consists of sitting at home alone and typing, so getting input is intellectually as well as socially attractive. For students, it is an opportunity to get information from the horse's mouth, so to speak.”



 Judith Ghilks



ANNUAL CAMPAIGN FOR STUDENTS 2013-14 OUR JOURNEY BEGINS WITH YOU

It is said that a journey of a thousand miles begins with a single step. For students, that step is coming to the U of S to pursue their passions and fulfill their ambitions in life. But they also need support from people like you to help them steer the course.

Take the first step and make your gift to the *Annual Campaign for Students 2013-14* right now to support student scholarships. Your gift not only helps

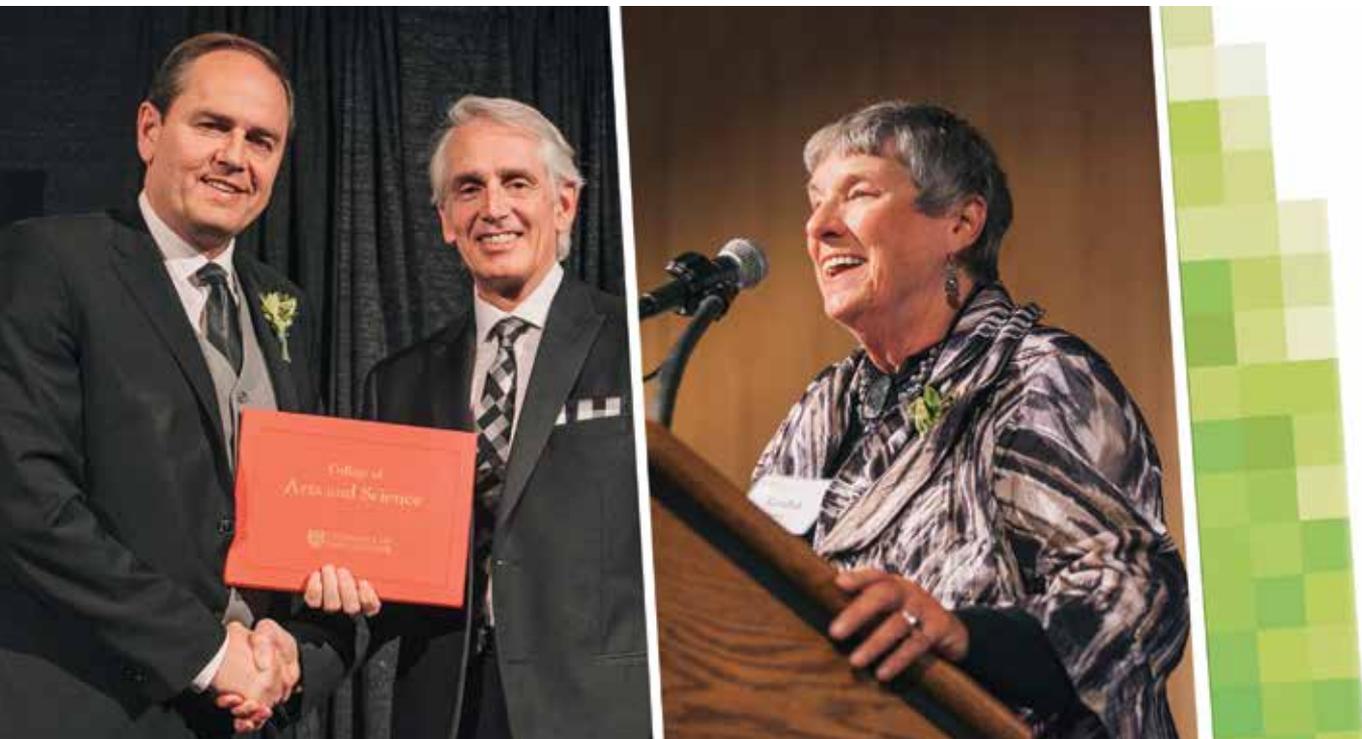
students in need with financial support, it rewards exceptional accomplishments, promotes leadership abilities and gives students peace of mind and confidence.

Your gift is the extra support students need on their meaningful journey at the University of Saskatchewan and beyond. **That journey begins with you right now.**

How to give

To make a gift online, visit give.usask.ca/students

To make a gift by credit card, please call 1-800-699-1907



Left to right: Tim Gitzel, Dean Peter Stoicheff, Sandra Pyke

2014 College of Arts & Science Dean's Dinner and Award Ceremony

Hosted by Dean Peter Stoicheff
Friday, March 14, 2014
TCU Place, Saskatoon

Reserve your table today or if you would like to purchase a ticket for a student to attend
please call Teri Olson at (306) 966-6388 or email teri.olson@usask.ca