Should Canadian troops be in Afghanistan?

- Yes
- No

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Waging a war for talent

With philanthropy playing a bigger role in fostering excellence, universities are increasingly able to attract the best and the brightest

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Alastair Summerlee has never liked shoes. Nor does he put much stock in sleep. At best, the president of the University of Guelph spends four hours between the sheets each night, usually rising sometime after 3 a.m. to head to his office on the fourth floor of the University Centre. So it should come as no surprise that in the wee hours of Oct. 19 he could be found at his desk, shoeless and sockless, scrolling through his email and barrelling through his papers. If it had been a typical morning, Summerlee would have headed home at 7 to have breakfast with his wife and change into his suit. But this was not a typical day. Having just returned from a week abroad, the president had prepared a perfect schedule. He would work until 7, taking a short break to shave and switch into his suit. At 7:15, he would head for the highway and drive straight to Niagara-on-the-Lake, arriving for the 8:30 kickoff of the premier’s Ontario Economic Summit--having already done a half day's work. "It was," says Summerlee, "a beautiful plan."

At 5, deciding to break early, the president began to run the water in the tiny adjoining washroom, preparing to shave. And that's when all hell broke loose. Fire alarms blared throughout the building. Minutes later the barefoot president was outside in the dark, trying to determine what on earth was happening. When the firemen arrived, they could find nothing. After three-quarters of an hour, the culprit was located: a 40-year-old water pipe had broken and was flooding the campus.

The upshot? All the students and researchers heading to the Hutt Building that morning would find themselves shut out. For a solid week, the building -- home to many classes and major research projects -- would be without water. And Summerlee? "Well," he says wryly, "this was only the third pipe to burst this year. I'm just glad no one was hurt. Someone was almost killed when one exploded earlier this year."

Guelph, which attracts $123 million in annual research funding, is home to the renowned Ontario Veterinary College and a new $144-million Science Complex -- one of the largest biological life sciences facilities in North America. It is also saddled with a system of ancient pipes, feeding water into 127 buildings across campus. All need replacing. Says Summerlee: "Deferred maintenance comes in many stripes. Shabby buildings are sad, but not serious. Exploding steam pipes are huge safety hazards."
As a result, Summerlee -- who happens to be a gifted neuroendocrinologist, a cancer researcher and winner of a 3M Teaching Fellowship -- has had to reallocate $19 million he had slated for projects he holds most dear: faculty hires, classroom renovation and curriculum innovation. "Once upon a time, as we began to see fiscal restraints, we focused on hiring people," says Summerlee, "and that was the right thing to do. What we're living with now is the consequence: a huge deferred maintenance bill of $200 million. This year, the Ontario government presented a coherent strategy, promising universities $6.2 billion over five years. We are very, very grateful, don't get me wrong. But this comes after years of disinvestment. The challenges are real."

Welcome to the world of the modern Canadian university president: a mink-coat-no-underwear reality, where there is a serious disconnect between the wealth of certain sectors and the shabbiness of others. Take Jillian Buriak, for instance. Spend five minutes with the spritely, spiky-haired nanoscientist and you think you've arrived in the land of milk and honey. Two years ago, the Harvard-educated Buriak, 38, turned down a tenured position at Princeton, choosing instead to move to the University of Alberta. There, as the new senior research officer and Canada Research Chair in inorganic and nanoscale materials, she will play a key role in helping shape the new $120-million National Institute of Nanotechnology (NINT), a unique collaborative effort between the U of A, the National Research Council and the Alberta government. Why Edmonton? "I felt I could have an impact here," says the mother of two. "NINT's research infrastructure and instrumentation are world-class," says Buriak. "To expose students and post-docs to the technology-transfer side of NRC is an incredible opportunity. And there's a new-frontier attitude here that I found irresistible."

No kidding. Take a stroll across the rambling U of A campus, and it's hard to find someone who doesn't mention NINT. Tim Caulfield, for example, the hip, black-bespectacled Canada Research Chair in health law and policy, will have a partnership with NINT. Says the boyish Caulfield: "Eighty per cent of my work is in biotechnology and ethical issues, human cloning." And nanotechnology? "It's the next wave."

But then there's Graham Lettner. "You hear a lot about the new initiatives around here -- NINT, the new Health Sciences building," says the student president, who then offers a big caveat. "Being a student here is not a dynamic experience. Teaching is not looked at creatively -- it's dry and mundane." Even in debt-free Alberta? "Sure," says Lettner, sitting in a dark corner of a campus café, "the taps are turned back on. But I don't think the government intends to revert to the Sixties teaching style."

Many of his peers share his view. This fall, the notorious Aberdeen Street party in Kingston, Ont., turned into a riot on Queen's University's homecoming weekend. A crowd of 7,000 showed up for the event, including students from universities across Canada: Dalhousie, McGill, Bishop's and many others. In the end, police laid 22 criminal charges. More than a few students blamed what happened on alcohol, of course, but also on a sense of deep disenfranchisement.

George Lovell, who sports a long grey ponytail and a thick Scottish accent, loves to teach. A professor of geography at Queen's, Lovell takes the students in his evening classes out for nachos and beer. "I'm just the facilitator," he says. "My good teachers kept me entertained -- cultivated a sense of curiosity. This group of students? They're not lost, but they're not getting as much guidance as they deserve."
It's a common sentiment. While the federal government has invested generously in the Canada Research Chair program and other research-related initiatives, per-student funding has been plummeting across the country. Take Alberta, a province awash in petro-dollars; but in terms of per-student funding, it ranks seventh out of 10 provinces. Carl Amrhein, provost and vice-president, academic, at the University of Alberta, admits that "Christmas came early this year," referring to Premier Ralph Klein's bonanza announcements of almost $5 billion for higher education. "But," he says "the student-faculty ratio is still a tough nut to crack."

Tough right across Canada. In recent years, enrolment has gone through the roof, but faculty hiring has barely budged. Meanwhile, in the United States, faculty renewal kept pace as our neighbours experienced a similar surge in enrolment. This year, it should come as no surprise that several presidents of large research-intensive universities have expressed deep and public concern about the undergraduate experience. Says Indira Samarasekera, the dynamic new president of the University of Alberta: "Students are passing through the system who can't get a letter of reference because they don't know one professor well enough to ask for one in their final year. What an indictment of the system!"

How do you spark the pilot light for a student sitting in a class of 400? Certainly, there are star professors who can do this. Take Marty Wall, psychology prof, a.k.a. the "Johnny Carson of the U of T." According to David Naylor, former dean of medicine and newly appointed president of U of T, Wall can turn Convocation Hall into a small living room. "But," he concedes, "not many professors have that gift." The U of A president agrees: "Research universities need to articulate what they can do for the undergrad. We need research fellowships for third- and fourth-year students, to expose them to the notion of discovery. Undergrads and grad students need more faculty. Right now, we have a capacity problem."

In fact, president Harvey Weingarten at Calgary says they are bursting at the seams. "We can't keep up. Calgary's a boom town and there's a mood of enthusiasm. But when Imperial Oil moves here, families expect their children to get educated." In the '90s, the university absorbed a large proportion of the province's post-secondary growth. "It hurt us! We grew too big, and we won't do that again. With all the money in Alberta, there will not be enough to meet the demand. It's a good problem, but a problem all the same: the city is growing like Topsy. And we need hundreds more physicians, engineers, nurses, lawyers, economists."

Last month, Bill Gates went shopping for talent at the University of Waterloo, one of six universities he visited in three days, and the only one in Canada. Call it a one-person career fair. "U of W grads will have lots of offers," Gates told a packed lecture hall. "We just want the best and the brightest -- we don't want them to work on hedge funds." But when Maclean's asked him whether he would think of making a major investment in Waterloo, building a research centre like the one in Redmond, Wash., he got decidedly cranky. Obviously, it's not in the cards.

More and more, philanthropy is the engine that helps drive the schools ahead. This year, once again, Seymour Schulich decided to take matters into his own hands. "Every university president that I've gotten to know has been a fabulous person," says the extroverted mining magnate. "But I want to cry when I see what they get paid versus these silly athletes. And their problems are so vexing."

First, Schulich decided to give $25 million to the University of Calgary for its
engineering faculty. "Alberta is going to have more money than Saudi Arabia -- so why did I give money there? A third of my wealth came from Alberta, and I'm the biggest believer in reciprocity you'll ever meet." He's on a roll. "The second reason? "I liked the president."

That's Weingarten. But he made it clear to Calgary's rumpled, straight-talking executive head that there would be no gift unless David Hancock, Alberta's minister of advanced education, anted up as well. "When I put down my $100 bet in Vegas," says Schulich, "the other guy doesn't say, 'How about I put down mine over the next three years.' Dave Hancock took three weeks to get the matching money -- that's warp speed in that world!"

If Schulich has a soft spot for Alberta, he has an even softer one for his alma mater, McGill, and principal Heather Munroe-Blum. "I like her a lot," he says. "I wouldn't put her in Rob Prichard's shoes yet. If Prichard is a 10, she's a nine. But she may make it. She has great potential."

Schulich is sitting at Munroe-Blum's dinner table in Westmount, kidding around with her husband, screenwriter Len Blum. On the polished table between them is a brown envelope with two Canadian stamps. Blum has brought it out for this occasion, a prop for his after-dinner toast to honour the philanthropist and his wife, Tanna, on the occasion of their $20-million gift to the McGill Faculty of Music. So just what did Schulich scribble on that envelope, the one he returned to Blum by mail? He circled the two stamps and said, 'Len, you'll never get rich this way!'"

The kid who grew up in Montreal's Notre-Dame-de-Grace neighbourhood, whose classmate and best friend was and still is Lawrence Bloomberg, doesn't forget his roots. The next morning, as Schulich stood on the stage of the newly christened Tanna Schulich Recital Hall in the new Schulich School of Music, he wore black socks with treble clefs on them, and a maroon tie with notes as well. And as dozens of new Schulich Scholars poured onstage, wearing black T-shirts emblazoned with 'Merci Seymour,' Bloomberg sat in the front row, beaming.

Also beaming were Dan Levitin and Stephen McAdams. A Californian who dropped out of the Massachusetts Institute of Technology at 17 after he played Abbey Road too loud in his residence and his speakers burst into flames, Levitin took a circuitous route to becoming the Bell Chair in Psychology of Electronic Communication. After his short stint at MIT, he joined a punk band and went on to be a music producer.

But, when he began teaching a course at Stanford, they suggested that it might be best if he got his B.Sc. Now, with more than $2 million in research grants and about to publish a book, This is Your Brain on Music, Levitin has a deep appreciation of what Schulich's gift makes possible. "I was at Stanford when the Bill Gates Computer Science building opened," says Levitin. "It created a recognition that the university was where it was at for computer science. I would say the same thing is true here: this provides post facto recognition of some sort of world-class expertise that we have attained. The most important practical benefit is recruitment -- what will make or break a department or school is whether they are getting the best students and faculty. We've been very successful in recruiting -- we've tended to get anyone we wanted. It's the buzz factor."

Call it human Velcro: smart people attracted to other smart ones. One of those people drawn to McGill was Levitin's pal Stephen McAdams. Now a Canada Research Chair in music, perception and cognition, and the head of the Centre for Interdisciplinary Research in Music, Media and
Technology (CIRMMT), McAdams, also a Californian, first came to McGill in 1975, to study perception. Two years ago, he returned after 20 years at a research institute in Paris. Says McAdams: "Up until the Schulich gift, CIRMMT was a sort of interdisciplinary virtual network. But when Schulich gave $8 million to the building, the CIRMMT labs were made possible, and that's where it really takes off -- a beehive of people doing collective work, rubbing shoulders in multidisciplinary groups. It's absolutely extraordinary here. Something very special is going on."

**Something very special is going on also at Guelph**, an experiment in going small. Five years ago, Summerlee -- then VP academic, launched a series of problem-based seminars as a pilot project. Each of the 45 offerings is taught by a senior academic, and the president himself teaches Sex and Sexuality with dean of arts Jacqueline Murray, a medieval historian. For three hours each week, eight students have the undivided attention of the two. The students are given a new challenge every time, and have to return with a solution. The result? "I've been exposed to so many issues that I can't decide whether to go to medical school or law school," says Emily Gilbert. "Sitting in a lecture hall is now painful. Most students are conditioned to 400-person classrooms. And people who haven't experienced a smaller course can't stand being that exposed. Now everyone's terrified of having an opinion -- and that's the scariest of all."

Summerlee is determined to spread the word about the benefits of his problem-based seminars. Last summer, seven students travelled to P.E.I. for a demonstration case at a conference of the Society for Teaching and Learning in Higher Education. As 30 professors looked on, the students were presented with a problem that they had to solve within 24 hours: can a convicted pedophile ask to be denied parole until he is chemically castrated? The students came back with a smashing presentation that moved some seasoned profs to tears. Summerlee's fondest hope was to expand the number of seminar courses this year, but when the pipes blew, the money went to excavation.

Actually, many university leaders are trying to bring a sense of intimacy to the learning environment. Naylor admits that U of T's big classes can be "tough sledding for young people -- especially in the sciences." But, he adds, "We're working very hard on first-year learning communities: groups of 24 students working with a student mentor and a faculty resource person. You can make a big place seem small by offering detailed feedback; a small-college interaction makes it much more engaging."

Making a big place seem smaller is an idea that Martha Piper, president of the University of British Columbia, has been wrestling with. Over the past several years, UBC has established a series of international residences on the campus, with Canadian students sharing space with students from Mexico, Korea and Japan. "The biggest challenge we face is how to educate the global citizen," says Piper. "You can be a global citizen and never leave the campus. But you need to be culturally literate."

She's right. And increasingly, students want that for themselves. Take Queen's student Leigh Eagles, now in her fourth year of a sociology and development studies degree. To date, she has volunteered in a Nepalese orphanage and spent a summer running a literacy camp in Nunavut. The trip to the Canadian North was organized through the Queen's Project on International Development, which sends students to developing communities in such places as Nicaragua and Burkina Faso to work in hands-on projects. Eagles's plan for next year is to head to India for an
internship. Says the 21-year-old: "This sort of experience gives you new eyes."

Samarasekera has vowed to make a difference in the years ahead. Says the new president at U of A: "There's a tsunami of global change out there, and we are all lying on the beach here. India and China each have one billion people in a world of six billion. Universities that don't engage in those regions won't really be able to contribute in the future. We need to reach out."

She envisions an investment in grad students, wooing brilliant candidates from across Canada and around the world. Why not, for instance, a prestigious federal initiative, like the Rhodes Scholarships or the Fulbrights? "The U.S. and Britain got it right with those programs," she says. "Why? A grad student is likely to stay in the country where they did their degree. It's a way of attracting talent. And as someone recently said, George Bush is the best recruiting officer Canada has ever had: since 9/11, many international students have had their eye on Canada."

The bill for the Canada Research Chair program, which is a federal initiative, now sits at $1.6 billion, and there are many who would argue that the government could easily fund a similar program for graduate students, without stepping on any toes. "We need to build capacity at the grad level," says Amrhein. "Grad students are disproportionately the source of new patents. We can do many things if grad students are funded: it unleashes innovation. And, if at the end of their undergrad years you lose them to another jurisdiction, then all you've done is lose them after 12 years instead of 16."

Heather Munroe-Blum couldn't agree more. "In the mid-'90s, when I was VP research at U of T, and the federal government cut back their funding, we asked the top 10 per cent of research-fund recipients: 'If we can only do one thing, what would it be?' The answer? Allow us to maintain and grow the number of grad students to sustain our research -- or our innovation and productivity will sink like a stone." She believes that creating a progressive program of grad support, linked to the granting councils, including international students and our own, would be the correct investment. "Right now, we're dramatically underfunded to be able to compete."

Maria Klawe despairs. "The Canadian government must make more significant reinvestment," says the dean of engineering at Princeton, formerly dean of science at UBC. "Quality has gone down significantly across the country."

Winnipeg native Mark Schaan, a Waterloo grad and Rhodes Scholar who is now assistant dean of Oxford's Somerville College, sees it very clearly. "Governments want accessibility so that everybody and their dog can go to university," he says, "but they're not willing to pay for it. Where does that leave us? That only the brightest go to university?" Now doing his Ph.D. on the changing nature of Canadian social policy, he say: "We send everyone who could benefit from university -- which is almost everyone -- and put them them in huge classes, where the best and brightest can't learn."

Last month, Schulich received a call from Prime Minister Paul Martin, congratulating him on his generosity to McGill University. It was a well-deserved thank you. At this point, Schulich has given more than $100 million to Canadian universities. Now, he says that's enough. "I'll give more posthumously," he vows, "but I'm not doing any more before that. We've
plastered my name on enough things! But ultimately, I'll strengthen what I've given to."

So what should come next? "Ken Thompson, the Irwins -- they should do the same thing. We need to create a culture of giving in Canada." And the government? "Well," he sighs, "you know, I've come to believe that governments don't run things very well. But God's own truth? Private guys do."

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