What will be the ‘fuel of the future’?

Falconry business is soaring

Inching closer to a cure for AIDS

Boxing dentist fights for title

The University of Western Ontario
For Muhammad Kamran Khan ‘the rubber hit the road’, when he began his career with the Ontario Ministry of Transportation. Armed with a MSc in Geotechnical Engineering, Khan is a soils engineer overseeing 5,000 KM of highways. His latest project? The Detroit River International Crossing where he's using his Western education to build bridges that join countries and connect economies.

To see where a Western graduate degree can take you, visit: GRAD.UWO.CA
I indulge in lottery fantasies from time to time and dream about instantly paying off my mortgage and making sure my kids have enough money to get through university and get them started. But if I found myself with the ‘problem’ of independent wealth, there aren’t too many things on my shopping list (after world hunger, war and disease are wiped out in the ensuing Utopia).

But one stands out as we look to the future for alternative fuels and energy sources for our vehicles and homes: a high-performance electric car from Tesla Austin in the green — but economically anemic — state of California. (I’d look closer to home but Western Engineering’s solar ‘Sunburst’ car isn’t quite at mass production yet.)

As my kids would say, “They’re ‘only’ $129,000” and the $12,000 deposit for a Tesla – which is also the cancellation fee if you don’t go through with the purchase — is not for the faint of heart or credit limit red-liners.

Some U.S. states like California (now infamous for “killing the electric car” – see documentary of similar name) are further ahead of us here in Ontario. Quebec and B.C. have leapfrogged ahead of us, too. But at least on campus and featured in this issue, Research Western and Western Engineering are leading the way in environmental sustainability and green energy with research into biofuels, solar and alternative energies, and many other initiatives.

The recent opening of the Claudette McKay-Lassonde Pavilion “(The Green Building)” puts Western at the head of this pack for green technology.

If only I had a ‘spare’ $129,000, I could help the environment, be a leader in new technology in a Tesla and go 0 to 60 mph in 4 seconds. Until then, a 1996 Camry (regular oil changes) will have to do.

I am the Editor of Alumni Gazette (Issue 70) and Executive Editor of Alumni Western. I am also a member of the Alumni Gazette’s Executive Advisory Board. I welcome your feedback.

Please write to me at dscott@uwo.ca or mail at The University Affairs in partnership with Alumni Western and the Alumni Gazette.

David Scott, Editor
Your Alumni Gazette now comes in a handy digital format. Get the award-winning features and bold design of the print magazine, plus some attractive extras:

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GREEN BUILDING OPENING KICKS OFF CAMPAIGN

The building is named for Claudette MacKay-Lassonde, the first female president of the Association of Professional Engineers of Ontario. She has been described as a strong advocate for the role of engineers in society, and tireless in her promotion of engineers in society, and tireless in her promotion of engineers as an attractive career for women. Her son Christian, a Western computer science and engineering student, but the entire campus and beyond.

Western President Amit Chakma says the school’s highly regarded undergraduate program has grown 40 per cent over the past three years and is expected to double in size by 2013. The PhD program has tripled in size over the last decade. The new 234,000-square-foot, three-storey facility finally brings all Ivy programs under one roof. Richard Ivy took part in groundbreaking ceremony on Wednesday October 10 for the facility, which will be built on the west side of Western Road in front of Brescia University College.

The building also gave the university the chance to officially announce the launch of the public phase of Western’s campaign to raise $500 million (2007-2014).

The 2009-10 fundraising goal of $65 million sits at over $20.2 million, or about 31 per cent. The school’s highly regarded undergraduate program has grown 40 per cent over the past three years and is expected to double in size by 2013. The PhD program has tripled in size over the last decade. The new 234,000-square-foot, three-storey facility finally brings all Ivy programs under one roof. Richard Ivy took part in groundbreaking ceremony on September 10 for the facility, which will be built on the west side of Western Road in front of Brescia University College.

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To-date, more than $116.8 million, or 27 per cent of the overall goal, has been raised. The 2009-10 fundraising goal of $65 million sits at over $20.2 million, or about 31 per cent.

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Brescia University College is encouraging young women to go boldly into the future and choose to lead. As Canada’s only women’s university college celebrates its 90th anniversary, The University of Western Ontario affiliate is launching a new brand and tagline, Brescia Bold. Choose to Lead.

“It’s more than a new look and a new tagline, Brescia Bold: choose to Lead. “The Alumnae trailblazers that encompasses a commitment to students and call to action: “Brescia University College is the transformative learning community for passionate, creative young women who seek to fulfill their personal aspirations and lead boldly in a rapidly changing world.”

The words invigorating, student-centred, compassionate and empowering will be guiding attributes of a Brescia education, influencing daily operations, planning and programs. The new direction will be used to “attract donors, heighten awareness for what we do and what we stand for, and will entice new students to join us here on the hill in what is – without doubt – one of the warmest campus environments in the country,” says Hanycz.

As part of anniversary celebrations, Brescia honoured 12 alumnae who embody “choosing to lead.” The Alumnae Trailblazers represent the nine decades of Brescia’s history and were the first to achieve a particular distinction as a student or alumna.

For more information: brescia.uwo.ca/about/online_media_room/news_releases.html

ARTS AND SOCIAL SCIENCE TAKES NEW DIRECTION AT HURON

The University of Western Ontario opened a new $5-million biofuel facility October 16 and unveiled the first sale of a university-developed farm harvester that turns agricultural byproducts into a material for creating fuels, chemicals and fertilizers.

John Milkey, Ontario Minister of Research and Innovation, led the official opening of the Institute for Chemicals and Fuels from Alternative Resources (ICFAR), located at Western’s Experimental Research Farm on Wonderland Road north of London.

“ICFAR is also expected to house two new energy-related research chairs and provide workspace for visiting scientists and students from Canada and abroad. The new research facility, led by Engineering professors Franco Berrutti and Cedric Briere, will help place Ontario at the forefront of global biofuel research.

ONE-STOP SHOPPING FOR STUDENT SERVICES

In a long-anticipated move this past summer, a variety of services – from financial aid, to the registrar, to international student support – moved to a new home in the Western Student Services Building. The $21-million, four-storey space is located close to Western Road, between the University Community Centre and Weldon Library.

“We are all kind of tucked away in different buildings, whereas this was more designed around the type of programming that’s provided by the different areas,” she says.

There has been feedback from students that there wasn’t enough space for the programming that they wanted to do. “There’ll be a lot more... elbow room.”

All of the services at the new site report to Western’s vice-provost, with a few exceptions. The Teaching Support Centre is still located in Weldon Library and has enough space to operate well, Chełchowski says. Continuing Studies at Western will have representation in the new building, but its headquarters will stay in Galleria London downtown.

The Western Student Services Building also has more features built specifically for certain groups such as the Dr. David S. Chu International Student Centre, which was funded by a $2-million donation from the Chu family. The money went toward a large meeting space for students where international events can be held. The area will also help provide room for workshops and programs run by all the services in the building, Chełchowski says. The building also has a strong indigenous component in the architecture of the building. The university hired a First Nations architectural company to help plan construction details that would be important to indigenous students, Chełchowski says.

For a full list of the student services in the new building and where they’re located, visit wss.uwo.ca/floorplans.cfm.

“Western ushers in new era of biofuels research

The University of Western Ontario opened a new $5-million biofuel facility October 16 and unveiled the first sale of a university-developed farm harvester that turns corn stover into a biofuel.

Agricultural byproducts are the next step in biofuel development, according to engineering professor Franco Berrutti. The new research facility, located at Western’s Experimental Research Farm on Wonderland Road north of London, is expected to house two new energy-related research chairs and provide workspace for visiting scientists and students from Canada and abroad.

The new research facility, led by Engineering professors Franco Berrutti and Cedric Briere, will help place Ontario at the forefront of global biofuel research.
In the second floor office in the back of the Spencer Engineering Building, PhD candidate Hisham Hafez and associate professor George Nakhla are talking mols and microbes. There is a mixture of modesty and pride as they review the results of 120 days of operation of their biohydrogen reactor, a device that puts bacteria to work to convert industrial waste into hydrogen fuel.

The numbers are good, some would call it a breakthrough – 2.9 mol of hydrogen per mol of glucose. “We are not creating any miracles, don’t get me wrong. This is just innovative engineering design,” says Nakhla.

Innovative enough to rate a patent application and draw international attention. Hafez and Nakhla are not alone in what has become a major, multi-pronged race at the University of Western Ontario – develop a new, greener fuel source that will keep the lights on and vehicles on the road in the decades ahead without trashing the planet.

It is an effort that has attracted millions of government and industry research dollars, bringing together faculty from diverse departments and faculties – surface scientists, electrical, computer and civil engineers, Richard Ivey School of Business professors.

And the bets aren’t on a single horse. Western scientists are probing everything from municipal landfills to farm manure pits and sunlight for a viable energy source. “We have to look at the alternatives and how they address the issues,” said Hesham El Naggar, Associate Dean, research and professor in Western’s department of civil and environmental engineering.

“Are they going to provide the amount of energy we need, are they going to provide that in a sustainable fashion, and if that is the case, what is the impact on the environment of every option?” Urgency was added to the work when oil climbed to an unthinkable $100 a barrel and kept on going to $144. The north American oil revolution that started 150 years ago, less than an hour from the university near Petrolia, Ontario at oil springs, looked like it was finally fading.

“When it was at $140 a barrel, it made it real in people’s mind that it is going to end at some point,” said Lars Rehmann, an assistant professor in the department of chemical and biochemical engineering. “With oil damped back under $100 a barrel, some of the urgency has subsided,” said El Naggar.

But there remains an environmental push. People want a replacement for oil that won’t hurt their health. “It is the quality of air you breathe, the quality of water you drink, the quality of the soil you live on, the quality of agricultural food. If you pollute the ground, the water, the air, it comes back to you,” El Naggar expects oil supply concerns will return and it could happen quickly.

There is no single energy solution to replace petroleum and new sources won’t be as simple as pumping oil out of the ground.

“Thirty years ago we spoke about China as a nation that rides bikes, is very healthy, has very efficient means of transportation, but BMW and Mercedes sold more cars in China than they sold in North America over the last decade,” said El Naggar.

What is clear is there won’t be a single energy solution to replace petroleum and new sources won’t be as simple as pumping oil out of the ground.

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“We have the introduction of the Nano as the smallest car, but not necessarily the most efficient car. That will have very significant implications. People will choose to use the car and eventually as the economic prospects improve, they will want to have a larger car and then an SUV,” he said.
I see butanol as filling the gap for as long as vehicles use liquid transportation fuels. Liquid transportation fuels are great. There is a lot of energy in a very small volume.

And butanol has an advantage over ethanol, the other liquid fuel frontrunner. Unlike ethanol, butanol doesn’t like water.

Ethanol’s propensity for absorbing water has meant it can’t be pumped through existing pipelines and has to be trucked to gas stations, where it is mixed with gasoline. Butanol can be added to gasoline at the refinery.

And while ethanol has 60 to 65 per cent of the energy of the same volume of gasoline, butanol comes in at 90 per cent.

“You can use the existing distribution system and the existing engine.

“That is extremely important,” Rehmann said.

Producing it from fermenting biomass, instead of from petroleum, isn’t new. The process was developed during the First World War and butanol was made by fermentation until the 1950s.

But there is a problem:

“The microbes in a biohydrogen reactor start off making hydrogen, but after a short period another group of organisms take over and produce methane instead. Both are fuels, but hydrogen is cleaner and has three times as much energy per unit volume as methane.

“Stability is the biggest challenge of these systems,” Nakalla said. Researchers in other parts of the world have reported success in producing hydrogen in a biohydrogen reactor, but most only report on 15 days, 20 days or 30 days.

“The rule of academica is publish or perish. In order to publish people want to tell a good story and a good story happens in the first 30 days because after that the methanogens take over the system and the system fails,” he said.

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The pair found they could keep the microbes producing hydrogen if they separated the solid biomass from the liquid in the reactor, recycling the biomass through the system.

They have tested their system with fermentation waste from Sunoco’s ethanol plant near Sarnia.

Instead of switching over to methane production within a few days, the biohydrogen reactor continued to produce hydrogen at 100 days. The yield of hydrogen was also substantially higher than in other reported studies – 75 per cent efficiency compared to about 50 per cent.

The Western engineers have applied for a patent for the system and are discussing building a pilot plant to produce hydrogen at Suncor’s facility. That has to be done before a full-scale system is ever considered, said Nakalla.

“If a full-scale biohydrogen plant is eventually built at the Suncor facility, it is estimated it could produce hydrogen with an energy value of $100,000 a day from 6,000 tonnes of organic waste.

“If we are not capturing the hydrogen, the energy is lost,” said Nakalla.

But the commercial viability of biohydrogen will in the end depend on a market emerging for hydrogen.

While he believes in the potential of hydrogen as a fuel, Nakalla only sees the biohydrogen reactor as part of the energy answer, not the ultimate solution.

“It is an accomplishment and we are very proud, but it is not a process that can be applied randomly to everything. Like any other technology it has its limitations,” he said.

The limitation engineering professor Rajiv Varma is working to overcome is what to do with a new source of energy once you have it in hand.

Ontario threw the door open to solar power development when it promised to pay producers 42 cents a kilowatt hour, about seven times the price of conventional power, on a 20-year contract.

“There was a huge rush for people to get into these technologies. Hydro One had about 2,000 applications, people saying please connect me,” said Varma.

But hooking relatively small power producers into a transmission and distribution system that was never designed for it is a major technical challenge. That challenge is compounded when power production can vary dramatically simply by a cloud drifting over.

Typically, wind and solar farms are established in remote areas where the load, or demand, on the system is low. If the load drops below the power produced, it can send electricity flowing in the reverse direction on the grid.

“Our systems were not designed to handle power in the reverse direction. It can damage the system,” said Varma.

Then there is harmonics.

The power being fed into the grid has to match the electrical wave of the system. If the voltage doesn’t, it creates a jagged wave. “This is not good for equipment such as computers. Even your TV, your DVD player wants a clean wave. "We have a lot of sensitive equipment these days that will not operate with distortion. All these solar farms and wind farms tend to create this harmonics and distortion,” he said.

Varma is Western’s leader on a project that has been awarded $16 million by the Ontario Centre of Excellence to solve how to integrate large-scale photovoltaic solar power farms into the Ontario’s system.

Teene faculty, 10 from Western and six from the University of Waterloo, are working on the project that is backed by major industry players, including First Solar, which is building a 60 megawatt solar farm on 1,200 acres near Sarnia.

Some of the most important work is examining land use policies, he said.

“Ontario wants to go green, they want to invest in renewable technologies with wind and solar farms, but they are both land intensive and you are cutting into agricultural land. The question is what sort of policies should Ontario have so that you can encourage both solar and wind but not cut into agriculture,” he said.

Which energy sources dominate the future will have a lot to do with politics and location, said El Naggar.

For Ontario, the best prospect appears to be biomass, converting crop residues and the byproducts of food processing into chemicals and fuels, like the work being done at Western’s newly opened facility, the Institute for Chemicals and Fuels from Alternative Resources (ICOFAR) led by engineering professors Franco Berruti and Cédric Briens. (Read more about ICOFAR on page 10.)

“I can see that becoming a very significant industry here,” El Naggar said. But no one should expect to all of give up its decades of dominance without a fight.

“There will be very significant resistance from the oil companies and we will have to see who wins.”
Who says the world is running out of oil?

Western researchers are engineering new technology that converts agricultural waste into bio-oil – the essential building block of countless fuels, chemicals and plastic materials. As home to North America’s first professional degree program in Green Process Engineering, Western is a leader in the development of renewable resources.

During 25 years as a highly successful energy entrepreneur, Paul Woods built two companies worth $170 million and became a major player in the distribution of natural gas all across Canada and the U.S. Now he’s poised to embark on the adventure of a lifetime – creating a brand-new “clean energy” technology by using genetically engineered blue-green algae to manufacture low-cost ethanol that he hopes will challenge the oil industry and help to stave off global warming.

He calls it the “Holy Eureka! moment,” and he says it took place only a few blocks from Western’s campus, back during the spring of 1984. He was a senior that year, and majoring in biology. Sitting in the living room of a friend’s apartment, he was toying with “a truly ridiculous” bit of scientific speculation – the kind of speculation that might provide the plot for a science fiction novel.

What if human beings could make their own food through “photosynthesis,” the same way plants do, simply by converting carbon dioxide to sugar in the presence of sunlight?

It was an absurd hypothesis, of course, utterly absurd. And yet... All at once, Paul Woods, BSc’84, sat up straight on his friend’s living room sofa. With a sudden shock, he realized that his ridiculous speculation (“Human beings outfitted with gills, making sugar from sunlight!”) might actually make sense... if he applied it to a problem that had been absorbing him for some time in an on-campus biology lab: Finding a way to convince blue-green algae to produce a basic combustion-engine fuel, ethanol, in huge quantities.

Solution: What if Woods were to use state-of-the-art “gene-splicing” technology to ‘recombine’ the algae DNA with genetic material from another species (yeast, maybe?)... in order to create a form of algae that could produce ethanol in its cells in vast amounts, instead of in the tiny amounts that were normally synthesized there?

A screen cap of a magazine article with a headline about energy to burn and a picture of a person holding a bottle with a liquid dripping from it.
If that could be accomplished (and it was an enormous ‘if’)… then Woods might be able to ‘farm’ ethanol for an energy-hungry world in enormous quantities—and at prices so low they might shake up the oil industry and astonish everyone who owned a car or truck.

**HOLY EUREKA!**

It took Paul Woods nearly 25 years to transform his dream of deriving low-cost (and environmentally friendly) ethanol from blue-green algae (the soupy, summertime gunk that most of us refer to as ‘pond scum’) from a wacky sci-fi concept to scientific reality. But he pulled it off. While building two large energy companies over two decades, the incredibly tenacious and goal-oriented Woods worked relentlessly to keep alive the idea that he’d originally been born in that cluttered apartment near the Western campus, back in April of ’84.

Three years ago, after having sold one of his natural gas businesses for more than $100 million, the never-say-die Woods amassed his colleagues by launching a brand-new company that will, indeed, specialize in creating ethanol from genetically engineered blue-green algae—and then in selling it to the U.S.-Canadian energy market that has seen gasoline prices soar toward the once-unimaginable plateau of $4 U.S. a gallon (3.8 liters) in recent years.

Ladies and gentlemen: meet Paul Woods, the high-flying computer engineer and my former Western biology major actually a demonstration ethanol-manufacturing plant and within a few years of nailing down his Bsc in biology, he was already neck-deep in the creation of a brand-new natural gas enterprise – Alliance Gas Management, which he launched in Toronto in 1989. “I was convinced that we could find a way to sell deregulated gas to major users at prices that were well below what the major suppliers were charging,” he says.

“You have to remember here is that we’re producing ethanol directly from the cells of the living algae,” says the co-founder and CEO of Algenol Biofuels, a Florida-based energy startup which is about to begin building a demonstration ethanol-manufacturing plant in Freeport, Texas. “With our process, you don’t have to harvest a crop before you can begin extracting the ethanol.”

According to the hard-charging Woods – who says he was “lashed out of a dozen corporate offices, including Sunoco of Canada” when he first began pitching the idea of making auto and truck fuel from algae about 20 years ago – the Algenol manufacturing process can produce 6,000 gallons of ethanol per acre of land, compared to only 400 gallons per acre that can be extracted from corn.

DOW CHEMICAL ANNOUNCES PLANS TO BACK WOODS & HIS DARING ‘BIOFUELS’ VENTURE

Can Paul Woods actually pull it off? Can the former Western biology major actually produce commercially viable ethanol at $1.25 a gallon (or about 30.33 per litre), while using no arable land and creating no carbon dioxide or other greenhouse gases in the manufacturing process?

Ask Woods why he’s so convinced that his unique and patented method for extracting high-octane ethanol from ordinary blue-green algae (“pond scum”, to the layman) will work, and the veteran inventor and energy entrepreneur doesn’t hesitate:

“How do you drive a car if you don’t have a car? You have to have a supply of ethanol.”

Woods & HIS DARING ‘BIOFUELS’ VENTURE

The Woods method for synthesizing fuel for combustion engines from pond scum calls for vast arrays of outdoor troughs that hold seawater. The photosynthetic algae in the troughs are fed carbon dioxide and animal waste in the presence of sunlight, and they respond by synthesizing sugars for food. Later in the process, the genetically altered algae nudge the sugars through a series of enzyme reactions that slowly transform them into ethanol.

While opinions differ about Woods’ chances for ultimate success as a pond scum energy farmer, one major energy industry giant seems convinced that he’s on something big.

At the corporate headquarters of mighty Dow Chemical in Midland, Michigan, a team of product research analysts recently announced that the company will back Woods and his Algenol Biofuels startup by helping to construct an ethanol-manufacturing “demonstration plant” with Algenol within the next year.

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Thus new opportunity to ‘farm’ ethanol for an energy-hungry world in enormous quantities — and at prices so low they might shake up the oil industry... and he pulled it off...
“You might want to stay in the truck,” says Stephen Buccarelli, BA’08 (Huron, Philosophy), as he grabs his equipment and walks to the two crates waiting in the flatbed. When he returns to view, Pandora (pictured on previous page), is sitting motionless on his gloved wrist, her head covered with a tasseled hood.

Still tethered by her leather jesses, Buccarelli removes the blind. Pandora blinks and tilts her head to take in the surroundings. Kneeling, Buccarelli prepares to release her for flight. A cloud of squawking gulls fills the air as the three-year-old bald eagle stretches her wings. Evidently, it is time to seek safer pastures.

Buccarelli is one of the lucky few. He discovered his passion at a young age and now makes a living doing what he loves – working with predator birds. The 23-year-old is a licensed commercial falconer, but he doesn’t use his skills for hunting. Instead, as founder and president of Predator Bird Services Inc., Buccarelli trains falcons, hawks and his lone bald eagle to drive avian pests like seagulls, Canada Geese, pigeons and starlings away from industrial sites, landfills, high rise buildings and golf courses. The beauty of Buccarelli’s service is that his raptors chase – but don’t catch – their prey.

The seagulls don’t suspect a thing. As we pull into the vacant lot behind the abandoned big-box store, the flock continues to bask in the late summer sun, preening their feathers and bathing in the puddles left over from the previous night’s rain.
As a boy, Bucciarelli kept every reptile and amphibian he could convince his mother to house. “There was nothing about birds that interested me,” he says.

That changed when a Cooper’s hawk made the backyard birdfeeder its hunting ground. “He’d come through super-fast trying to catch the birds. It was fascinating to watch and I decided I had to have a hawk.”

Bucciarelli consumed books on falconry and went online to meet others interested in the ancient sport. He applied for his hunting license and began the two-year apprenticeship to become a licensed falconer.

Back in the truck, Bucciarelli drives around the empty lot while Pandora soars somewhere overhead. Although trained to follow the vehicle, she would have no problem surviving on her own in the wild, Bucciarelli comments.

Food is the key to any raptor’s training, but teaching his birds to harass but not kill is a trade secret that Bucciarelli declines to reveal.

<table>
<thead>
<tr>
<th>Species</th>
<th>Native to</th>
<th>Specialty</th>
<th>Number of Avian Staff</th>
<th>Founder &amp; President</th>
<th>Year of Incorporation</th>
<th>Weight</th>
<th>Wing Span</th>
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<tbody>
<tr>
<td>Lanner Falcon (3 months old)</td>
<td>North America</td>
<td>Small bird abatement, particularly starling and pigeon control</td>
<td>6</td>
<td>Stephen Bucciarelli</td>
<td>2007</td>
<td>2 pounds</td>
<td>4 feet</td>
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<td>Raven Falcon (4 years old)</td>
<td>North America</td>
<td>Pigeon control</td>
<td>8</td>
<td>Stephen Bucciarelli</td>
<td>2007</td>
<td>2 pounds</td>
<td>4 feet</td>
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<tr>
<td>Harris’ Hawk (3 years old)</td>
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<td>Pigeon control</td>
<td>8</td>
<td>Benjamin Grosbeck</td>
<td>2007</td>
<td>4 pounds</td>
<td>4 feet</td>
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<tr>
<td>Peregrine Falcon (2 years old)</td>
<td>South America</td>
<td>Pigeon control</td>
<td>8</td>
<td>Christopher Grosbeck</td>
<td>2007</td>
<td>2 pounds</td>
<td>4 feet</td>
</tr>
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</table>

The truck stops and Bucciarelli whistles for Pandora to come in. She swoops low over the field, then pulls up to stare at the roof.”That can get a bit hard on the paint job,” Bucciarelli laughs.

“You can see how birds just hate Pandora,” he says, gesturing to the empty sky. “I don’t even need to fly her to scare things away. I just take her out of the truck and every bird in the area will leave.” Her exercise over, Pandora returns to her wrist and devours a raw quail.

London’s Wolverine Tube had a Canada Goose problem. Hundreds of birds had moved into their parking lot. Droppings ended up all over the copper tubing plant floor, tracked in on worker’s boots. Patrolling dogs didn’t remedy the situation, so Wolverines’ environmental safety supervisor, Kevin Grosbeck, called in Predator Bird Services.

Bucciarelli arrived with a Harris’ hawk, his own dog – a Munsterlander named Molly – and some small pyrotechnics. They worked as a team to flush the geese out and chase them away. “Steve actually had Pandora perch on the front of our building overlooking a few times, just to make sure they didn’t come back,” Grosbeck says.

But Canada Geese were the least of their worries. “They were having problems with people being – how do I put this politely – dropped on,” Grosbeck says.

With Pandora safely returned to her crate, it’s time for Apollo to make an appearance. The three-month-old Lanner falcon has only been flying freely for a few days and is hesitant to venture off on his own.

“With these little birds you just have to let them go and play,” Bucciarelli says. On a windy day, he would bring along a kite to encourage Apollo on his adventures. “The bird will cruise around, working his way up to the kite, learning about thermals and how to stay up (in the air),” he explains.

Once fully-trained, Apollo will chase pigeons from apartment building balconies. And when he’s not working, he will be free to roam the skies high above Bucciarelli’s north-London home.

At 2,000 feet, Apollo will have a clear view from Lake Huron to Lake Erie. “No one will notice this little guy,” Bucciarelli says. “And if he does get lost, he’ll just go up in the sky and look for a landmark.”

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Stephanie Grosbeck, BASSH, with Peregrine Falcons, Lickety and Split.
INCHING CLOSER TO A CURE FOR AIDS

After more than 20 years of labouring on an HIV/AIDS vaccine, The University of Western Ontario’s Yong Kang continues to inch closer to what would be an historic moment for mankind – a vaccine to prevent the disease that has taken 25 million lives and sees another 35 million infected worldwide.

Developed by Kang and his team at the Schulich School of Medicine & Dentistry, and licensed to SanoGent Canada Inc, the vaccine completed animal toxicology trials in April and following United States Food and Drug Administration (FDA) approval (pending) will begin Phase 1 human trials for its sAV001 AIDS vaccine.

“The application for the approval of Phase 1 human clinical trials is a very important milestone for our vaccine development,” says Kang. “We hope this vaccine is it, and hopefully this vaccine will prevent HIV infection and save millions of lives.”

By PAUL MAyne
According to the HIV Vaccine Trial Network, after an experimental vaccine has been tested in laboratory and animal studies to determine its safety and immune response, it must successfully complete three stages of testing in people before it can be licensed.

The Phase I clinical trials, if approved, will double-check the safety of the vaccine using HIV-positive volunteers. The second stage – Phase II trials – would then assess the immunogenicity of the vaccine. Human trials are necessary to test the efficacy of the vaccine in protecting against HIV infection because the HIV virus does not cause AIDS-like symptoms in animals, says Kang. However, the immune responses in the animal trials have been promising, he says.

Since the AIDS virus was recognized in 1983, there have been numerous trials through pharmaceutical companies to develop vaccines, however, no commercialized vaccine has been developed to date.

If the vaccine is given the go-ahead to enter human clinical trials, it will be at least four years before Kang expects to have statistically significant results. The vaccine against different viruses in different regions in the world.

"In HIV there are at least six major sub-types, so you have to make a vaccine against each and every sub-type in order to have a really effective vaccine," says Kang. "If this virus vaccine works, then we can use the same strategy to customize the vaccine against different viruses in different regions in the world."

Kang’s vaccine has been manufactured at a bio-safety level 3 (BSL3) good manufacturing practice (GMP) facility in the United States. That may soon change, as London, and Western, are currently one of four organizations on a short list of Canadian cities under consideration by the federal government to build Canada’s first HIV vaccine manufacturing facility. Part of the funding for the secure, ultra-high-tech $88-million HIV vaccine manufacturing facility will come from the Bill and Melinda Gates Foundation.

Kang is hopeful London and Western’s bid will be successful, as having a facility closer to home will help his research. It would also be more convenient. "When we were looking for facilities like this to manufacture our vaccine we could find only a few around the world," he says. "This kind of facility near us would help us to manufacture our candidate vaccine and also future vaccines."

"This is exhilarating and promising news for London," says Ted Hewitt, Vice-President (Research and International Relations) at Western.

“We have our work out for us, as I am sure the competition will be tough, but London and Western have a great history of research and manufacturing success. This is exemplified by the leading research of Dr. Yong Kang in developing an HIV/AIDS vaccine."

"It has been a tremendous effort to engineer or design a vaccine," says Kang, adding “this type of research and development is so important for humankind to saving millions of lives."

"The success of this vaccine will really help the millions and millions of people around the world affected by HIV/AIDS. We can save lives."

HIV/AIDS has taken more than 25 million lives and today 35 million people are living with HIV, says Kang. "It has been a long, painful process, but we have gotten to this stage now, to test our vaccine, and see whether or not it can prevent HIV infections. Despite the tremendous amount of scientists working on this project, to date there has not been an effective vaccine."

Kang and his team have invested years getting to this point; even so, they are not alone in having created a vaccine that could potentially curb the deadly toll of this virus. "We have been working on this project for over 20 years," says Kang. "It is a long, painful process, but we have gotten to this stage now, to test our vaccine, and see whether or not it can prevent HIV infections. Despite the tremendous amount of scientists working on this project, to date there has not been an effective vaccine."

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"He has developed the technology to take it this far in a process where dozens of other potential vaccines, from much larger institutions globally, have failed," says Hewitt. "We are tremendously proud of Dr. Kang’s accomplishments to this point."

Kang says while he sees the trials of fellow scientists worldwide fail, which he admits can be discouraging, he is confident his approach to the vaccine is a step others have not taken.

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As a dentist, has he ever felt guilty about hitting opponents in the mouth? “Never. I never felt guilty about it—because boxing is the one sport where you have nowhere to hide. You have no one to pass the ball to. You can’t trade off with another player. You can’t ask for a timeout.”

There’s nobody to protect you but you. That’s why it’s sort of something you should walk away from. But you miss it."

Witzu’s family had their concerns. "My wife Marjorie didn’t like it. None of my family liked it. In fact the only time they’d watch it was on tape. They would never come and see me fight. I have two kids, my son is 33 and my daughter is 32. They didn’t want to watch either. They kept thinking ‘Gee Dad, aren’t you a little old for this?’"

So it is time to hang up the gloves now that he’s won the title. "For this year I’ve enjoyed being the champion. I’ve had offers to fight—but the guys really weren’t worth fighting. Not that I want to sound arrogant but they just weren’t title ready. Guys want a shot at the title—but fight a few guys first and see if you’re ready. I didn’t get my title by beating an average fighter.”

Witzu, who turned 60 in September, says the promoters are asking him to go back. "If I had to put my signature on the paper today I’d probably say no. You retire undefeated. It’s sort of something you should walk away from. But you miss it.”

How do you motivate a dentist to win a boxing title? Try hitting him in the mouth. That was enough to make Terry Witzu DDS’74, win the Heavyweight Masters Class Amateur Boxing belt at the age of 59 last year in Kansas City, Missouri—a first for a Canadian. But how does a dentist from Sudbury become a champion of 59 last year in Kansas City, Missouri—a first for a Canadian boxing title? Try hitting him in the mouth.

The dentist started boxing and winning six months before he went to the final, so I had a lot of therapy to do. And I had three broken ribs just before that. So, I was recovering but I was determined to fight. I had to duct-tape my ribs to hold them in shape while I was training."

"With his rotator cuff healed and in prime shape from hard training, he was determined to win."

His opponent was a "pretty tough guy from Kansas City," a hometown favourite and he got in a really good hook, first shot, says Witzu.

"I lost three teeth. Right through my mouthguard. I felt my teeth crack."

That was just the inspiration the dentist needed to win the belt.

"I thought to myself my nose has been broken many times, I’ve fought with three broken ribs, I’ve had two broken fingers, I’ve had cuts on my face. But you know what ticked me off? I’m a ***n’ dentist. You don’t break my teeth. And I beat him 20-1.”

Witzu did some research and found out about the World’s Masters Boxing Championships. "After you hit 34, you can’t compete in the international amateur arena anymore. So, they developed the masters (class) for 40 to 60 year olds as a way people who already, professional fights. They could hit guys were in their 20s and had 22 knockouts already, professional fights. They didn’t get to the Olympic heavyweight, and the light heavyweight sparred with the Canadian Olympic boxing coach Peter Yannacoureas.

“i trained like a dog. I actually tore my rotator cuff six months before I went to the final, so I had a lot of therapy to do. And I had three broken ribs just before that. So, I was recovering but I was determined to fight. I had to duct-tape my ribs to hold them in shape while I was training.”

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Western Ontario Alumnii

As the final countdown to the Vancouver 2010 Olympics approaches, it’s becoming harder to turn on a television without hearing mention of the Winter Games.

But one alumna already has her sights on another Olympic event scheduled to take place on Canadian soil next year – the 2010 Special Olympics. What’s more, the upcoming summer games are set to be held on the Western campus.

President and CEO of Special Olympics Canada Deborah Bright, B.A.'90, M.A.'92, said organizers are already in high-gear working to secure facilities, recruit volunteers and build momentum for the event, which is expected to draw about 1,100 athletes with an intellectual disability from across Canada.

Although she’s only been at the helm for three years, Bright is no stranger to the organization. In fact, she got her start right after graduating from Western, working at Special Olympics Ontario for two years, followed by five years at Special Olympics Canada.

At that point in her career, Bright decided she wanted to switch gears and left the world of sports for a newsroom in Alberta, where she worked as a reporter at the Calgary Herald for seven years.

But when the opportunity to take on a leadership role at Special Olympics Canada came up, she couldn’t resist returning to her roots. The appeal wasn’t about running the show at a high-profile organization, however. It was about the inspirational stories of athletes, the powerful way sports can instill a sense of pride and achievement in those involved, and being part of a community where trying one’s best is regarded as the most accurate measure of success.

“I think sport becomes a vehicle which everyone can relate to,” Bright says. In the years since she started working at the Special Olympics, Bright says the organization has grown tremendously, attracting more volunteers and corporate involvement in the form of sponsorships and work programs for athletes off the field, which has helped change how many Canadians perceive the games.

“There’s a greater acceptance,” she says. “When you see someone’s success, you don’t just say that lightly. “I was very fortunate to have some front-line involvement in the form of sponsorships and work programs for athletes off the field, which has helped change how many Canadians perceive the games.”

Bright says much of her success is tied to her days at Western, where many of her experiences would help guide her career, particularly being involved with the Winter Special Games, a yearly event geared toward special-needs students.

“I don’t just say that lightly,” Bright says. “I was very fortunate to have some great experiences.”

While at Western, Bright also forged many ties with faculty members that she has maintained for years. One of them, kinesiology professor in the Faculty of Health Sciences, Darwin Semotuk, is one of the co-chairs of the 2010 organizing committee.

With just months to go before the big event, Bright is already looking forward to bringing the games to Western and the City of London, a place that holds wonderful memories and helped launch her career.

“To have that on campus and to have the Western sense of pride there, I think it’s going to be amazing.”
In the 1960s it was bumbling secret agent Maxwell Smart of the Get Smart series who had ‘mobile phones’ that would make the iPhone blush. Whether it was the now famous shoe phone or hidden telephones in his necktie, watch or garden hose, Agent 86 had all the toys. But jump ahead four decades and the latest mobile phone offerings are making the sci-fi more tangible than ever thanks to Wi-Fi.

Oh, and BTW, an Australian engineer, Paul Gardner-Stephen, has developed a working prototype of the shoe phone with a mobile handset fitted in one heel and a Bluetooth headset in the other. He plans to develop a spinoff version of the technology for measuring pulse, blood pressure and other medical information that would be stored in the shoes.

**THE ORIGINAL SMART PHONE**

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**APPLE.COM/IPHONE**

The iPhone is the media darling smart phone dripping with style and lots of great applications built for it. The latest iPhone includes a video camera and on-board video editing (and publishing). If you’re the type who loses things easily, the iPhone can be found again (or remotely wiped to keep secret information secret) with Apple’s MobileMe service.

- Huge application catalogue
- GPS, onboard video editing
- Lack of physical keyboard, requires iTunes to sync data with a computer

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**BLACKBERRY STORM**

The Blackberry Storm is Apple’s main competitor in the touchscreen market. Engineered and built by Canadian company Research in Motion (RIM), the Storm carries on the established reputation of Blackberry devices that have come before it. Like the iPhone, the Storm doesn’t have a physical keyboard.

- Reputable brand, touchscreen input, expandable memory
- Arguably too many styles, limited default memory, no Wi-Fi support

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**PALM PRE**

The Pre, dubbed the “iPhone killer” when it was launched on June 6, 2009, is the latest foray into mobile devices by Palm after the Treo handset device. One of the Pre’s unofficial abilities was to sync with iTunes. As Apple updates iTunes, the Pre’s ability to sync with it disappears.

- Qwerty keyboard, touchscreen, large memory, supports Wi-Fi
- Some hardware issues with screen problems and overheating

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**ANDROID.COM**

The killer feature of Google’s Android phone is that it is “open source”. It’s designed to let anyone build apps for it. It’s also set up so that the platform can exist on many different devices from many companies. That means that any handset maker can potentially be a platform for Android.

- Open source, deployable on all, uses Google’s app base
- Being open source could lead to hacking, limited application base
During the early years of the twentieth century students at Western adopted a number of ‘initiations’ to welcome new students to university life. In 1939 many of these activities such as the tug of War, staged near University Bridge, were interpreted by members of the Board of Governors as a form of hazing and the university ended the practice. Following WWII a popular ritual was the “Snake Dance.” Frosh, wearing their Beanies, would gather in Victoria Park forming an unbroken chain of dancers who snaked their way along Wellington Street to Dundas and turning west would end at the Capitol Theatre to watch a movie. London City Police provided an escort and frequently blocked traffic to ensure safety of the students.

Public complaints about over zealous students opening car doors and making their way through vehicles and out the other side along with a general rise in rowdy behaviour began to put a damper on the tradition. In 1960 the journey from the Park to the Capitol had been virtually reduced to a walk. By the mid-1960s the Snake Dance was just a memory.

Photographs (clockwise from top): Frosh along Dundas Street September 23, 1953; Snake dancing along Dundas Street September 28, 1948; Snake dance September 29, 1953 ends at the Capitol Theatre; Beginning the 1957 Snake Dance in Victoria Park September 27
NEW RELEASES

THE THIRTEENTH ONE
What would you do, during the Depression, if you were the mother of 12 children, some who need medical attention, and a rich childless woman came to you and is willing to help you save your farm if you will give her your unborn child? London’s own Denyse Gervais Regan, BA’92, brings us The Thirteenth One, an account of her family’s determination to make it through the Depression despite the losses, a ruthless bank manager, and too many mouths to feed. Book orders at: ldregan@sympatico.ca or visit denysegervaisregan.com

THE BIG BOOK OF CANADIAN TRIVIA
The Big Book of Canadian Trivia is a “greatest hits” book that contains the best Canadiana and trivia from previous eight books, plus a considerable amount of new material. Readers will find all the trivia and facts about Canada they need to know. All regions and provinces are covered, as well as important Canadian figures like John Molson, Elizabeth Arden, and Russ Jackson. www.triviguy.com

CANADIANS IN SPACE: THE FOREVER FRONTIER
Veteran writer John Melady, BA’92 (King’s), has recently released his 35th book, Canadians in Space: The Forever Frontier. On October 5, 1984, Marc Garneau became the first Canadian astronaut when he launched aboard the shuttle Challenger, and women. www.ubcpress.ca/search/title_book.asp?BookID=29172319

BIRD CHILD
Bullying and the ability to rise above it are at the heart of the strikingly beautiful picture book Bird Child by Nan Forler, BEd’88. All school-aged children have either been bullied, been bullied, or witnessed bullying, and all too often, they feel powerless to stop it. Such is not the case with Ilia. Her mother has given her “wings to fly” and the ability to see all the possibilities. Forler’s text is complemented beautifully with François Thibideau’s haunting images. www.recoliful.com

A IS FOR ARIA
Dawn Martens, MA’87, is known worldwide for her work with young children and opera. Her opera productions at Buchanan Park Public School in Hamilton have garnered rave reviews and teaching awards. Her first book, A is for AriA, is an alphabetized journey through the amazing world of opera. Using themes and brief explanatory notes, Martens brings student drawings to life while delving into all aspects of opera production. www.apopc.ca or www.firstbooks.ca

RAISING THE BAR
Raising the Bar—Preventing aggression in and around bars, pubs and clubs by Glenn Dietzel, BC’87 – demonstrates to “just write” a moneymaking book in less than 12 hours and builds a business focused on multiple streams of income in Author and Get Rich. Five years ago he replaced the combined income of himself and his wife in 127 days and launched an authoring and e-publishing company that quickly caught the attention of a publishing giant. Adobe. He created an authoring process that teaches how to fast write a book and make money. www.AuthorAndGetRich.co.uk

THE WORLD AND DARFUR
The crisis in Darfur has led to systemic and widespread murder, rape, and abduction, as well as the forced displacement of millions of civilians. The World and Darfur, edited by Amanda F. Groff, BA’74, MA’79, assistant professor at Western, brings together genocide scholars from a range of disciplines—social history, art history, military history, African studies, media studies, literature, political science, sociology—to provide a cohesive understanding of the crisis in Western Sudan. http://onqmp.ucfl.edu/book.php?bookid=2336

UNVEILING THE BREATH
Unveiling the Breath: One woman’s journey into understanding Islam and gender equality by Donna Kennedy-Glans, LLB’04, tackles the pressing issue of changing roles that men and women confront in a globalizing world. It explores the whole issue of gender within the Islamic world, that the author has observed firsthand through humanitarian work and as the first female VP of Heemst de, a Canadian-based energy company operating in Muslim countries. All proceeds from this book go to advancing gender harmonization. www.canalindiges.com

JOURNEY TO FREEDOM
In Journey to Freedom, Valdemus (Woody) Zwanitz, BA’70, has translated and expanded on his mother’s true story of a family torn apart by WW II. The book describes the difficulties faced and the obstacles overcome by Valda Nudelkis and her boys during their four years in Sweden and the unlikely journey across the Atlantic. Ossinou in a small surplus Navy trawler to begin a new life in Canada. www.volumesdirect.com

MORE THAN LIFE ITSELF
More than Life itself: A Synthetic Continuation in Relational Biology by mathematical biologist Alkinoos Louie, BC’78, MA’79 (Mathematics) explores how biology is a subject concerned with organization of relations. Life is not characterized by its underlying physico-chemical structures, but by its relations: what they do, and to what end. In other words, life is not about its material cause, but it is intimately linked to the other three Aristotelian causes, formal, efficient, and final. www.onqmp.ucfl.edu

THE PRACTICE OF HER PROFESSION
The Practice of Her Profession. Florence Carlyle, Canadian Painter in the Age of Impressionism by Susan Butlin, BA’01, tells the story of Florence Carlyle (1864–1932), born in Galt, Ontario, who emerged as one of the most successful Canadian artists of her time. Trained in Paris, she worked in New York City and Canada, cultivating a career as a popular portrait and genre painter. Butlin draws on unpublished letters and family memoirs to recount Carlyle’s personal and professional life. http://onqmp.ucfl.edu/book.php?bookid=2319

THE LAWSON SITE
Western grad Jacob M. Anderson, MA’05, MLS’07, has compiled an authoritative book on the Neutral Iroquois who occupied southwestern Ontario in the fourteenth to early sixteenth centuries, The Lawson Site: An Early Sixteenth-Century Neutral Iroquoian FORTsite (Ontario Archeology, Special Publication No. 2). It contains descriptions of all of the major artifacts classes discovered on the Lawson archeological site in northeast London, and interpretations of these artifacts. For purchases, contact the Museum at 519-473-1360. www.onqmp.ucfl.edu
Inside a low-slung, non-descript building on the edge of campus, the wind tunnel at Western University — through the power of his imagination — recreated the world.

Walk through the halls of his “wind tunnel” with the modest but brilliant researcher, scientist, professor and colleague, past miniature replicas of every single major bridge and building that has been built in modern times and you can feel the scope and reach of his touch. He says hello to everyone he meets, is gracious with his time and knowledge and is clearly loved by those he works with.

But when it came to wind, the world came to Davenport. Models litter the halls of the Boundary Layer Wind tunnel like trophies. There’s the CN Tower. The Sears Tower in Chicago. The Normandy Bridge in France. The Hong Kong and Shanghai Bank in Hong Kong. The World Trade Centre in New York.

Turns out that Davenport even tested the Towers for the impact of an airplane hitting the buildings a way back in the 1960s. The problem was the planes were much smaller and the amount of gasoline they carried much less. Not even his genius could predict that an evil mind would turn an airplane into a human bomb.

In fact, in a book by two New York Times reporters called “City in the Sky: The Rise and fall of the World trade centre,” the writers note that Davenport was concerned about the buildings swaying too much in high winds and so he invented a system of “shock absorbers” to stabilize them during construction. When the planes hit several decades later, many speculated his invention probably saved hundreds of lives.

His research even took on one of the greatest challenges of professional golf. Davenport and his team at the request of Sports Illustrated tried to explain how to play the perfect golf shot at “Amen Corner,” a famously windy hole at the Augusta national Golf Club.

The truth of it was Davenport was fascinated by wind and the power of nature.

Growing up in Madras, India, where he was born on September 19, 1932, he recalled the roof of his family home was supported by bags of sand to keep it in place when the monsoon rains came. When he was awarded the first Hellmuth Award for distinguished research at Western, his lecture borrowed from a famous Bob Dylan tune of the 1960s — “The answer is blowing in the wind” — and he mesmerized a crowd of hundreds in a packed lecture hall.

When a series of hurricanes hit the coast of Florida in 2004 (Hurricanes Charley, Frances, Ivan and Jeanne) with unprecedented speed and power, he called me over to the wind tunnel to meet with him on a Saturday morning. He wanted the world to know this was important stuff and he gave interviews to leading publications in Canada, Britain and the United States.

Like many accomplished people, Davenport was honored many times for his work. He was named a Member of the Order of Canada in 2002. He also received 10 honorary degrees, six from Canadian universities and four from universities in Argentina, England, Denmark, and Belgium. He authored more than 200 scholarly works, was named a member of the Royal Society of Canada in 1972 and became a Foreign Associate in the National Academy of Engineering.

But for all the accolades, world success, and recognition, he remained a modest man, brilliant in his work and happy in his life and times.

Though his work took him around the world, London, Ontario always remained home. It was there that he passed away on July 19, 2009 of complications from Parkinson’s disease. His wife, Sheila, his daughters Anna and Clare and his sons Andrew and Tom were with him.

**A Tribute to Alan Davenport, 1932-2009**
2009 ALUMNI AWARDS OF MERIT

YOUNG ALUMNI AWARD
The Young Alumni Award recognizes significant contributions by an outstanding individual in their field of endeavour, whether through professional achievement or community service. The recipients are aged 40 or under and set an inspirational example for future young alumni.

Shuman Ghosemajumder, BSc’96
Shuman says Western laid the foundation for both his future education and career. “The World Wide Web, which has enabled my entire career, was just getting started while I was a computer science student at Western,” says Shuman. “I was the first student webmaster at Western, and was able to take advantage of the outstanding computing resources to learn about web technologies, even though there were not any courses on them at the time.” Shuman notes his time as a member and President of the Western Debating Society taught him about communication and leadership. Today Shuman lives in California with his wife of six years, Dr. Pija Suraci. He leads Trust & Safety product initiatives at Google, where he focuses on protecting users, advertisers and partners against click fraud and related threats. Arriving at Google in 2003, Shuman is known for helping grow Adsense into a more than $2 billion-a-year business.

PROFESSIONAL ACHIEVEMENT AWARD
The Professional Achievement Award recognizes superior achievement in a professional field. The recipient is a role model for newcomers and sets standards to which others can aspire.

Ron Potter
Ron Potter says everything he has accomplished has been because he stepped into the middle of the stream and got swept away. “Not once did I ever say I’d like to be involved – all of my activities have been a result of someone coming up to me and saying they could use my help.” says Ron. He spent 30 years volunteering with the Canadian Cancer Society. As Ontario Campaign Chairman, Ron was responsible for Terry Fox and his run in Ontario. The former athlete in football and basketball only attended Western for one year and completed his degree at Waterloo Lutheran University in 1956. Throughout the years, Ron has maintained his dedication to Western. He switched from playing to coaching football and was recruited by John Hnatiw to assist in coaching the Mustang football team from 1968 to 1973. Today he is an Honorary Officer with the “W” Club and remains on the Board of Foundation Western as Past President. For the complete 2009 Alumni Awards including Women’s Athletic Alumni Maira Berzins Award Recipients and “W” Club Hall of Fame Inductees please visit: www.alumnigazette.ca

COMMUNITY SERVICE AWARD
The Community Service Award pays tribute to alumni who have made outstanding contributions to the community and through this generous gift of time and talent, have enriched the lives of others. Recipients have championed civic, charitable, philanthropic and social welfare causes.

Ruth Shipman Morawetz, BA’53
Ruth Morawetz credits Western for having an enormous impact on building her career. “I was challenged with the teaching and skills of faculty members who were excellent professional musicians,” says Ruth. Experienced in both classical and contemporary music, Ruth has been a pianist for The National Ballet, Senator Accompanist at the acclaimed Classical Cabaret. Ruth’s volunteer contributions are a testament to her dedication to the arts. She organized 178 Preview Lectures with the Toronto Symphony Orchestra, booked and chaired 88 programs for the Toronto Arts and Letters Club; coordinated Jean A. Chalmers Awards for the Canada Opera; and has organized numerous fundraising galas over the years.

REGIONAL BRANCHES: CANADA
Burlington, Ont.
The Future of Local Media Panel
January 19, 2010
Calgary, Alta.
Calgary Holiday Reception
December 8, 2009
Calgary Flames Alumni Hockey Night
March 22, 2010
Edmonton, Alta.
Edmonton Oilers Alumni Hockey Night
March 26, 2010
Elgin County / St. Thomas, Ont.
70th Annual Alumni Dinner Picnic
June 9, 2010
Guelph, Ont.
Evening at the MacDonald Stewart Art Centre
January 21, 2010
Halifax, N.S.
Wine Tasting at the Halifax Club
February 20, 2010
Kitchener, Ont.
Wine Tasting & Food Pairing at Westmount Golf and Country Club
March 25, 2010
London, Ont.
London Knights vs. Kitchener Rangers
December 11, 2009
Senior Alumni Program
January – March 2010
London Knights Alumni Lodges Beer Tasting Event at The Next Door Pub
January 22, 2010
London Knights vs. Sudbury Wolves
February 14, 2010
Founder’s Day Quiz Night at The Spoke
March 7, 2010
London Knights vs. Windsor Spitfires
Silver Kang Co-Op Alumni Hockey Tournament
April 11, 2010
London, UK
Love your London at the ARTS Project
June 4, 2010
Montreal, Que.
Alumni Cocktail Reception
“The Future of Education”
February 4, 2010
Ottawa, Ont.
Toronto Maple Leafs at Ottawa Senators
March 16, 2010
Regina, Sask.
Alumni Mix and Mingle
January 29, 2010
Saskia, N.Z.
Hockey Night in Saskia
LCBO Tasting event
Spring 2010
Saskatoon, Sask.
Alumni Meet and Greet at the Saskatoon Club
January 28, 2010
Toronto, Ont.
Rick McKee at The Duke
December 6, 2009
Alumni Lecture Series Open House
December 6, 2009
New York Knicks at Toronto Raptors
March 6, 2010

REGIONAL BRANCHES: INTERNATIONAL
Bridgetown, Barbados
Wine at Whisper’s On The Bay
December 4, 2009
Dubai, U.A.E.
Jewels of the Emirates Alumni Reception
March 8, 2010
Hong Kong, China
Walk for Millions
January 10, 2010
Rock Climbing & BBQ
January 30, 2010
London Knights vs. Windsor Spitfires
Founder’s Day Happy Hour
March 7, 2010
London, UK
London Knights vs. Windsor Spitfires
International House Sliding Event
January 20, 2010
London Knights vs. Toronto Maple Leafs
UK Branch Founder’s Day Quiz
March 10, 2010
New York, NY
Hockey Night in New Jersey
Pep Night
January 29, 2010
January 29, 2010
President’s Reception
February 18, 2010
Shanghai, China
Alumni Happy Hour
December 12, 2009
Washington, D.C.
Toronto Maple Leafs
January 15, 2010
@ Washington Capitals
January 21, 2010
All Canadian Alumni Dinner
March 4, 2010

SHARED INTEREST GROUPS
The Mustang Old Owls Club
Rooftop Gala 2010
March 10, 2010
Hunting 1911 Anniversary Gala
October 21, 2010

FUTURE HOMECOMING DATES
2010 – September 30 – October 3
2011 – September 29 – October 2
2012 – September 27 – 30

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1950s
On August 17, 1959, the Canadian Medical Association (CMA) presented the 2009 FNG. Star Gazette to business, philanthropy and community volunteer Dr. Donald McC, MD, FRCP, Toronto, B.C. “It was great to see again a source of information to all health professionals,” said CMA president Dr. Robert Cutler. “He is an exceedingly generous physician who is widely admired by medical colleagues for his dedication to making our community and the world a better place.”

1960s
paintings “Ed Bartram – New Works” at the Mira Godard –

1970s
Patricia Anestis-Heinemann, MSc’71, PhD’72 (History), was appointed to the board of Directors of Educators in Residence at the Canadian Investor Relations Institute’s annual conference.

1980s
Senior Cocoa-Cola Executive Penny Mcintyre, MBA’82, has been named the new CEO of Coca-Cola Canada. Mcintyre brings 27 years of global consumer packaged goods sector for 17 years. Prior to this, Mason was employed as a geologist with a number of Canadian and international mining companies.

Educational Advancement Foundation, as a community leader, employee and as an individual. His involvement in the community included roles in Moscow, Johannesburg, London and the U.S.

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L.C. Alan Sutherland, BESC’63, PEng, passed away peacefully on Monday, September 21, 2009, in London, Ontario. His parents were John and Annie Sutherland of Newquay, Nova Scotia, and his wife of 57 years, Myra (nee Casselman) of London, Ontario. He was predeceased by his parents, John Sutherland and Annie Sutherland; his wife, Myra; their son, Peter; and his ashes were scattered at sea in the Bay of Fundy. He leaves his wife, Myra (nee Casselman) of London, Ontario; his children, Allan, Brian, and Robin; his grandchildren, David, Luanne, Elyse, and William; and his great-grandchildren, Anna and Jack. He was a Past Master Mason with Perfection Lodge 616 and a life member of the Canadian Masonic Order of Sovereign Grand Lodge.

Richard Jefferies, B.A. ’84 (Political Science) and Hannah Gordon-Roche, B.A. ’84 (Psychology), jointly married June 6, 2009, died tragically in a catastrophic traffic accident with their beloved Wasabi. Their body was found on June 24, 2009, four days after the return from their honeymoon.

Richard Jefferies, Vice President of Coshocton Industries, Hamilton, is the beloved son of Gordon and Susan Roche of Excelsior, grandson of the late Samuel and Nancy Jefferies and the late Gordon and Eileen Roche and Gordon and Susan Roche of Watertown, all of Watertown. Richard was greatly missed by his many brothers (Kappa Alpha). Hannah Gordon-Roche is the beloved daughter of Vernon and Joan (nee Williams) of Waterford, Canada. Richard and Hannah were the most devoted parents to their children, Michael and Ruby, and their parents, Vernon and Joan, have been extremely supportive of their children and grandchildren.

Michael Waye and Pat Waye of Calgary and beloved grandchildren, Matthew (T_EP’07), Morgan (T_EP’09), and Tyler (T_EP’11) have many children and grandchildren, and their family is greatly missed by countless individuals who were touched by their generosity and kindness.

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It’s autumn, which means next year’s federal budget is just around the corner. No, really. That’s what autumn actually means. By the time the feds announce the date of their budget (usually sometime in February), they’ll already have made just about every important decision about what goes into the year’s plan for taxes and spending. So for anyone who hopes to influence those decisions, it’s important to move early.

With that in mind, Canada’s university administrators are gearing up to re-fight last year’s battles. It’s hard to blame them. Last year’s battles didn’t end well for research and scholarship in Canada, and it’s worthwhile revisiting some of those short-term decisions. But the broader economic and cultural moment so fraught that it won’t do just to ask for the goodies that didn’t get delivered last year.

Canada’s universities are in considerable peril. Just look at what happened the last time Canada pulled out of a recession and an extended bout of deficit financing. That would be the mid-1990s. Governments in Ottawa and every province, of every partisan stripe, finally realized they had been spending far more than they could raise in tax revenues. Deep spending cuts were necessary. The thing about deep spending cuts is, you can really only make them if you realize they had been spending far more than they could raise in tax revenues. Deep spending cuts were necessary. The thing about deep spending cuts is, you can really only make them where there’s deep spending. That means health care and education.

So for a few years the Chrétien government cut deeply in transfers for health care and education. And every provincial government worked harder to protect health care and grade schools from those cuts than universities. It’s pointless to blame anyone for those decisions. They pretty much came with the territory.

It’s territory that’s starting to look familiar again. In only the last year the federal budget deficit has grown from zero – indeed from modest surpluses – to $55 billion, and that’s only the latest guess. When I wrote this, the Harper government still preferred to believe no spending cuts or tax increases would be needed to get out of that hole. But provincial governments, closer to the services most Canadians use, are already further along in their calculations. A few are trying with tax increases. All are looking around for services to cut.

Compare this cold universe with the relatively comfortable world Canada’s research funding has inhabited for more than a decade. Once the Chrétien Liberals got deficits under control they started paying into university research, modestly at first and then in a big way. Paul Martin and Stephen Harper continued that focus, though at a slower rate of increase.

Last year the increases were so modest, and the conditions attached to them so onerous, that a few academics complained. The international contest has changed, they argued, with U.S. President Barack Obama promising a more research-friendly administration than the one he replaced. There’s been a bit of a brain drain from the U.S. to Canada. The danger is that it could reverse.

That’s the argument that has come largely from university teachers. Administrators were more grateful for the big injections of infrastructure money they received, under the rubric of “economic stimulus,” to build up and modernize their campuses.

Over the summer, however, I started hearing from academic administrators who said they were back in sync with their faculties. Now’s the time to invest in people, they said, and boost the budgets of research granting councils so those shiny new labs won’t go underused.

Have you spotted the gap between last year’s fight and next year’s yet? Here it is. Last year’s fight, between new infrastructure and new research dollars, was a fight over the disposition of new resources. But it assumed there would be new resources. Next year’s fight will be a fight against real cuts. It’s going to make the genteel conversations of the past decade, the cozy decisions about how to spend the next few tens of millions, look like a walk in the park.

How should universities respond? The temptation will be to retreat a bit, to make more modest requests — and to make an elaborate show of looking more pragmatic: “Universities generate the ideas that drive the new economy,” sort of thing. The problem with that line of argument is that in a really nasty economic environment, governments on a tight budget will take that as a cue to go hunting for anything a university does that doesn’t, demonstrably, simplistically, generate the ideas that drive a new economy.

Whatever they find that looks like a ‘trill’ by that definition will be in danger of getting cut. And frankly, most of what goes on at a university is hard to justify as part of a job-creation mill. In fact, for a few thousand years, that’s been the beauty of a university. It’s the place where knowledge and beauty go to be measured and nurtured. And modernize their campuses.

I think university administrators should say so, out loud. They need to broaden their defence of the university’s mission, and make it less rigorously pragmatic. After focussing for a decade on research to the exclusion of less hard-headed functions, I think universities need to go back to basics and talk more, outside the campus gates, about the intrinsic value of knowledge, scholarship, beauty, contention, and an environment that urges scholars toward ambition and accomplishment.

Universities need to get better at explaining themselves, and quickly. The weather’s about to get rough.

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