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Thinking outside the box

Today’s global problems — sustainability, clean energy, pandemics — require multi-faceted solutions. Professors are reaching out to colleagues to collaborate across subject disciplines. In the process, they’re changing perspectives, educating tomorrow’s leaders and generating new ways of understanding the world.

by Marie Weeren

It’s a crime, really.

At times we all plot and scheme and imagine the worst, but Anne Emery puts those thoughts to work. After hours, the law analyst walks the Halifax streets — mentally polishing off her fictional characters in macabre fashion. Those shocking ideas are earning national recognition, including a crime-writing award for her first novel, Sign of the Cross.

by Stephanie Domet

Leading from behind

A family tradition led Bernie Derible to join the Canadian military. Since then, he’s been everything from a squadron commander to an equerry for royalty. As part of the Canadian Strategic Advisory Team in Afghanistan, he’s been advising the country’s senior leadership on managing change.

by Ryan McNutt

Research that matters

This year alone, Dalhousie researchers attracted $114 million to further their important work — alleviating pain for children, protecting indigenous health knowledge and predicting reactions during chemical accidents. Such influential research will assist those who shape policy and make decisions in future.

by Julia Watt

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Creatively speaking

Final touches are being applied to this issue of the magazine even as we are going to press — I can’t seem to let it go this time. It’s been months of consideration and collaboration with a talented team to bring a new creative and editorial approach to life.

Recently, I was reminded that it’s wise to take detours and to risk making mistakes, in order to be more creative. And there are moments when life shows us that we need to accept an unexpected direction. Either way, by choice or by circumstance, the result is an opportunity for change.

The university community is engaged in imaginative and unconventional thinking. Professors identify unfamiliar questions and unexpected consequences. They create new knowledge and foster our future leadership.

That next generation of leaders has just arrived in town, revitalizing the campus. One of those students shares his initial thoughts and feelings, reminding us of the value of a fresh perspective. (See “First impressions,” Page 3)

Increasingly, collaboration is transcending traditional academic boundaries to create previously untried and multi-faceted inquiries. (See “Thinking outside the box,” Page 10) These approaches promise new insights for solving social problems — such as why medication errors are a major concern for patients and the health care system. (See “Mind your meds,” Page 4)

Everyone you’ll encounter in these pages has chosen an original path. Professor Richard Nowakowski employs his subconscious to solve tough math problems while he’s walking to and from work each day. (See “Daring to be differential,” Page 6) Author Anne Emery listens to music to open her mind and literally recreates Halifax in her mystery novels. (See “It’s a crime, really,” Page 14) And then there are those who recognize unmet needs and put their ideas into action in the community. Strategist Bernie Derible offers a rare vantage point on rebuilding Afghanistan. (See “Leading from Behind,” Page 12).

Speaking of the creative process, you may notice that your magazine looks different these days. Our audience is expanding to include the extended university community — alumni, students, faculty, staff, donors and friends. The time seemed right to give the university magazine a fresh, energetic new design. We’re excited that expanding our scope also lets us tell you more stories than ever before.

It’s our hope that this change provides a thought-provoking detour for you — please share your comments with us.

Amanda
Nothing is as exciting as Orientation Week for a new student at university. In heavy contrast, it would be difficult to come up with something that sounds more tedious than an “Induction Ceremony” with not one, not two, but five speakers. On the first evening of Orientation Week (and consequently my first day), those hideously boring words dragged down the schedule.

With the wail of bagpipes, I entered the Dalhousie Arts Centre alongside my fellow freshmen, all bottled up nerves and excitement. As we entered, each of us received a class pen, a notepad, and a tartan scarf, along with the program. Things were looking up.

Then the bagpipes started again. A procession walked down the aisle through the audience, led by the Beadle, the bearer of the university mace (which I learned has an extensive history). Behind the Beadle, clad in academic costume (medieval garb that also has important historical meaning), came Dalhousie staffers and a few notable Haligonians who were dressed normally.

For a moment, I thought I had arrived at Hogwarts School of Witchcraft and Wizardry. President Tom Traves’ enthusiasm at seeing the new class, along with our own excitement, was beyond moving. While Dr. Traves talked about the bright future ahead of the freshman class and introduced the guests, I couldn’t help but feel as though I was invincible, like the entire world was mine for the taking. (And Dr. Traves did sort of remind me of Professor Dumbledore).

Chancellor Richard Goldbloom — by far the man with the most fabulous evening gown — gave the induction pledge itself. Dr. Goldbloom stressed the social side of university life. “Feel free to facebook me,” added Mike Tipping, the President of the Dalhousie Student Union.

As I was still trying to figure out what keynote speaker Dr. Thomas J. Duck, from Physics and Atmospheric Sciences, did for a living he walked up to the podium. Dr. Duck used his own project to explain that Dalhousie is a place where new research keeps people (both profs and students) on the brink of innovation. I think Dr. Duck was trying to say that the means can be just as fulfilling as the ends.

Finally, Dr. Duck introduced his model for success. First you invest in yourself (in this case by going to Dalhousie); you discover the unexpected (which might come in the form of a new interest, or maybe even a new passion); you embrace the challenge; and finally, you seize the opportunity.

The Beadle then led the gold-and-black-garbed procession out of the auditorium.

While I am just a naive freshman and this ceremony was just that — a ceremony — I found that it offered quite a bit more. For me, it symbolized the beginning of a great journey. It started the clock running on a time that countless others have called “the best years of my life.” Dalhousie, I have arrived.
**Blasting to Mars**

“Look,” says Tom Duck, with a nudge to Dalhousie research associate Cameron Dickinson, “there’s four years of your hard work perched on top of a giant stack of explosives.”

Dr. Dickinson laughs nervously and turns to face one of the five large screens in the D-Drive lab in Dalhousie’s Computer Science Building.

About 30 people have gathered to watch the early-morning launch, broadcast from the Kennedy Space Centre and cheer on Dalhousie’s scientific team who provided expertise to the Canadian weather station aboard the Phoenix Mars Lander, now strapped to a rocket on the launch pad.

The Delta II rocket lifts off with a burst of gold in the predawn sky over Cape Canaveral, carrying the Phoenix spacecraft on the first leg of its journey to the Red Planet.

“We’re off,” announces a jubilant Dr. Duck, co-investigator for the meteorological station aboard Phoenix and a lidar expert. Lidar is one of the weather instruments which will be used to analyse the position, structure and optical properties of clouds, fog and dust in the lower atmosphere of the Red Planet.

The powerful three-stage rocket with nine solid rocket motors lifted off at 5:26 a.m. on Saturday, Aug. 4 (EDT). It’s a 680-million kilometre trip to Mars.

The next big hurdle for the mission is the landing. Phoenix follows in the flight path of the Mars Polar Lander, which left a crater on the surface of Mars when it crashed in late 1999. If all goes to plan, the Phoenix should touch down sometime in May 2008, its descent cushioned by landing thrusters.

And then the countdown begins: “T-minus 10, nine, eight, seven...”

But the health care system is so complex that there are inevitably gaps in the process. These might include an incorrect diagnosis, insufficient lab work or a lack of patient monitoring. Patients who are transferring within the health care system may experience medication errors. Another major barrier to proper medication is access due to the cost of drugs.

Positive strategies for front-line health care professionals and scholars, including more effective communication, is the goal.

**Insights into glaucoma**

The main factors that worsen glaucoma, an age-related disease that can destroy sight, are now identified due to a major clinical study.

“Our population is aging, and in 30 years we’ll have twice as many patients to look after,” says Dr. Balwantray Chauhan, Canadian Glaucoma Study’s principal investigator and chair of vision research at Dalhousie University’s Faculty of Medicine. “So how do we target these patients appropriately? That’s where this study will help.”

Glaucoma, a disease of the optic nerve, reduces a person’s field of vision over time resulting in tunnel vision. It’s caused by a buildup of pressure in the eye as the normal flow of watery fluid is blocked — “put simply, it’s a plumbing problem,” he says.

Complicating the devastating disease is that nearly half of those with glaucoma do not realize they have it and the damage is irreversible.

Over 15 years, the Canadian Glaucoma Study tracked 258 people through five university hospitals in Halifax, Montreal, Toronto and Vancouver. The $2.2 million study, funded primarily by CNIB, found four significant reasons why some patients’ vision deteriorates faster than others, including gender, age, high eye pressure and anticoagulants (associated with thrombosis or autoimmune diseases).

The study also ruled out several factors previously thought to be important, such as diabetes, hypertension and a history of cardiovascular disease. The findings of the study, the largest clinical study of glaucoma in Canada, will focus the research that follows.

**Mind your meds**

Medication error is the fourth leading cause of death among North Americans and costs billions of dollars in unnecessary health expenses every year.

“We spend more on drugs in Canada than we do on physicians or medical equipment. Drugs are also the fastest growing component of health budgets and that’s a challenge, obviously, for the patients and the payers,” says Neil MacKinnon, associate professor at the College of Pharmacy.

Pharmacy researcher Dr. MacKinnon will embark on a major study to determine whether government and private payer drug policies improve safety and quality or unintentionally contribute to the problem of medication mistakes. Dr. MacKinnon has earned a Harkness Associate, a fellowship administered by the U.S. Commonwealth Fund and the Canadian Health Services Research Foundation. Dr. MacKinnon is the first Canadian pharmacist — and the first in the Maritimes — so recognized.

“There are obviously many benefits to medication, which can often replace surgery or greatly improve a patient’s quality of life,” he says.

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A little dab will do you

EpiCept Corporation, an American company specializing in pain management, has signed a licence agreement with Dalhousie to license a pain product developed by pharmacologist Jana Sawynok.

The analgesic cream, currently named NP-1, is designed to provide long term relief from neuropathic pain resulting from injury to the nervous system. Common causes of neuropathic pain include diabetes, shingles, herniated disk, AIDS, and cancer chemotherapy.

“It is very rewarding for the university and the researchers to see their discoveries may improve the lives of patients suffering with chronic pain,” says Ronald Layden, Executive Director of Industry Liaison and Innovation.

EpiCept Corporation is a specialty U.S. pharmaceutical company based in Tarrytown, New York, which focuses on fulfilling unmet medical needs in cancer treatment and pain management. The licence covers a number of patents on a pain product candidate developed by Dr. Sawynok, Professor and Chair of Dalhousie's Department of Pharmacology. The product candidate is currently undergoing Phase II trials.

Under the terms of the agreement, Dalhousie will receive an upfront fee of $300,000 US and nearly $1 million US in development milestones. The university will also receive annual fees of between $400,000 US and $500,000 US along with royalties on any future product sales. “This represents one of the most significant licence agreements that Dalhousie University has completed to date,” says Dr. Layden.

Shot in the arm

An attempt to contain the Nova Scotia mumps outbreak is getting a shot in the arm. Working in cooperation with the Nova Scotia Department of Health, Dalhousie Health Services is offering a voluntary measles, mumps and rubella vaccination to all new and returning students this fall. Nova Scotia has had three mumps outbreaks since 2005. The most recent outbreak affected dozens of Dalhousie students during exam time last spring.

Ghost ship sails again

Dalhousie students are helping a Nova Scotia village to assert its connection to one of the world's most puzzling and enduring mysteries — the Mary Celeste. No one knows what happened back in 1872, when the ship was found in full sail off the Azores with nobody aboard. The captain, his family, and the crew were inexplicably missing.

From time to time, tourists have arrived in Spencer's Island, a rural community located on the Bay of Fundy down the shore from Parrsboro. They want to see where the famed brig was built and speculate with the locals about what may have happened.

“I think we should reclaim her. She was built here and she's still an unsolved mystery,” says Laurie Currie, who lives in Spencer's Island. Mr. Currie's idea was to build a replica of the Mary Celeste and bring back the 19th century ship-building knowledge.

With the help of 10 architecture students and professor Roger Mullin, Mr. Currie's dream has started to take shape. The challenge was to create a public space while paying tribute to the rich shipbuilding history of the area, says Prof. Mullin.

“We came up with the idea of an outdoor cinema as a public space where people can watch stories together,” explains architecture student Kimberly Fuller, from Westbank, B.C.

Built on land donated by the Currie family, the outdoor cinema evokes the Mary Celeste in many ways: the students recreated the 32-metre line of the hull and keel in stone and salvaged wood — forming a seating area — and the double mast, which serves as a film screen. Facing the canvas screen is a projector, inside a viewing tower that looks like a lighthouse.

Once residents saw the students at work, they were keen to pitch in. When the project was unveiled to the community, more than 100 people turned out. “It’s been a wonderful education for all of us,” says Mr. Currie.

Mystery ship

1860: The Amazon is built in Spencer's Island, N.S. It's later renamed the Mary Celeste.
1872: Discovered drifting and deserted
1884: Scuttled off Haiti
1884: Arthur Conan Doyle writes about the "Marie Celeste" in a short story that blends fact and fiction
2001: Final resting place of the Mary Celeste discovered
2007: Mary Celeste is evoked in an outdoor cinema in Spencer's Island.
Trekking Dracula’s mountains

Romania was the destination for 18 earth sciences students during their annual honours field trip.

“It’s two weeks of hard-core geology everyday,” says Duncan McLeish, a fourth-year earth sciences student. “It lets us see everything we’ve talked about for the past three years.”

Along with professor Nick Culshaw, students explored Rosia Montana, the largest gold mine in development in Europe; took a close look at mud volcanoes, tree-stump sized eruptions of gas and water; and hiked the Carpathian Mountains, the major mountain system of Eastern Europe. Along the way, they walked around Bran Castle, briefly the home of the notorious Vlad the Impaler.

In 2006, students in the honours program traveled to southern Italy to see volcanoes Mount Etna and Mount Vesuvius, which destroyed Pompeii in 79 AD. And, in 2005, students experienced Chile’s diverse landscapes, ranging from the Andean Mountains in the east to the desert in the north.

“It’s really important to experience what geology is like in other places,” says Tara Muth, a student who also went to Romania.

Daring to be differential

It takes an hour for Math professor Richard Nowakowski to walk to the Chase Building — time to keep mind and body in top form.

“Once it took six weeks of walking into work and thinking about this math problem before I finally understood what my subconscious was trying to tell me,” he explains, smiling at the memory. “I get this little rush of adrenalin when my subconscious has started to reach out to the solution.”

Math is more than number crunching, he believes, it’s also about observation and finding patterns and symmetry. “Math has a lot of creativity,” says Dr. Nowakowski.

He was recently named the winner of the Canadian Math Society’s Adrien Pouliot Award, a national award recognizing his significant and sustained contribution to mathematics education.

Dr. Nowakowski’s enthusiasm for mathematics extends beyond the classroom. He’s set up Math Circles, monthly puzzle-solving and pizza parties, and the Math League, a series of math competitions, both for high school students; and he’s been a leader with the Canadian Mathematical Olympiad and the International Mathematical Olympiad.

In his spare time, he enjoys mulling over cryptic crosswords and the Japanese strategy game Play Go.

A question of rights

Since its adoption in 1982, the Canadian Charter of Rights and Freedoms has changed the legal landscape, and it’s also created a discourse in this country about human rights that didn’t exist before.

“It’s had a huge effect as far as Trudeau’s legacy goes,” says doctoral student Elaine Craig. “It’s also had a huge effect on my life.”

And now the Trudeau legacy has touched her in another way: she’s one of 15 recipients across the country to win a prestigious Trudeau Foundation Scholarship.

Ms. Craig’s research will study human rights and why different cultures and religions have not, to date, found significant commonality in their interpretations of human rights principles. Looking specifically at the Canadian experience through case studies, she’ll examine how the law accommodates the rights of minorities, and in particular how the law regards disempowered segments of society (for example, women) within specific minority groups.

“Issues of equality and justice definitely hit home for me,” says Ms. Craig. “To me, that’s what the law is about. It’s about figuring out a set of principles that we can all live by.”
Head over heels for ALS

It was a fundraiser to flip over — Catherine Kennedy chose a sunny summer’s day to walk upside-down along the Halifax waterfront in memory of her Grandma Billie. Along with a few splinters and bruises, the 22-year-old gymnast from East Lawrencetown, N.S. managed to collect $4,000 and tell a lot of perplexed bystanders about the debilitating disease, ALS, which claimed the life of her beloved grandmother. Often referred to as Lou Gehrig’s Disease, ALS is a neuromuscular disorder that causes progressive paralysis.

“People with ALS lose the use of their limbs, so I wanted to use mine to draw attention to this disease,” says the Dalhousie student. “In my grandmother’s case, she lost the use of the muscles in her throat, and towards the end, spoke through a lap top. That’s why I wanted to raise the money — so I could help pay for a machine like that for someone else who really needs it.”

She’ll graduate from the Health Promotion program this fall.
Research powerhouse for the region

Overall, researchers at Dalhousie received $18 million in funding from Natural Sciences and Engineering Research Council (NSERC) — ranking ninth among universities in the country. The money will fund 169 scholarships totaling $3.4 million and 114 research grants totaling $14.5 million. The money supports research ranging from dust-explosion analysis to understanding the effects of species loss in the food chain.

“We do extremely well for our size, both in terms of scholarships and research funding,” said Carl Breckenridge, Vice President (Research). “It reinforces that we have a really strong research-focused community.”

Physics professors Harm Rotermund and Jeffrey Dahn were awarded Discovery Accelerator Supplements, a new initiative directed to select researchers who are poised to make major breakthroughs in their fields. Only 50 of the new awards were given across the country.

Undergraduate students benefit from Dalhousie’s research strength — 99 will receive NSERC’s Student Research Awards worth a total of $445,500. “The undergraduates who get to be part of ‘learning teams’ get mentored in research,” says Keith Taylor, Dean of Science. “They’re all part of this vibrant discovery process in which they mutually teach each other.”

Undergraduate honours science students also gain research experience through their honours projects in fourth year and many are able to take advantage of summer employment opportunities.

“There’s just so much potential for students to get involved,” said Dr. Breckenridge. “This is where Dalhousie has a definite advantage.”

Expedition is the ‘job of a lifetime’

Colonies of bright pink bubblegum coral. A grapefruit-sized single-cell protozoan. A strange-looking silvery octopus dubbed “Dumbo.” These are some of the weird and mysterious things a scientific team discovered living two kilometres below the surface of the ocean, about 200 nautical miles off Nova Scotia.

“It was amazing,” said Ellen Kenchington, a research scientist at the Bedford Institute of Oceanography and adjunct professor of marine biology at Dalhousie. “You’re looking at something down there, there’s no light, it’s so deep and you know no human eyes have ever seen these things before, and it’s almost like you feel like you’re the first man on the moon.”

The 21-day expedition took place in July aboard the Coast Guard ship Hudson. The ship was outfitted with a ROPOS — a remotely operated vehicle about the size of a Volkswagen bug — which was lowered into the depths of the Atlantic and beamed back photographs and video. It even gathered samples with its two robotic arms, one equipped with a suction device.

Dalhousie students Tyler Jordan, Lindsay Beazley and Deanna Ferguson — they took Dr. Kenchington’s third-year algae class — were part of the 28-member scientific team. The students describe the expedition as the “summer job of a lifetime.”

“Undergraduate students rarely get opportunities like this,” says Ms. Beazley, a 21-year-old from Upper Sackville, N.S. who was determined not to let seasickness keep her from her research. “I actually got to sit in the ‘hot seat’ and direct the ROPOS 2,000 metres below. That’s crazy!”

“It really shows the opportunities available to us. Just from this cruise alone, there are hundreds of tangents you could do research on. We all feel so lucky we could take part.”

Deep sea explorers Lindsay Beazley, Ellen Kenchington and Tyler Jordan.
Eureka!

Physics student Stephanie Flynn, of Yarmouth, N.S., called the top of the world her temporary home during a summer research job at Canada’s first High Arctic weather station.

A job with atmospheric scientist James Drummond took the fourth-year student to Eureka, thanks to her NSERC Undergraduate Student Research Award. Together with Dr. Drummond’s team, she flew into Yellowknife and then took a small charter plane over the arctic glaciers to reach the destination.

Eureka, Nunavut sits at 80°N and 86°W, on Slidre Fjord on Ellesmere Island. “It’s pretty remote — only about 1,100 km from the North Pole,” says Ms. Flynn.

Most of her time was spent collecting data and doing computer maintenance. The data measures absorption of various chemicals in our atmosphere that play an important role in understanding issues like climate change and global warming. “It’s research for the greater good, as Dr. Drummond puts it,” says Ms. Flynn.

“Tell me why you want to be a part of this,” asks Dr. Drummond.

“I think it’s important to know how we evolved,” says Ms. Flynn.

The research was conducted over a four-month period, and the data was collected by the students and sent back to Canada for analysis.

She suspects there’s something more to it, which is why she’ll be studying the cultural history of taxation in greater depth, thanks to a three-year, $88,900 standard research grant from the Social Sciences and Humanities Research Council of Canada (SSHRC).

Newton, who says he’s a taxpayer, is a monetary expression of the values we hold as a nation. And, when someone announces, “I’m a taxpayer,” what they’re really saying is that they have the right to speak and be heard. Paying taxes also infers rights.

Dr. Tillotson’s research is just one of the research projects at Dalhousie to be supported by SSHRC. The federal funding agency announced $804,000 for research at Dalhousie.

This year’s recipients of standard research grants will undertake research across a broad spectrum of the humanities and social sciences, including history, education, politics, economics, law and literature.

Think like a fugitive

Where do fugitives hide out when they’re on the run? How do they get food? Where do they find shelter? Who do they contact?

With thousands of people on outstanding warrants in Canada right now, psychology student Marcus Juodis is trying to find the answers to those questions. He recently received $60,000 from the Social Sciences and Humanities Research Council of Canada (SSHRC) to probe the decision-making strategies of offenders who have evaded arrest by police for extended periods of time.

“If you’re a fugitive, your needs don’t change. You still need food, shelter, perhaps drugs… I think there’s an educated guess to be made on what these people do when they’re evading arrest. Hopefully studies with these offenders can back up these guesses.”

He’s planning on interviewing offenders who made the RCMP’s most-wanted list and have since been apprehended. He’ll be interested in how they’re able to cross borders, why they pick one city over another, and if and how they change their appearance.

“These kinds of things cause the public a lot of stress. There’s a certain amount of powerlessness that is felt and I want to be able to do something about that.”

SSHRC develops Canadian talent

If there’s anything that can get people up in arms, it’s taxes. But here in Canada, the historical literature says little about the violence and drama of tax resistance.

“Have struggles around taxation played so little part in forming Canada’s political culture?” asks Dalhousie history professor Shirley Tillotson.

She suspects there’s something more to it, which is why she’ll be studying the cultural history of taxation in greater depth, thanks to a three-year, $88,900 standard research grant from the Social Sciences and Humanities Research Council of Canada (SSHRC).

Newton, who says he’s a taxpayer, is a monetary expression of the values we hold as a nation. And, when someone announces, “I’m a taxpayer,” what they’re really saying is that they have the right to speak and be heard. Paying taxes also infers rights.

Dr. Tillotson’s research is just one of the research projects at Dalhousie to be supported by SSHRC. The federal funding agency announced $804,000 for research at Dalhousie.

This year’s recipients of standard research grants will undertake research across a broad spectrum of the humanities and social sciences, including history, education, politics, economics, law and literature.

Think like a fugitive

Where do fugitives hide out when they’re on the run? How do they get food? Where do they find shelter? Who do they contact?

With thousands of people on outstanding warrants in Canada right now, psychology student Marcus Juodis is trying to find the answers to those questions. He recently received $60,000 from the Social Sciences and Humanities Research Council of Canada (SSHRC) to probe the decision-making strategies of offenders who have evaded arrest by police for extended periods of time.

“If you’re a fugitive, your needs don’t change. You still need food, shelter, perhaps drugs… I think there’s an educated guess to be made on what these people do when they’re evading arrest. Hopefully studies with these offenders can back up these guesses.”

He’s planning on interviewing offenders who made the RCMP’s most-wanted list and have since been apprehended. He’ll be interested in how they’re able to cross borders, why they pick one city over another, and if and how they change their appearance.

“These kinds of things cause the public a lot of stress. There’s a certain amount of powerlessness that is felt and I want to be able to do something about that.”
THINKING OUTSIDE THE BOX

BY MARIE WEEREN
From amid my pages of research and interview notes, a vision of Leonardo da Vinci appears. He regards my laptop computer with interest, examining it from different angles and stroking his beard thoughtfully. He pulls out a notebook and begins to sketch. The notebook is already overflowing with descriptions and drawings of machines, the human body and more. “Leonardo,” I say, “Please tell me what interdisciplinarity really means. Of all people, you should know.” He looks at me quizzically, smiles gently, puts down his notebook and, with a broad sweep of his hand, takes in my entire office and the view from the window. Without a word, he returns to his sketching.

The Big Picture “We (universities) are on the threshold of a new golden age of knowledge where we’ll bring the parts from all the disciplines together to advance the understanding of the universe in ways that we didn’t think were possible before,” says Dalhousie Vice-President Academic Dr. Alan Shaver.

What is Dr. Shaver’s vision for interdisciplinarity at Dalhousie? “It’s really the natural evolution of our disciplinary strengths. With those strong disciplines we will have that flowering of interdisciplinarity, which will make us more attractive to undergraduates. It will make us more attractive to professors starting their careers. This will attract resources — brains first, and money — and we’ll have more impact on people, to the benefit of people.”

Multiple Perspectives As a student in Dalhousie’s Interdisciplinary PhD program, Karen Beazley brought multiple perspectives together. Now, as associate professor and director of the School for Resource and Environmental Studies in the Faculty of Management, she continues and expands that work.


Dr. Beazley says the Interdisciplinary PhD program “gave me the opportunity to create my own committee, create my own research subject which was interdisciplinary, and pull these various perspectives together to answer questions that related to not only how do we go about maintaining biodiversity, but why should we? What is the ethical or moral imperative — or is there one?”

Students enrolled in the Master of Environmental Studies and Master of Resource and Environmental Management programs also draw upon multiple perspectives.

For example, in one term, resource and environmental management students take three interrelated courses that examine the sociopolitical, biophysical, law and policy dimensions of their field. Dr. Beazley says interrelationships are highlighted through common case studies, which culminate in students presenting findings and recommendations in a workshop open to students, faculty and stakeholders in the issues.

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I’m encouraged and inspired to look at different angles, and the discussions with my colleagues are what inspire me most.  

Dr. Liesl Gambold

Connecting in this way prepares future leaders able to contend with the complexities posed by as yet unknown environmental challenges. “It really prepares them and gives them some experiential learning in dealing with the kind of processes and issues that they are going to face out in their jobs as environmental managers and scholars,” Dr. Beazley says.

Inspiration The Department of Sociology and Social Anthropology is not just interdisciplinary in title. As assistant professor, Liesl Gambold strives to show students “We share a goal, and that is understanding human beings and human behaviour.”

By taking courses from sociologists and social anthropologists, students can become stronger in both fields. Dr. Gambold says her own research view is enhanced as a member of the interdisciplinary department.

“I’m encouraged and inspired to look at different angles, and the discussions with my colleagues are what inspire me most,” she says. “Sometimes you’ll say, ‘Oh, I have this idea, here it is,’ and then I’ll be talking to a colleague who’s a sociologist and they’ll say, ‘Well I think you should look at it this way.’ I might not see it in that way initially but inevitably I’ll come back to my office and think, ‘Well, I hadn’t thought of that, but…..’”

Teamwork “I think there’s a major societal need to address the isolation and the insulation of the different health professions and how that impacts on each and every one of us,” says Will Webster, Dalhousie’s Dean of Health Professions. He gives as an example a stroke patient who faces a battery of professionals asking the same questions with little communication or coordination among them.

Communication and coordination underlie the development of new interprofessional elective courses, learning tools, workshops and increased opportunities for work placements. They are also evident in Seamless Care: An Interprofessional Education Project for Innovative Team-Based Transition Care, a Health Canada-funded project. This has seen Dalhousie medical, nursing, pharmacy, dentistry and dental hygiene students “learn with, from and about each other while they assist patients to develop the knowledge and skills to manage their conditions effectively,” says Dr. Judith McFetridge-Durdle, associate professor in the School of Nursing and a principal investigator in the study.

Dr. Webster says geography is an obstacle in interprofessional learning among the faculty’s eight schools, one college and two programs. He envisions a central building where the professions’ interconnections are fostered through shared classrooms, administrative and social spaces. He also sees a literal “bridge to health and social wellbeing” linking other health profession buildings such as the Forrest and Tupper, so “faculty and students are moving through the same space both horizontally and vertically.”

Horizontal and vertical connections are essential in Dalhousie’s planning for a new master’s degree in public health. The project, which creates opportunities for cross-faculty and cross-university collaboration, provides another occasion to meet a social need and strengthen interprofessional learning.

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Impact If you’re looking for names of researchers on lab doors in the School of Biomedical Engineering, look again.

“Nobody’s name is on the doors because it’s part of the communal model that we use to encourage the sharing of resources and the building of mutual things,” says Mike Lee, who played a pivotal role in the school’s creation.

Openness and flexibility create an environment for interdisciplinarity to flourish — an atmosphere appreciated by PhD student Marianne Ariganello. Under the guidance of Dr. Lee and his colleague, Rosalind Labow at the University of Ottawa Heart Institute, Ms. Ariganello is studying reasons for failure in replacement heart valves made from tissue.

“When we look at replacement valves that have failed we find they have tears and macrophages (a type of white blood cell) associated with them. We’re not sure if the tears start first and macrophages come and exacerbate the environment or if macrophages notice something about the tissue and initiate that tear. My area is to try and see if I can figure out what went first,” says Ms. Ariganello, who presented her research in Australia at the last World Biomaterials Congress.

Ms. Ariganello’s research could help lead to an extension of the life of tissue replacement valves, resulting in patients requiring less frequent surgery. Dr. Lee, a professor in the School of Biomedical Engineering and in the Department of Applied Oral Sciences, has also seen the real-life impact of his research. A stent he designed — a device used to open arteries to aid blood flow — is used in Canada and in Europe.

Interdisciplinary work is invigorating but not easy. Dr. Lee says the school faces the challenges of securing resources from the university and finding its place. “There are times at the university when we’re nobody’s child. We’re sort of peripheral to the main mission of engineering and medicine, but we share a tremendous common mission amongst us.”

Interactions The Institute for Research in Materials at Dalhousie has some 100 affiliated faculty members from six faculties and 18 departments. The focus, however, isn’t on the individual disciplines but on the problems they can help solve collectively by studying the “interactions between and among the structure, processing and performance of materials,” says Dr. Mary Anne White, director of the institute and a university research professor of chemistry and physics.

Interdisciplinary work often involves collaborations with government, industry and academia. For example, Dr. White and her research group have discovered some materials that “can absorb a lot of energy when they change phase” and remain as solids. Now, with colleagues in a cross-country Solar Buildings Research Network, “We’re incorporating these materials into building materials that will absorb solar energy during the day and then re-radiate this energy at night.”

Securing funding for the institute remains a challenge. But looking ahead, Dr. White has a positive vision for interdisciplinarity. “I think it will continue to grow. I doubt it would overtake disciplines, but I think it will continue to grow and the interactions within the university in interdisciplinary groups will continue to increase.”

I now understand what Leonardo da Vinci meant by the sweep of his hand. Interdisciplinarity is everywhere and all-encompassing.

It demands big-picture thinkers who are unafraid to tackle complex, often messy problems and willing to meet the communication challenges that arise when different disciplines — each with their own terminology and approaches — collaborate. It’s a concept that can be embraced by learners early on, and it’s an understanding critical in an age where terms like pandemic, global warming and sustainability are common.

I’ve learned that those engaged in interdisciplinarity can face challenges such as securing funding and receiving scholarly recognition comparable to those focused on a single discipline. I’ve also discovered that interdisciplinary study and research at Dalhousie is inspiring, broadening and potentially life-changing.
Hidden in the plain brown envelope sent by author Anne Emery are some clues. Inside are CDs — the playlists she listened to while writing her award-winning first novel *Sign of the Cross* and its follow-up *Obit* — along with typewritten quotes, like chapter headings for a novel as yet unwritten. “Music is the harmonious voice of creation; an echo of the invisible world,” reads the first. The credit for that one goes to Giuseppe Mazzini (1805-72). The second one is from Victor Hugo (1805-85): “Music expresses that which cannot be said, and on which it is impossible to be silent.”

Music, it seems, is integral to her imagination and she shares the preoccupation with her fictitious creation Brennan Burke, choirmaster and priest. She hastens to assure me when she offers to send me the discs that she only burns music she already owns, music she’s paid for. Yes, the music is vital to Anne Emery, and to her characters, but the legal side of things is just as important.

Ms. Emery (LLB’78, MA’89) has worked as a lawyer, legal affairs reporter and as a researcher. These days, she works at McInnes Cooper in Halifax as a litigation law analyst. Nights and weekends, she writes. “I’m not a joiner,” she says. “I’m not a strict housekeeper, either.”

Instead, most days she walks for an hour or so around her North End Halifax neighbourhood. And she listens to music on her MP3 player — blues, rock, opera or chants. She thinks about two of the most important men in her life. There’s Monty Collins, the sole criminal lawyer in a corporate law firm, with his acerbic soon-to-be ex-wife and a secret desire to chuck it all for life in a blues band. And there’s Father Burke, an Irish Catholic priest.
with a mysterious past. Her husband doesn’t mind that she thinks about these other men. After all, it’s been wildly successful for her. The pair first meet in her debut novel, *Sign of the Cross*. It picked up a prestigious Arthur Ellis award this year for best first crime novel.

And when we meet in a downtown Halifax steak house to discuss her book’s success, she draws on Mazzini to explain Brennan Burke’s reliance on music. “It means everything to him,” she says. “That’s the expression of the divine, ‘the harmonious voice of creation.’ It expresses the inexpressible. For him, that’s his way of worshipping or praising God.”

Ms. Emery is somewhere between her two leading men when it comes to music. “I can write a book, but not a song.” She just needs music the way she needs water or air. “I can’t imagine life without it,” she says. It’s an integral part of her writing process as well. Songs give her ideas about characters. Bob Dylan’s *Man in a Long Black Coat* was an early inspiration for *Sign of the Cross,* as was Matt Minglewood’s *Dorchester.* She credits the music with letting her get into an elevated mood, the kind it’s easy to be creative in. She listens to music, walks the streets of Halifax, and her characters and stories develop as she goes.

Those familiar streets have been just as influential on her writing style. “There’s so much history in Halifax,” she says. “It has great buildings and a great atmosphere. A really new city, with brand new buildings, and everyone just moved there 10 minutes ago — that wouldn’t be interesting to me. But this place has a past.” Her books — two published so far, with a third on the way and three more planned in the series — are set firmly in Halifax’s very recent past.

The story unfolds on streets and by landmarks that will be familiar to anyone who’s spent time in the port city. Monty and Brennan meet when the priest is accused of murder at his church (incidentally, one of the few fictional locations). Gargoyles in the provincial court glare down at Monte. The statue of Winston Churchill is here. The Collins family lives on Dresden Row. The law courts, the waterfront, Dalhousie — it’s all there.

Though Ms. Emery doesn’t draw on her daily work as a law analyst when it’s time to write fiction, she does use her research skills and the materials at hand, “… everything from the 1990 Criminal Code to old city directories, to find out what was where in Halifax in 1990.” Research skills were handy in obtaining copyright clearances for the many lyrics she wanted to use in the book. “Music was so important to *Sign of the Cross* — I had to use it, no matter the hassle or expense.”

Meanwhile, she knows how she’ll be spending her nights and weekends. “I always knew I wanted to write,” she says, “since I was a kid. But I thought that law would be interesting work. I probably imagined myself with earth-shattering cases. Then I realized that I would rather make up my own drama than stand or fall on someone else’s life.” Her friends had no idea what she was up to until the book came out, but they were supportive and encouraging once they discovered her other life. While she may find ‘seeds of stories’ in the work of friends who practice criminal law, the demarcation between her worlds — law analyst and crime fiction writer — is clear. “People think certain characters represent someone or other,” she says. “Who knows? Maybe that accounts for a few sales.”

As for her future, she describes being at a function with her publisher. Someone asked when she was going to ‘quit her day job’ and write full time. “My publisher leaned over and said, ‘When we sell the movie rights.’”

For now, she’s happy to lead a double life.
Generations of Afghan people have suffered through war, oppression and a collapse of civil order and government. Attempts to rebuild since the fall of the Taliban regime have been hindered, and not only by the ongoing conflict in which 2,500 Canadian troops are currently fighting. Decades of enduring strife have left gaping holes in the country’s civic institutions. Among its many problems, Afghanistan suffers from a leadership gap that desperately needs to be closed if the country is to finally take the future in its own hands.

Bernie Derible (BSc’84) is no stranger to conflict zones, having served as a Canadian Armed Forces officer in Africa and the Middle East. His role in Afghanistan, however, is quite different from that of other Canadians fighting in the country’s southern regions. Mr. Derible just finished a year as senior officer in a unique organization called the Canadian Strategic Advisory Team (SAT), whose members act as advisors to government officials. Mr. Derible served as the special advisor to President Karzai’s Senior Economic Advisor, Professor Ishaq Nadiri.

“What has been missing in the Afghanistan government is experience that we here in Canada take for granted,” Mr. Derible explains. “The basics of leadership, HR policies, business planning and sometimes even literacy are lacking. The war and ongoing conflict in the country has left a two-generation void in skills essential for running a successful governmental organization capable of aiding its citizens. We’re working with government officials on everything from how to effectively run a business meeting to top-level strategic planning for the country.”

“Reinforcing success” is one of the phrases that Derible uses to describe SAT’s role in Afghanistan. It means ensuring that any military successes achieved in the mission are not rendered moot by the government’s inability to provide basic, functional services to the Afghan people. Another phrase is “leading from behind.” You won’t find Mr. Derible’s name on any press releases or on any of the detailed plans that he worked on with Afghan officials in areas ranging from agriculture to the economy. SAT is in no way trying to run the Afghanistan government, but are mentoring and assisting some of its leaders to manage it themselves. “Afghans are the ones who need to be leading the change, not us,” Mr. Derible explains.

The Chief of the Defence Staff, General Rick Hillier, hand-picked Mr. Derible for the 15-member team based...
on his wealth of leadership and management experience. After graduating from Dalhousie with a psychology degree, Derible followed in his father’s footsteps and joined the Canadian Army as part of what he refers to as “a three-year thought process that turned into a 22-year career.” Quickly elevated to officer ranks, his career highlights include serving as a squadron commander in his regiment; acting as Equerry for His Royal Highness Prince Charles and Her Royal Highness Princess Diana; chaperoning and providing security for several visiting heads of state including the Queen; serving as a senior military advisor to the Canadian minister of national defence and managing the department’s human resources and recruitment strategy; and being granted the rare opportunity to study at the U.S. Army Command and General Staff College in Leavenworth, Kansas where he earned distinguished graduate honours.

What was his biggest surprise upon arriving in Afghanistan? “It was without doubt the will of the Afghan people to be a part of change,” he says. “Their country may have a troubled history but they want a stable platform to move forward.” Mr. Derible mentions his experience lecturing at Kardan University and Institute, teaching classes on English communication, organizational behaviour and basic leadership skills: “I found out one day that some of the students had driven 45 minutes to go to my 6 a.m. class, after which they work nine or 10 hours before returning for my evening classes. And these classes sometimes cost them a month’s salary to take. It’s really quite remarkable — they truly want to be the drivers of their own future.”

“These are also very, very hospitable people,” Derible continues. He describes one encounter with a group of local elders where almost all the conversation was in gestures and hand-drawn illustrations because of the language barrier. Yet, their shared taste for kebobs came through loud and clear, inspiring the elders to present the Canadian with a full meal cooked fresh from their own livestock. “They will give you the shirt off their backs. It’s a rarity, even here in Canada, that you can walk into someone’s home and have a place to stay the night if you need one. It is amazing that after all that they’ve been through, they’re still willing to offer the olive branch.”

He also expresses his frustration that the significant improvements that he’s witnessed do not seem to be resonating back home in Canada: “There is a tremendous amount of stability and progress in the country — not necessarily in the south around Kandahar where our men and women are fighting the Taliban, but in the east, particularly Kabul and throughout the northern regions. In these areas you see significant construction — more so even than in Halifax — and you see boys and girls going to school. There are beautiful parks where people who used to stay home in fear for their safety are having picnics on their days off. These examples are a big part of the untold story going on in the country.”

His optimism for the mission reflects a competitive spirit that dates back to his years with Dalhousie’s volleyball squad. He was team captain and a conference all-star. “Defeat — I don’t even know how to spell it,” Mr. Derible jokes. But his serious side returns as he ponders the implications of the broader work that Canadians are attempting to accomplish in Afghanistan: “The world can’t afford us to lose.”
RESEARCH THAT MATTERS

by julia watt

This is essential for the long-term survival of all life, our own included, but there is much that we don’t understand,

and desperately need to.

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Probing the Microbe

Microbes deserve more respect. These microscopic organisms defy basic science when it comes to species identification. They also play a critical role in maintaining the earth’s biosphere and evolve very differently than plants or animals.

And they fascinate Ford Doolittle, Dalhousie’s Canada Research Chair in Comparative Microbial Genomics. “Unlike humans, a species that evolves through gene mutation, bacteria are able to transfer genes laterally to adapt to their environment.” Their fluidity and adeptness in taking on new genes needed to survive poses great danger to the long-term effectiveness of antibiotic treatment. It also makes it very difficult to decide just what makes up a bacterial species.

While these organisms are challenging fundamental concepts in genealogy and the ways living things evolve, they will also play a host of relevant roles when it comes to global warming. “Microbes recycle and metabolize substances in the atmosphere,” explains Dr. Doolittle. This is essential for the long-term survival of all life, our own included, but there is much that we don’t understand, and desperately need to.

“It will be sad if the polar bears die off or get misplaced due to the melting of the Arctic ice cap. It may be disastrous if the permafrost melts, bringing to active life the vast community of methane-producing microbes currently mostly dormant in that environment. The time is ripe to try to understand the biological, ecological and environmental impacts of microbes as they relate to the basics of the biosphere.”

Digging Deep

While many people today are heading mid-profession to Fort McMurray, Alberta, it’s where Grant Wach began his geology career almost 30 years ago. He still works with the energy industry, but today, in his capacity as professor of petroleum geosciences and director of energy at Dalhousie, he now serves as a mentor, helping students become successful geologists and engineers.

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“My students and I recently went to the Guadalupe Mountains in Texas, where we examined an ancient fossil reef similar to one offshore Nova Scotia that will produce gas through the Deep Panuke project,” says Dr. Wach. In Barbados and Trinidad, he and his research students are completing detailed analyses of rocks that are similar to the Sable gas fields.

Fieldwork not only makes better geologists or engineers, it appeals to students worldwide. “Our undergraduates spend more than 70 days of their studies in the field looking at the rocks,” says Dr. Wach. “We attract graduate students from across Canada, the United States, Trinidad, Norway, Libya, Iraq and Pakistan to our research group.”

**Asking Challenging Questions**

As a philosopher and ethicist, Françoise Baylis, Dalhousie’s Canada Research Chair in Bioethics and Philosophy, applies her ethics expertise to assisted human reproduction, embryo research, stem cell science and neuroscience. Scientific and technical advances in each of these areas are poised to radically transform health care and introduce new possibilities for human enhancement.

“By stirring the gene pool you could create new kinds of beings. It is now possible to imagine a future in which deliberate human selection significantly alters the genetic makeup of our species,” says Dr. Baylis. Her novel perspectives on these types of issues are valued by some of the country’s top policy-makers. She was recently named to the Board of Assisted Human Reproduction Canada, a federal agency chaired by Nova Scotia’s former premier, Dr. John Hamm.

“Developing good public policy is difficult,” says Dr. Baylis. “Our policies stand as public statements of who we are and what we value. If our policies disproportionately harm disadvantaged groups then they are flawed and should be changed.”

**Decreasing Children’s Pain**

As Dalhousie’s Canada Research Chair in Pain and Child Health, Christine Chambers has a goal to decrease suffering in children and increase their ability to cope.

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She is finding that sleep, or more specifically the lack of it, may hold the key to some of the recurring pains like headaches and stomach aches experienced by many teens today. She also studies two other areas: pain assessment tools and the role of family in pain.

One of her most surprising findings is that parental reassurance actually has a negative impact on children. "If a child is having blood drawn, many parents offer reassurance telling them that ‘it won’t hurt,’” explains Dr. Chambers. "We have found that this increases the child’s distress.” Distraction and humour are much more effective in alleviating pain.

Dr. Chambers has also found that children are terrible at faking pain but are fabulous at hiding it. “A child’s ability to hide pain is problematic, especially for those who have undergone a number of medical procedures (and want to avoid more) or don’t want their parents to worry about them.”

Ultimately, she hopes to improve pain assessment and treatment effectiveness for children. “We’ve come a long way since the 1970s and 1980s, when it was thought that infants didn’t feel pain and were operated on without the use of pain-relieving drugs. As we learn more, we can direct public policy around pain management systems for kids. Overall, this bodes well for children, their families and the health care system.”

**Turning Powder into Products**

The long-time tradition of die-casting metallic material into components of a desired shape and mechanical performance has a challenger. Over the last decade a more efficient, more precise process has surfaced. Known as “powder metallurgy,” it involves taking metallic powder and pressing it directly into the desired shape of the finished product, a process Paul Bishop says has the potential to save money and be more environmentally friendly.

“With the powder metallurgy process, our end product has what is called a near-net-shape,” explains Dr. Bishop, associate professor in Materials Engineering. In other words, several costly steps are removed when using powder metallurgy technology.

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“This process is still quite new and there is obviously potential to make it even better for the end user,” says Dr. Bishop. “Our ultimate goal is to devise new powder metallurgy alloys and processing strategies that enable the production of components that are near-net-shape, geometrically complex, and exhibit excellent mechanical performance.”

Legal Intervention

As a lawyer specializing in intellectual property and corporate law in Nigeria, Chidi Oguamanam helped multinational corporations lay claim to ideas through intellectual property laws. Now, as a law professor and director of the Law and Technology Institute at Dalhousie, Dr. Oguamanam argues that “intellectual property law should not be a bully that perpetuates inequities. It must instead protect the weak and accommodate the strong.”

He cites an example in India, where the herb turmeric was traditionally used by local medicine men to cure diverse ailments, including skin infections. “In spite of it having been used for years, the remedy was patented by a western pharmaceutical company without any recognition of India’s rich “ayurvedic,” “sidha” and “unanmi” heritages in which the medical use of turmeric was implicated,” says Dr. Oguamanam.

He finds this unacceptable and feels strongly that there is a need for international law to recognize and protect the knowledge of indigenous and local communities in the intellectual property-driven global knowledge economy.

“I’m an African first and a lawyer second. I feel deeply that a cross-cultural approach to knowledge protection would offer a more balanced perspective and better protection to indigenous and local communities that operate outside the contested paradigms of western science and market economy.”

Predicting the Future

Phytoplankton is minute, too small to be seen by the naked eye. Even so, it is a vastly important ocean plant — the primary food source, directly or indirectly, of all sea organisms. Being at the bottom of the ocean's continued on page 23
food chain makes it integral to supporting the ocean's delicate ecosystem.

Too small or too weak to swim effectively against a current, these microscopic floating plants drift effortlessly with the ocean current. If ocean currents shift, so too does the location and the availability of the phytoplankton. If once-plentiful phytoplankton becomes scarce in an area, it could have a disastrous effect on marine life and the ocean's ecological system.

One of Dalhousie's newest scientists, Katja Fennel, studies and makes predictions about the locale of phytoplankton through detailed ocean modelling. When applying her models to practical problems, predictions can be made about the future of phytoplankton in response to such things as greenhouse gases, ocean warming and changing circulation patterns.

"It's impossible to physically manipulate the ocean," says Dr. Fennel, "but we can simulate changes through computer modelling, meaning that we can answer a lot of 'what if' questions."

As a Canada Research Chair in Marine Prediction, Dr. Fennel's primary area of focus is along the Scotian shelf. She studies the waters from the Labrador Sea to the Gulf of Maine, an area where there is great potential for an oceanic shift due to changing coastal currents and an increased mixing of cold and fresh water.

"There is a real sense of urgency over the last 10 years to try to understand the implication of global change on the oceans," says Dr. Fennel. "The oceans are one of our greatest resources for food, transportation and recreation. It only makes sense that we should be concerned about protecting them."

The Influence of Salmon Interbreeding

Poached, planked, barbequed or baked, Atlantic salmon is enjoyed by many people worldwide. Much of the salmon consumed today has been grown on aquaculture farms because wild Atlantic salmon has suffered a population decline of up to 99 per cent in some waterways. But what happens when escaped farmed salmon mate with wild salmon? What impact, if any, will this have on the already scarce wild salmon population?

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A longtime scientist of endangered species, Jeffrey Hutchings is conducting research to find out just that. Now in its sixth year, the research is beginning to show a preliminary impact on the survival rate of wild salmon.

“We took wild salmon from two areas of the province and interbred them with salmon from an aquaculture facility,” explains Dr. Hutchings, Dalhousie’s Canada Research Chair in Marine Conservation and Biodiversity. “After the required two generations of breeding, we are beginning to look at characteristics vitally important to existence, such as growth rate, age at maturity and egg development patterns, to see how they differ.”

Dr. Hutchings says his work is extremely important to the survival of the wild Atlantic salmon, and vital to developing a recovery strategy and conservation plan for the species.

Disability and Dis-citizenship

“The world is designed for the able-bodied and creates barriers for people with disabilities.” That’s the collective belief that drives five Dalhousie law professors to research, critique and challenge existing laws, while also working toward developing future laws.

Archie Kaiser, Dianne Pothier, Richard Devlin, Sheila Wildeman and Constance MacIntosh all believe that, while the rhetoric about moral responsibility and social equality is strong in Canada, meaningful action is frequently absent. Prof. Devlin refers to it as the “unpleasant underbelly” of the nation. “Canada believes in the importance of democracy, but it’s really only available to people who have a lot of luck and privilege,” he says. “The 15 per cent of Canadian citizens who are disabled are denied the right to participate equally and as whole persons.”

This group makes an impact in various ways. The professors act as legal counsel or expert witnesses and research and write essays and books influencing government policy. They also present at key law conferences attended by key government players and help to design and deliver judicial education programs. continued on page 25
Chemicals on the Run

If you google the phrase “chemical accidents” on the Internet, the resulting hits are profuse. Delve a little further and you will find that that this type of tragedy has affected many countries such as the United States, Canada, Japan, Italy, Germany and Brazil. India has the unenviable distinction of having the world’s worst disaster, according to media outlets. In 1984, a chemical cloud filled the air of Bhophal, killing about 3,000 people and residually causing deaths of 15,000 more.

These accidents are triggered by a “runaway reaction,” something that Michael Pegg says is caused by chemical reactions that produce heat much more rapidly than it can be controlled and removed from the system. “If the runaway reaction isn’t controlled, it can result in an explosion that causes a major fire, severe chemical burns and/or skin and throat irritations,” says Dr. Pegg, chair of Dalhousie’s chemical engineering program. “The safety of the workers and even the surrounding community is in jeopardy.”

In his research, Dr. Pegg has identified some reactions about which little is known. “This means that we can learn more about the potential temperature and pressure reactions and in what conditions they occur. Only then can we begin to make recommendations about safety and preventative practices based on the predictive behaviour.”

Finding the Weak Link

Dr. Farid Taheri deals with reality — well, sort of. He can simulate reality and accurately predict the response and expected life span of some very important materials — all with a view of making things more efficient, safe and cost-effective.

Think about an oil rig. Expensive to run. Lots of metals and other materials. Constant drilling to seek out the coveted crude. But the relentless drilling and continuous ocean currents create an inordinate amount of stress, causing the metal to become fatigued and weaker over time. If something fractures in the rig’s infrastructure, it can cost millions of dollars in downtime, even if the downtime is very short.

continued on page 26
Dr. Taheri can take the guesswork out of preventative maintenance. “I can recreate the working scenario and determine very accurately when a pipe or a riser will fail due to the stresses put on it,” says Dr. Taheri, a civil engineering professor at Dalhousie. By recording the vibration response of the pipe, he can detect whether the pipe is damaged or not. “With this information, you can pinpoint the best time to replace equipment pieces, avoiding costly shutdowns and workplace accidents.”

“A CPU could process almost one million operations in the time it takes to retrieve one piece of data from the hard disk,” says Dr. Zeh. “While this isn’t likely to be a noticeable problem for home or general office applications, it poses major challenges for large-scale data analysis in scientific and business applications.”

The ones with the most dire need for methods to alleviate this “memory bottleneck” are massive computing centres at NASA or the sophisticated web caching and analysis tools working the magic behind Google’s search engine.

Dr. Zeh, an assistant professor at Dalhousie, aspires to provide such methods through a combination of new algorithmic techniques and data structures and the careful engineering of algorithm implementations. “While in the past, computation was slow and the key to efficiency was minimizing the number of computation steps needed to solve a given problem, the key now is to minimize disk accesses and memory accesses. This requires fundamentally different techniques from the ones developed since the 1960s, which are still at the heart of most software in use today.”

**Memory Overload**

Computers have become an integral part of our life. As their efficiency increases through new technological advances, so too do our expectations. But, according to algorithm expert Norbert Zeh, the lack of comparable advances in memory and hard disk technologies makes it more difficult to feed modern processors with data at the rate they can process it, meaning the computer’s central processing unit (CPU) is left starving for data.
The logical solution

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Dalhousie Alumni Association
Board of Directors

Level Y.Y. Chan (BA (Hon)’99, LLB’02) has assumed the chair of the Dalhousie Alumni Association (DAA) board. Level has a long history as a Dal supporter. During his student days, he was heavily involved as chair of the Howe Hall Residence Society, with the Dalhousie Arts Society, as a Dalhousie Student Union vice-president and as a student representative on the Board of Governors.

Level was called to the Nova Scotia bar in 2003. He has an affiliation with the Canadian Bar Association and the NS Barristers’ Society and holds membership in a number of professional associations. Level is an associate with Stewart McKelvey, one of Atlantic Canada’s most prominent law firms.

Level plans to employ his skills, experience and devotion to Dal to guide the DAA through another successful year of supporting Dalhousie’s strategic plans.

Welcome to our new board members:

Heather Bown (BEDS’00, MARFP’02) — Heather is vice-president of project management with William Nycum and Associates, a professional architecture firm in Halifax.

Donalda MacBeath (LLB’79) — Originally from Digby, Donalda is currently a lawyer with Petro-Canada in Calgary.

Welcome back returning board members:

Nancy Barkhouse (BA’72), vice-president of Alumni Board
Susan Zed Barry (BSc’79, DDS’83), Andrew Bennett (BA’95)
Christopher Coulter (MBA’93), J. Andrew Fraser (LLB’91)
Louisa Horne (BSc’80, BEd’88, MEd’96),
Nancy MacCready-Williams (LLB’89), Board of Governors representative, Paul Pothier (DENG’83, BENG’86),
Chris Smith (BCom’88), past president of Alumni Board, Board of Governors representative,
Jim Wilson (MBA’87),
Louisa Horne (BSc’80, BEd’88, MEd’96),
Nancy MacCready-Williams (LLB’89), Board of Governors representative.

The board is grateful to retiring members
Rhonda Wishart (BSc’76, MSW’78, LLB’81),
Willena Talbot (BSc’PH’98, MSc’94, PhD’98) and
David Craig (DEng’84, BEng’87) for their time, wisdom and leadership over the years.

If you have thoughts you’d like to share with the DAA board about your connection to Dal or about DAA activities, please contact us at alumni@dal.ca.

The Dalhousie Alumni Association is pleased to acknowledge the dedication, contributions and inspiration demonstrated by this year’s award winners. Congratulations go to:

Margaret Casey, CM (MD’68, LLD’04)
A. Gordon Archibald Alumna of the Year
Established in 1989 to recognize alumni for outstanding personal service, commitment and contribution to Dalhousie University. This award is named in honour of A. Gordon Archibald, recipient of the very first Alumni of the Year Award.

Throughout her career, Dr. Casey has been dedicated to the notion that health care in Canada and abroad is everyone’s right. A caring and compassionate physician who has demonstrated an outstanding commitment to patient-centered health care, Dr. Casey has made a contribution to the success of the North End Clinic in Halifax and has volunteered at medical clinics in St. Lucia and Haiti.

She has served on the boards of many community and educational organizations and has remained actively connected to Dalhousie and the Faculty of Medicine since her graduation. Dr. Casey currently serves as President of the Dalhousie Medical Alumni Association and as a member of the advisory committee for the James Robinson Johnston Chair in Black Canadian Studies.

James B. Morrow, PEng (DEng’48, BEng’50, DEng’79)
Alumnus Achievement Award
Established in 2006 to recognize alumni for outstanding accomplishments in career and community service. Recipients of this award demonstrate the true spirit of Dalhousie University and set an inspiring example for all who follow.

Dr. Morrow has always had a strong work ethic and commitment to things that interest him — the sea, the fisheries, the town of Lunenburg and the engineering profession. He is a proud engineer and his involvement with the Association of Professional Engineers of Nova Scotia (APENS) is extensive, going back to the 1960s. He served as APENS president in the early 1990s and was awarded the Gold Medal in 1998 for his commitment to the association and the profession.

Dr. Morrow is an active community member of Lunenburg. He is past president of the Lunenburg Board of Trade and fought to keep the Bluenose on the Canadian dime. He has been heavily involved with the community’s junior sailing program and most recently he volunteered with the restoration of St. John’s Anglican Church after it was destroyed by fire in 2001.

In 2002, Dr. Morrow was presented the Queen’s Golden Jubilee Medal for his work in literacy.

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Alumni Events

Hundreds of Dal alumni and friends gathered at events, dinners and receptions over the spring, summer and early fall to reminisce, reconnect and hear about the wonderful things happening at Dal today.

In July, a sell-out movie night (Harry Potter and the Order of the Phoenix) and the annual crowd-pleasing VIP passes to the Halifax JazzFest provided lots of fun and entertainment for hundreds of Dal alumni and friends in Halifax.

In late spring and early fall, alumni reconnected at receptions in Charlottetown, Yarmouth, London, UK, and New York City as well as at pub nights in Calgary, Toronto and Ottawa.

Alumni from the Faculties of Medicine, Law, Engineering and Occupational Therapy have all celebrated milestone anniversaries in their respective schools over the past few months.

The 2007 Dal Annual Dinner and Reunion were held in early October to the delight of close to 500 guests.

On October 5, the MasterMinds lecture series kicked off the 2007-08 season with a fascinating review of the ancient relationship between Christianity and Islam presented by Dr. Wayne Hankey, Carnegie professor of classics and chair of the Dalhousie Classics Department. MasterMinds will be back on February 1, 2008 featuring Why do people drink? Motivations, patterns and implications for interventions, presented by Dr. Sherry Stewart, Killam Research Professor of Psychology, professor of psychiatry and community health and epidemiology.

Upcoming alumni events:

- **Oakville/Niagara Region** October 25
  Host: Laura McCain Jensen (BCom’82)

- **Saint John, NB** October 30
  Host: Lynn Irving (DPT’76), Board of Governors member

- **Edmonton, AB** November 7
  Host: Barry Johns (BArch’72)

- **Montreal, PQ** November 13
  Host: Reg Weiser (BEng’66)

- **Ottawa, ON** December 4
  National Arts Centre
  Host: Peter Herrndorf (LLB’65, LLD’00)

For more information about these or other alumni events, visit www.dal.ca/alumni or contact us at alumni.events@dal.ca or 1.800.565.9969.

Sean Foreman (LLB’98)

**Outstanding Young Alumnus Award**

Established in 2006 to recognize recent graduates for innovative accomplishments and notable contributions to society, the community or Dalhousie.

In 2002, Mr. Foreman was a recipient of the Junior Chamber International (JCI) Canada Outstanding Young Canadian Award. He is deeply committed to the law profession, Dalhousie’s law school, the community and the environment. He is a part-time faculty member, director of the Dalhousie Law Alumni Association and has coached the Dalhousie Laskin moot team.

Mr. Foreman was a founding member of the Sexual Orientation & Gender Identity Section of the Canadian Bar Association in Nova Scotia and has been chair of the National SOGI section since 2003, working to advance the interests of gay, lesbian, bisexual and transgendered lawyers and members of the community. His pro-bono legal services to the gay and lesbian community culminated in the constitutional challenges that legalized same-sex marriage in both Nova Scotia and Newfoundland and Labrador, and through his involvement with the Youth Project in Halifax, he helped develop the “Safe Home” project.

**Peter O’Brien (BA’90, MA’92)**

**Award for Excellence in Teaching**

The Alumni Association Award for Excellence in Teaching recognizes professors who take teaching to an exceptional level. The award honours instructors who, in the eyes of students and teaching colleagues, display superior teaching skills, innovation and enthusiasm for the subject, and show an exemplary attitude toward the needs and concerns of students.

Dr. O’Brien is an assistant professor in Dalhousie’s Classics department. He is passionate about his subject and makes learning exciting by “exuding the atmosphere of a conversation in the classroom.”

Born and raised in Halifax, Dr. O’Brien became interested in classics during his first year as a university student. After completing his MA at Dalhousie, he began his doctoral studies at Boston University. His teaching career began at a private high school in Boston, and he has been teaching at Dal since 2000.

Dr. O’Brien keeps his subject matter fresh by reminding his students that the study of classics is about discovering what ancient civilizations can teach us about the present.
The United Nations has called the situation in northern Uganda the most neglected humanitarian crisis in the world. A 20-year civil war has victimized thousands of young people, destroyed families and fractured communities. The recent decrease in armed conflict has left a difficult question: how do you teach peace to a generation that has known nothing but war?

“The future of this region is in its youth,” says Stan Kutcher, Dalhousie’s Sun Life Financial Chair in Adolescent Mental Health. “Many young people have been traumatized as victims and as perpetrators of violence. They have grown up knowing fear, now they need to learn to adapt to a less frightening world and to help each other heal.”

The Dalhousie International Health Office (IHO) and Section of International Psychiatry: Youth Coalition for Peace participated in a project with Gulu University and the Canadian Physicians for Aid Relief. The goal was to work with affected youth, communities and non-governmental organizations to help build a climate supporting sustainable peace in Northern Uganda.

Dr. Kutcher’s team developed a peer-counselling program to integrate mental health into local peace-building efforts. They wanted to establish community activities and address the issues in a non-stigmatizing manner. Sport plays an important role in Ugandan communities, so soccer was seen as a way to engage youth and teach peace-building skills, such as teamwork and conflict resolution.

A small group — including former soccer captain Leah Kutcher (BA’06) and former Dalhousie women’s soccer coach Graham Chandler — worked with the International Health Office and the Halifax City Soccer Club to gather extra uniforms, equipment and soccer balls. The uniforms and equipment were distributed to teams in Laiby and Bungaterra.

“I know from my own soccer background that team sports are a great way to build camaraderie,” says Ms. Kutcher. “This was a way to offer the chance to work together to build a fun, peaceful environment and look beyond the conflict.”

Ryan McNutt
Like many young couples, Brian Collins (BCom’97) and Amanda Demers never considered estate planning a priority until the birth of their first child. Writing a will for the first time can seem like a morbid exercise to a young person, but Brian and Amanda took it as an opportunity. They thought of ways in which they could give back to the activities, institutions and communities that shaped who they are and reflect their values.

After providing for the material needs of their family, Brian and Amanda reflected on the life experiences that have meant the most to them and they named a select group of representative charities as the residual beneficiaries of their Estates. Including Dalhousie in this list was a reflection of the central role that education has played in their lives. A Halifax native, Brian had planned from an early age to attend Dalhousie’s Faculty of Management. By the time he was applying to university Brian’s family had relocated to Waterloo, Ontario, but a renewable entrance scholarship enabled Brian to return to his home town to experience four incredible years at Dalhousie. Directing a portion of their planned gift to ensure that future generations of students have the opportunity not only to pursue their educations but to live the Dalhousie experience seemed to Brian and Amanda like a natural fit in their estate planning.

“A friend of mine once observed,” said Brian, “that many people leave their estates to the things they died from, rather than to the things they lived for. Some day we want our legacy to be a celebration of the things we’re living for, including a commitment to lifelong education and a desire to help others reach their full potential, and Dalhousie is an important part of both.” Wendy McGuinness
Wise men say only fools rush in, so it took Ms. von Boetticher seven years to develop a sideline in Elvis jumpsuits...

Elvis lives. Thirty years after the death of Elvis Presley, there are so many tribute artists crooning Viva Las Vegas and Suspicious Minds that costume designer Eleanor von Boetticher finds herself up to her elbows in studs, stones, nailheads and big ol’ belt buckles. Wise men say only fools rush in, so it took Ms. von Boetticher seven years to develop a sideline in Elvis jumpsuits before going into it fulltime. The costumes can take anywhere from 30 to 85 hours to complete and cost up to $2,800.

For Ms. von Boetticher, who has sewn costumes for films like X-3: The Last Stand, Catwoman and I, Robot, it was a case of now or never after her son was born.

“I’m so lucky to have a business I can run from home,” says Ms. von Boetticher, 39, who runs Pro Elvis Jumpsuits from her home studio in Nanaimo, B.C. She graduated from Dalhousie with a Masters in Political Science followed by a certificate in costume studies in the mid-90s. “I can get a lot done in the evenings when my boy is asleep or daytime when he’s napping. I have the freedom to fit things in here and there.”

Marilyn Smulders continued on page 33
I wasn’t sure where I was going after high school. Now I’m here studying International Development and French, and my eyes are widening to the world. This is a great place to settle in for a few years.

The right place can change everything.

DISCOVER.DAL.ca
Phil Duguay’s (BA(Hon)’05) spirit has carried him beyond the borders of academe to the streets of Addis Ababa. On a recent seven-month stint in Ethiopia, he worked with landmine victims. “The experience deepened my very strong interest in African-Canadian relations,” he remarks. His interest was first sparked by a Dalhousie exchange program with Senegal. As a history student, he also did undergraduate research on U.S. foreign policy in Congo during the 1960s. His attachment to the continent of Africa persists, and he continues to see the landmine problem as a “very big international issue.”

He readily acknowledges the bleak conditions in Ethiopia. “The hopelessness is just terrible,” says Mr. Duguay. “Of the five million people in Addis Ababa, one million live in the streets.” He describes a vivid memory of “two lone children dancing in the puddles late at night,” and is saddened as he explains how this reflects a larger economic and social crisis.

Yet optimism is also at the heart of his perspective. He suggests that Ethiopia’s desolation is directly related to landmines, which “inhibit any kind of development.” He praises Mines Action Canada and the Landmines Survivors Network, organizations that work to eradicate landmines and to treat and rehabilitate landmine survivors. In his own work with the Landmines Survivors Network, he helped victims who had lost limbs, who were blind, and who had experienced both thoracic difficulties and psychological trauma due to landmine explosions. He and his team “reached out to victims, literally,” he says. “We often approached landmine victims in the streets” and then guided them through a program that transforms them into “active and engaged citizens.”

Phil has developed an appreciation of Ethiopia’s people, places, and local traditions. He has studied Amharic, the official language, and speaks movingly of his interactions with “everyday people on the streets, in restaurants, in taxis and buses.” He speaks of a brief, yet powerful encounter with a man who had lost his leg in the Ethiopian-Somali conflict of 1977. “I gave him a butterfly (the symbol of Mines Action Canada),” Phil explains. “He started crying; he was just so touched that someone would come all the way from Canada to offer their support.” Phil is also impressed by the country’s spectacular geography. “The landscape is unreal,” he says. “It is very rugged in the north, with very arid deserts in the east. During the rainy season it is the greenest place imaginable.”

Now back in Canada, he still harbours a passion for Africa. He has spoken publicly in Halifax and Victoria on his outreach work. In the fall, he will begin a law degree in humanitarian rights at McGill, and he hopes to spend a semester studying at the University of Cape Town, South Africa. Phil will no doubt excel in law, but his spirit of adventure — and his compassion — will also cause him to reach out, beyond the comfortable confines of academe. Dr. Heather Meek
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Classnotes

1950s

1959
LeRoy Peach, BA (K), BEd’60, is receiving the Meritorious Service Medal, the highest honour given by the Royal Canadian Legion, for service to Branch 055, Port Morien. In 2003, he received the Queen Elizabeth II Golden Jubilee Medal for service to the community.

1960
Arthur M. Lutz, LLB, of Calgary, Alta., has been appointed to the Canada Pension Appeals board.

1970s

1978
Wadih Fares, DEng, BEng’80 (NSTC), PEng, was appointed to serve a two-year term as chair of the board at Pier 21’s annual general meeting. Mr. Fares currently serves as the president of W.M. Fares Group, a building design, project management and development firm based in Halifax.

1979
Christopher Lempfers, RN, BN, MEd, retired from Health Canada, First Nations and Inuit Health Branch after 30 years of nursing service. Laterly he was the Alberta regional nurse educator working out of Edmonton.

1980s

1981
Patricia Henman, BA, lives in Nelson, B.C. and has changed vocation from theatre. She now works for Selkirk College, as an alumni and development coordinator. Her work in the arts and fund-raising serves her well in the education sector.

1986
Dwayne Beattie, BSc, is relocating to South Africa after 19 years in Ottawa. Dwayne has accepted an inter-company transfer to be the operations manager for Fugro Airborne Surveys (Africa, Europe, the Middle East and Central Asia). Accompanying him on his multi year adventure will be his wife Sue and children, Alex (eight) and Emma (11). Friends can contact him at dbeattie@fugroairborne.co.za

1990s

1990
Katharine (Kathy) Beaman, BSc’90, was appointed Honorary Vice Consul of Austria for the Atlantic provinces in November 2006. This appointment is official recognition of her contributions to the Austrian Consulate General in Halifax which represents Austria in Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland and Labrador.

1992
Ismael Aquino, BSc, BScN and wife, Tanya Aquino, BScN’97, are pleased to announce the arrival of their third son, Colin, born on July 7, 2006, at continued on page 37

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the IWK Health Centre. Nicholas and Tyler are very proud big brothers. Ismael is the director of programs for the Canadian Red Cross. Tanya is a staff nurse with VON and IWK.

Charles Crosby, BA, recently signed a publishing contract for his second novel, Backspin with Vancouver’s Now or Never Publishing — look for it this spring or visit www.charlescrosby.ca for details. His first novel Itals, mine, was published in 2005. Charles, his wife Tanis and their son Liam, age four, also greeted a new arrival in January when Patrick Kieran Crosby was born.

Anne Marie Woods, BA, has launched her first Spoken Word CD Amani, the Words, the Rhythm, in Toronto. Woods is well-known for singing with acapella sensation Four the Moment. She was a headline poet in New York at the Nuyorican Café. As a school speaker, she uses storytelling to talk about issues like bullying, violence and racism. This fall she is a featured artist in the Word Power International Black Literature Festival and Book Fair in Birmingham, UK. www.myspace.com/amanithepoet

1993

1999

Keith H. Poole, DEng’92, BSc’98, BEng (TUNS), became corporate manager of Lean Six Sigma effective January 8, 2007 with Sisters of St. Francis Health Services, owners of a network of 13 hospitals and several other related companies in Indiana and Illinois. Keith is an active member of the American Society for Quality, currently serving as the chair of the Northwest Indiana Section, and holds several ASQ certifications. Keith is completing a Masters of science in quality assurance at Calumet College of St. Joseph in Whiting, Indiana. Keith, wife Natasha, and their two young boys Noah and Luke reside in Munster, Indiana (close to Chicago, Illinois) and are expecting another addition to the family in December. Keith can be contacted at keith@moviekites.com.

2000s

2004

Elaine Craig, LLB, recently received a $150,000 scholarship from the Trudeau Foundation to support her research on human rights. Elaine will study the principle of “universal” human rights, and why different cultures have not, to date, found significant commonality in their interpretations. The Trudeau Foundation scholarships are the largest doctoral scholarships in the social sciences and humanities and are awarded annually to Canadian citizens and landed immigrants pursuing full-time doctoral studies in Canada, and to Canadians pursuing full-time doctoral studies at foreign institutions.

2006

Juanita Smith, MLIS, works for the Nova Scotia Community College, and is on maternity leave. She and husband Boyd Sharpe welcomed Annika Martine Sharpe into the world on June 1, 2007.

Matthew Wainman, BCD, is pursuing his passion for planning activities and events by creating a company with business partner Bob Morton. The company, based in Windsor, N.S., produced the first annual Rock-a-Thon for the community in July, 2007 for more information visit www.futurepromotions.ca

“IT’S A NATURAL OUTCOME OF HAVING BEEN FORTUNATE IN LIFE,” says David. “THE QUALITY OF EDUCATION I RECEIVED AT DAL AND MY ASSOCIATION WITH OUTSTANDING PROFESSORS AND MENTORS WERE MAJOR PREREQUISITES FOR MY CAREER.”

True to the passions of the Fraser family, David and his wife Jean’s bequest will support the Department of Radiology Research Foundation, established by David in 1983, as well as future Dalhousie athletes.

By including Dalhousie in your will you too can play your part in supporting Dalhousie’s students. Bequests can establish scholarships, support faculty priorities and generate financial resources.

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David Fraser has included Dalhousie in his will.

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**In Memoriam**

Anna M. Salmoni, BA’37, Kingsville, Ont.

Henry E. Dickson, BEng’38 (NSTC), Halifax, N.S., on June 7, 2007.

Fred Benjamin, BEng’40 (NSTC), Dartmouth, N.S., on April 18, 2007.

Edwin A. Brown, DDS’41, Schenectady, N.Y., U.S.A.

John W. Grant, BA’38, MA’41, LTH’43, DDIV, PhD’49, Toronto, Ont., on Dec. 16, 2006.

Constance E. Finck, BA’45, MA’47, Halifax, N.S., on May 21, 2007.

James Beverley Hamm, DEng’46, BEng’48 (NSTC), Halifax, N.S.

Carl E. Dexter, BSc’46, DDS’49, Halifax, N.S., on June 7, 2007.


Allister M. MacDonald, BEng’49 (NSTC), North York, Ont., on June 6, 2007.

Francis J. MacDonald, BEng’49 (NSTC), Sydney, N.S.

John Ryan, BScPH’50, LLD’04, Halifax, N.S., on July 8, 2007


Kathleen M. Stack, BSc’47, DDS’50, Calgary, Alta., in January 2006.

Donald B. Fay, BSc’39, DPHRM’51, Halifax, N.S., on May 6, 2007.


William G. Adams, LLB’52, St. John’s, Nfld.

Donald E. Belland, BEng’52 (NSTC), Antigonish, N.S., on Feb. 3, 2007.


Harry A. MacRobbie, BSc’53, Dinsmore, Sask., on Dec. 1, 2006.


John Leo O’Toole, BEng’55 (NSTC), Dartmouth, N.S., on July 1, 2007.

Elmer S. Morrison, DDS’56, Halifax, N.S.

Bertha Wilson, CC, LLB’57, LLD’80, LLD’83, DSCIE’85, LLD’91, Ottawa, Ont., on April 28, 2007.

James A. Lawrence, BSc’50, MD’58, Annapolis Royal, N.S., on April 25, 2007.


Patricia Matheson O’Neil, MD’58, Salt Lake City, Utah, U.S.A., on Sept. 7, 2006.


continued on page 39
When I came to Dal, I had to adapt to many new things: a new country, a different culture… and really cold weather! The Dalhousie community welcomed me and the university offered me a chance to improve my skills. Dalhousie doesn’t feel like school, it feels like home.”

— Azza Abouzied, BCS’07

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NOTABLE ACHIEVEMENTS The Tony Griffin 7,000-km Ride for the Cure across Canada and Ireland raised 600,000 euros for Ovarian Cancer Canada, the Lance Armstrong Foundation and the Irish Cancer Society.
NEXT UP The hurling star from Ireland is a kinesiology student in the School of Health and Human Performance, which is currently celebrating its 40th anniversary.

“Dalhousie inspired me to dream bigger than anything I’d ever imagined. This wasn’t something that I accomplished; we accomplished it together. It just goes to show that with the right people in your life, nothing is impossible.”

Dr. Stephen Cheung, former Dalhousie professor, developed Tony’s training program, while classmates Ben Whidden, Matt Bethune, Alison Keen and Rob Book accompanied him on his journey. In memory of his father, Tony wanted to spread his message to ‘celebrate life.’

Research: Dawn Morrison
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